

Instruction Manual

Model

Luma



FOGO MONTANHA

Thank you for purchasing Fire Mountain equipment.

- The manufacturer of the Fogo Montanha stoves declares that all models manufactured comply with the general safety requirements. This declaration ceases to be valid if there are changes to the product without the proper written permission of the manufacturer.
- Please read the instructions carefully before installing, using and maintaining the equipment and keep it for future reference.
- The instruction manual is an integral part of the product. Keep this manual near the appliance at all times.
- All products comply with the requirements of the Construction Products Directive (EU Reg. No. 305/2011) and are approved with the CE conformity mark.
- Local heating stoves are tested according to EN 16510-2-6:2022 standards.
- The installation must be carried out only by authorized persons, who must provide the buyer with a declaration of conformity of the installation and who will be fully responsible for the definitive installation, and consequently, for the proper functioning of the product. Fogo Montanha is not responsible for any damage to the equipment when it is installed by unqualified personnel.
- All local regulations, including so-called national and European standards, must be respected in the installation, operation and maintenance of the equipment.
- Whenever you need technical assistance, contact your supplier or equipment installer. You must provide the serial number of your stove which is attached to the rear grille of the appliance, or on the label attached to the warranty statement sent with the appliance.
- Technical assistance must be carried out by your Installer or Solution Provider, except in special cases after evaluation by the installer or technician responsible for assistance, who will contact Fogo Montanha if necessary.
- This equipment must be intended for the use for which it was expressly manufactured. All contractual or non-contractual liability of the manufacturer is excluded if it causes injury to people, animals or objects due to installation errors, maintenance or inappropriate use.
- All the components that make up the equipment guarantee its operability and energy efficiency, and must be replaced by original parts, through the intervention of an authorized technical assistance center.

Index

1. Fire Mountain.....	3
2. Package Contents	4
3. Safety Warnings	5
4. For your safety, we remind you that:	6
5. Advice on what to do in the event of a chimney fire (including equipment)....	Erro! Marcador não definido.
6. Equipment Dimensions.....	9
7. Specifications	10
8. Installation of the combustion air intake duct	11
9. Installation of the chimney in a wood burning stove <i>pellets</i>	12
9.1. Installation criteria	12
9.2. Precautions to be taken when installing smoke ducts	15
9.3. Installing a fume exhaust duct in a stove	16
9.4. Installation without chimney.....	17
9.4.1. Chimneyless installation with rigid flue	18
9.5. Chimney installation.....	19
10. Use of pellet stove.....	21
11. Fuel	23
12. Remote control and <i>Display</i>	24
13. Outburst.....	26
14. Extinction	26
15. Recommendations for the use of the stove <i>pellets</i>	27
16. Columbus Electronics	29
16.1. Remote control	29
16.2. Display	30
16.3. Settings Menu	31
16.3.1. Language	31
16.3.2. Date and Time	32
16.3.3. Remote control	35
16.4. Keyboard Menu.....	35
16.4.1. Contrast	36
16.4.2. Min Brightness	36
16.4.3. Screen Saver	37
16.4.4. Firmware Codes.....	37
16.5. Menu Service	38
16.5.1. Counters	38
16.5.2. List of errors	39
16.5.3. Secondary Information	40

16.5.4. Zero Cleaning.....	41
16.5.5. Cochlear Calibration	Erro! Marcador não definido.
16.5.6. Fan Calibration	42
16.5.7. Cochlea Load	43
16.6. Power Menu	44
16.6.1. Combustion	44
16.6.2. Ambient Ventilation	45
16.7. Thermostats Menu.....	45
16.8. Menu Crono	46
16.9. User Info	51
17. Anomalies	52
18. List of Alarms / Defects / Recommendations	52
19. Installation and operation with Chronothermostat (optional)	54
20. Maintenance	55
20.1. Daily maintenance.....	55
20.1.1. Glass cleaning.....	56
20.1.2. Cleaning the interior of the stove.....	56
20.2. Weekly maintenance.....	57
20.3. Additional cleaning.....	58
20.4. Review after a long period of inactivity.....	59
20.5. Maintenance plan and record.....	59
20.6. Maintenance Guide Label.....	63
21. Electrical schematic of the salamander <i>pellets</i>	64
22. End of life of a salamander <i>pellets</i>	65
23. Sustainability.....	65
24. Warranty	66
24.1. Model-Specific Conditions	66
24.2. General Warranty Conditions	66
25. Attachments.....	73
26. Parameters shown in the Rating Plate and Technical Data Sheet	76

1. Fire Mountain

Fogo Montanha's vision has always been clean, renewable and more economical energy. For this reason, we have been dedicated to the manufacture of biomass heating equipment and solutions for more than 45 years.

As a result of the persistence and unconditional support of its network of partners, Fogo Montanha is today a leader in the production of biomass heating, with solutions for domestic heating of homes, which include the traditional stove or firewood inserts for installation in the living room, but also more robust solutions for pellet or firewood central heating for placement in the technical areas of the house.

We equip more than 20,000 homes with biomass heating solutions every year. A sign that consumers are paying attention to the greenest and most economical solutions.

Fogo Montanha has ISO 9001:2015 Quality certification and ISO 14001:2015 Environmental certification.

2. Package Contents

The package contains the following items:

- Free Standing Pellet Stove LUMA;
- Leaflet to access the online instruction manual;
- Power cord;
- Infrared control;
- Cleaning bar handle
- Before unpacking the equipment, check that the packaging is in perfect condition, any deficiency or anomaly in it should be reported to the installer or dealer.
- Once you have removed the packaging, make sure that the contents are whole and complete. If the contents of the package do not correspond to the above, contact the retailer from whom you purchased the appliance.
- During the unpacking process of the machine, the parts that join the machine to the pallet must be removed, to perform this function it will be necessary to use a star wrench (see Figure 1).



Figure 1 - Unpacking the stove

3. Safety Warnings

- Fogo Montanha will not assume any responsibility if the precautions, warnings and operating rules of the equipment are not complied with.
- The equipment manufactured by Fogo Montanha is easy to use and special attention has been paid to its components in order to protect the user and the installer from possible accidents.
- The installation must be carried out by authorised persons, who will have to provide the consumer with a declaration of conformity of the installation and who will be fully responsible for the final installation and, consequently, for the proper functioning of the product.
- The equipment must be intended for a purpose for which it was specifically manufactured. Any contractual or non-contractual liability of the manufacturer is excluded in the event of injury to persons or animals, or damage to objects, due to errors in installation, maintenance or as a result of misuse. After removing the package, check that the contents are complete. If the contents of the package do not correspond to what is indicated in the point 2, contact the merchant.
- All the components that make up the equipment guarantee its operability and energy efficiency, and must be replaced by original parts, through the intervention of an authorized technical assistance center.
- Equipment maintenance should be performed at least once a year. To do this, contact your expert installer.
- This instruction manual is part of the product. Make sure you are always close to the equipment.

4. For your safety, we remind you that:

- The *pellet stove* is a biomass heating equipment that should only be used after a thorough reading of this manual.
- This appliance is not intended for use by children or persons who are not fully capable of physical, sensory or mental capacity, or who have no experience or knowledge, unless such persons are under supervision or have been instructed by a person responsible for their safety. Children should be supervised to ensure that they do not play with the equipment.
- DO NOT TOUCH the stove if you are barefoot and if any part of your body is wet or damp.
- Modifications to the safety or control devices are NOT permitted without the manufacturer's permission.
- Installing air intake grilles near the equipment is essential for proper combustion, taking care not to clog them.
- It is FORBIDDEN to obstruct, block or reduce the dimensions of the air intake grilles allowing ventilation of the installation area.
- The *pellet stove* is a piece of equipment that needs air to achieve proper combustion. For example, the possible tightness of the area where the equipment is installed or the existence of other sources of air extraction in the home can prevent the equipment from working properly.
- Air vents are essential for proper combustion.
- Keep the packaging out of the reach of children.
- During normal operation of the appliance, the stove door must be closed.
- AVOID direct contact with parts of the appliance that tend to overheat during operation, including the door and all its parts.
- Check the chimney for OBSTRUCTIONS before turning on the appliance.
- The *pellet stove* is designed to be installed in homes, in a protected environment. Safety systems can be installed to switch off the stove. In this case, contact the technical support service and do not disarm the safety systems under any circumstances.
- The *pellet stove* is a biomass heating equipment with fume extraction carried out by an electric extractor. Any power outage that occurs during use can cause smoke to stop venting and enter the home. For this reason, it is recommended to have a chimney with good natural extraction.
- If you use your stove while you are away or if you are not monitoring it, it is advisable to use the safety system mentioned above, in order to be completely safe in the event of a power cut.
- NEVER unplug the electrical outlet of your *pellet stove* while it is in operation. Since the exhaust fan of the equipment is electric, this can cause the exhaust of combustion fumes to stop.
- Before servicing your equipment, unplug the electrical outlet. Before starting maintenance, the equipment must be cooled down completely (if it is in operation).

- In France, you will have to consult decree 2008-1231 and the DTA for the installation of watertight stoves with concentric pipes.
- NEVER touch the inside of the stove without first disconnecting it from the power source.
- NEVER install the equipment in small rooms, bedrooms, rooms with explosive atmospheres or similar, with similar conditions.

5. What to do in case of a chimney fire (including the stove)

- Try to extinguish the fire without endangering your life.
- If in one minute you can't put out the fire, you should call the fire department.
- Close doors and windows or the partition where the fire started.
- Turn off electricity and gas before leaving the house.
- Once outside, you should wait for the fire brigade and be prepared to give them the following information: the location of the fire, possible materials that are burning and what they can do to prevent the fire from spreading.

6. Equipment Dimensions

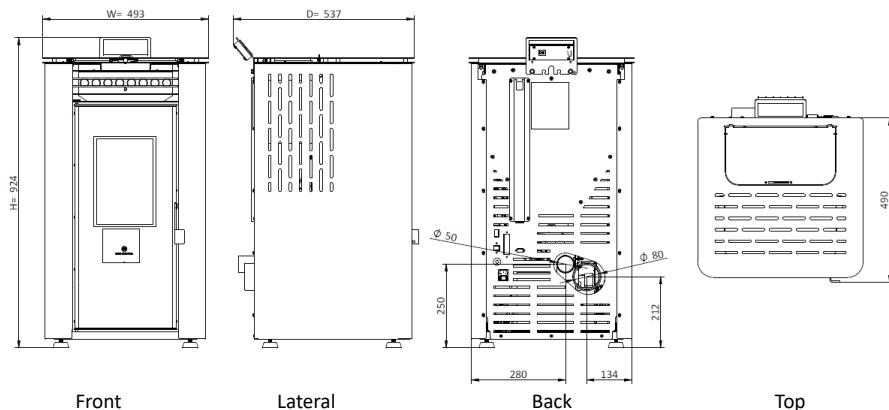


Figure 2- Dimensions of the stove pellets Luma.

Model	"H" Dimension	Dimension "W" (mm)	Dimension "D" (mm)	Weight (kg)
Luma	924	493	537	80

Table 1 - Dimensions of Luma stoves.

! NOTICE!

The stoves cannot be used or connected to the mains without the proper installation of the enclosures.

7. Specifications

Table 2 - Technical Characteristics

Characteristics	Luma	Un
Height	"H"	Mm
Width	"W"	mm
Depth	"D"	mm
Diameter of the smoke discharge pipe	80 Rear	Mm
Type of use	WITH	-
Fuel Type	L	-
Type of Tightness	B	-
Tank capacity	15,0	Medical history
Maximum heating volume	182	m ³
Maximum global heat output	8,0	Kw
Minimum thermal power	3,0	Kw
Minimum fuel consumption	0,68	kg / h
Maximum fuel consumption	1,8	kg / h
Rated electrical power	102	In
Electrical power at start-up (<10 min.)	362	In
Rated voltage	230	V
Nominal Frequency	50	Hz
Thermal Yield at Rated Thermal Power	91,0	%
Temperature Max. two gases	183	°C
Temperature Min. two gases	77	°C
Type of Chaminé	T200G	-
CO emissions at rated thermal input	0,024	%
Flue gas mass flow	5,0	g/s
Depression in the chimney	12	Pa

Note: Tested with wood *pellets* with a calorific value of 4.9 kWh/kg. The above data was obtained during product registration tests in independent and accredited laboratories in order to carry out tests on pellet heating equipment.

8. Installation of the combustion air intake duct

- The equipment is a type B equipment, that is, it is not watertight. The air supply is carried out directly from the firing room.
- To feed the firing room, at least a 100cm² inlet air grille is required.
- If desired, combustion air can be supplied directly from the outside by installing an air pipe. The pipe must be connected to the combustion air inlet already in the equipment and must have a minimum internal diameter of 50 mm.
- The maximum permissible length of an air inlet pipe for external combustion is 100 cm with the same cross-sectional diameter and no disturbances (90° bends, etc.).

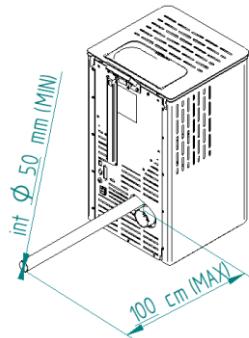


Figure 3 - LUMA ar inlet tube

9. Chimney installation in a *pellet stove*

Before you begin the installation, perform the following steps:

- Take out the owner's manual, read it carefully and give it to the customer.
- Check that the product is delivered complete and in good condition. Any defects must be reported prior to installation of the equipment.
- The stove base has four height-adjustable feet, allowing for simple adjustment on uneven floors.

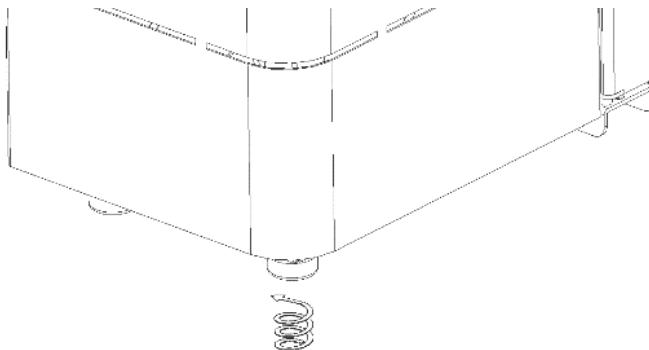


Figure 4 - Stove adjustment

- Connect an 80 mm diameter pipe to the flue gas outlet and to a gas outlet pipe outside the building (e.g. chimney) - see point figures 9 of this manual.
- The front of the appliance containing the main hot air outlet must face the room to be heated.
- The machine is equipped with a stopwatch thermostat on the display. Optionally, a conventional external timer (not included) can be used to automatically set the operating times of the device.
- Important note: The pipes or fittings to be used must contain seals that provide a good seal.

9.1. Installation criteria

- The minimum distances between the stove and the *pellets* and particularly flammable surfaces are shown in the Figure 5.
- The base on which the stove rests must not be made of a flammable material (e.g. a carpet), so there must always be adequate protection and it must also be strong enough to support the equipment.

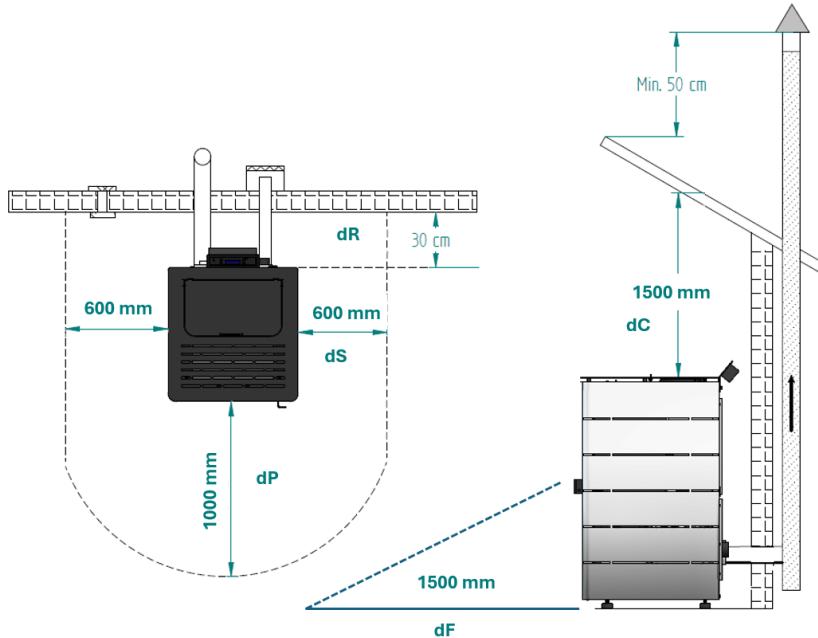


Figure 5 - Minimum distance from all Luma combustible surfaces

- On the top of the stove, it is necessary to maintain a minimum distance of 150 cm from the ceiling of the room, especially if they contain flammable materials in their composition.
- **⚠ ATTENTION!**
If the stove is installed in a place where there are objects considered particularly delicate, such as curtains, sofas and other furniture, the safety distances should be increased.

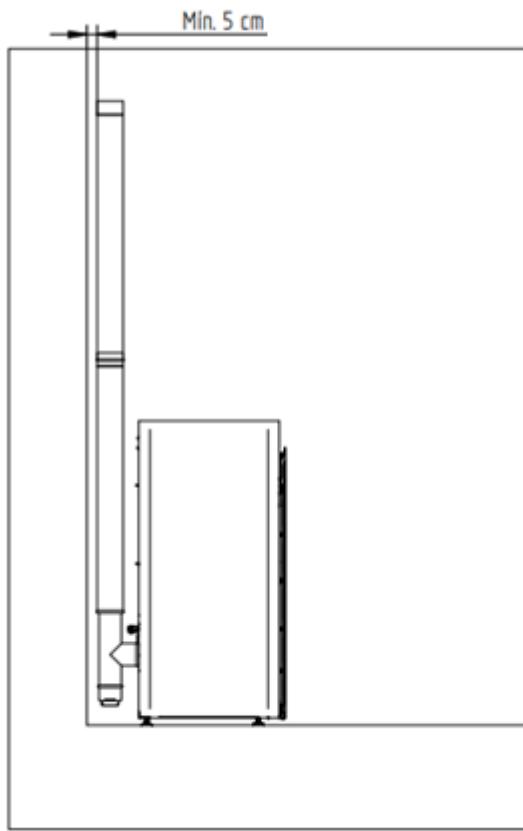


Figure 6 - Minimum distance from a chimney within a wall

- Keep combustible and flammable materials at a safe distance.

9.2. Precautions to be taken when installing smoke ducts

- The construction of the exhaust gas pipe shall be adapted for this purpose in accordance with local requirements and applicable regulations.
- When installing the chimney pipe, if it is necessary to drill a hole in a wall or ceiling of the house, it is necessary to take into account the material they are made of. If the building material is heat-sensitive (e.g. wood), a hole must be drilled and a special wall connection with an inner diameter of at least 13 cm must be installed, and then the smoke outlet pipe of the machine must be insulated with a suitable insulating material (e.g. 25mm thick with a thermal conductivity of 0.07 W/m⁰K).
- If the exhaust duct is installed near a wall (less than 20 cm) in which the above condition is present, the pipe must be insulated.
- As an alternative to insulation, we recommend the use of insulated pipes that should be used outdoors to prevent condensation.

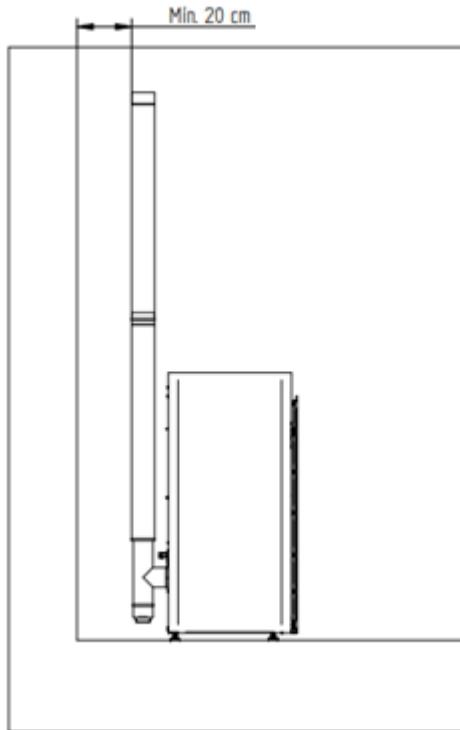


Figure 7 - Minimum distance between a chimney and a temperature-sensitive wall

! **IMPORTANT!** When installing a flue gas exhaust pipe in a *pellet* stove, T-inspection should be installed at the exhaust pipe outlet of the stove, with an airtight lid to allow regular inspection or discharge of heavy dust and condensates.

- As indicated in the Figure 8, the exhaust duct shall be constructed in such a way that cleanliness and maintenance are ensured by the placement of inspection points (T).

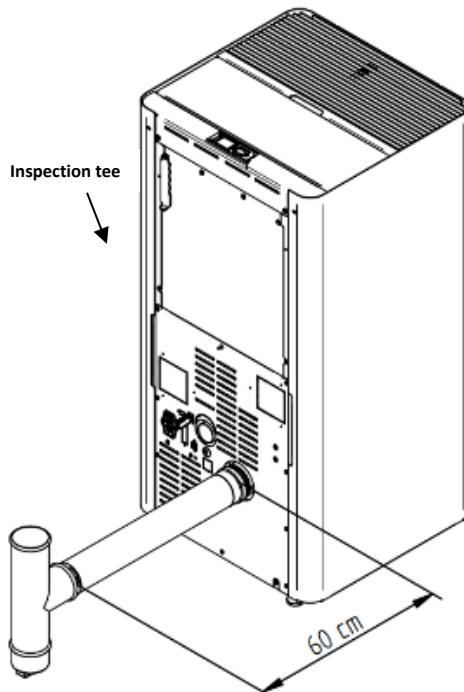


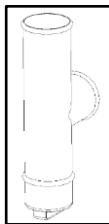
Figure 8 - Example of installing a T-inspection

- Under nominal operating conditions, the flue gas draft shall result in a depression of 12 Pa, measured 1 metre above the fume outlet neck.
- The stove must not share the chimney with other appliances.
- Pipes outside the place of use must be double-insulated in stainless steel, with an inner diameter of 80 mm.
- The fume exhaust pipe can generate condensation, in which case it is advisable to establish suitable condensate collection systems.

9.3. Installing a fume exhaust duct in a stove

- The *pellet stove* can be installed as follows: the chimney comes out at the back of the appliance.
- The machine incorporated a stainless steel curve Ø80 x 90° at the exit of the fume extractor of the equipment.

- In the solutions presented, the installer must have the following materials:



Inspection Tee

- The inspection tee should be placed as shown in the Figure 9, if it is necessary to move the chimney away from the equipment, it is only possible to place a pipe horizontally up to a maximum of 60 cm without reductions or disturbances, as shown in the Figure 10.

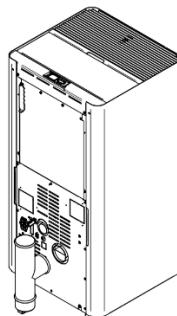


Figure 9 – Inspection tee connection

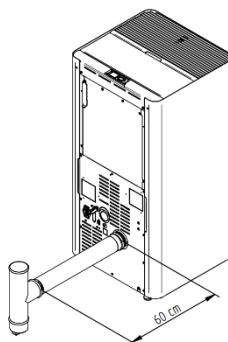


Figure 10 – Installation of an inspection tee with an elongated part



NOTE!

- It is necessary to make sure that the connections between the different tubular elements are correctly placed and sealed, in order to avoid any possible leakage of harmful gases into the house.

9.4. Installation without chimney

9.4.1. Chimneyless installation with rigid flue

- Stove installation *pellets*, when there is no chimney, it must be carried out, as shown in the Figure 11, bringing the exhaust gas pipe (with minimum internal diameter of 80 mm directly out and above the roof).

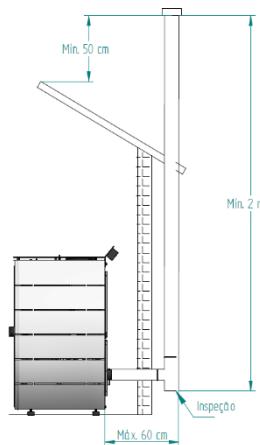
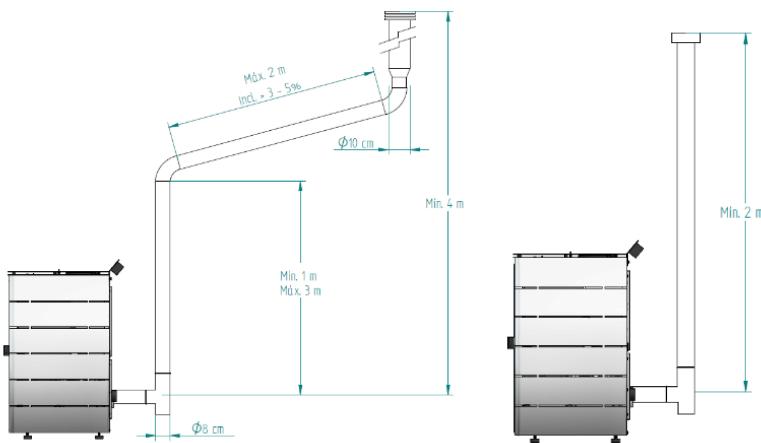


Figure 11 – Side view of the installation without chimney, with example of the inspection point

! The smoke vent must be equipped with a suitable waterproof cover that complies with local regulations.

- The Figure 12 shows the basic requirements for stove chimney installation.



(a) (b)

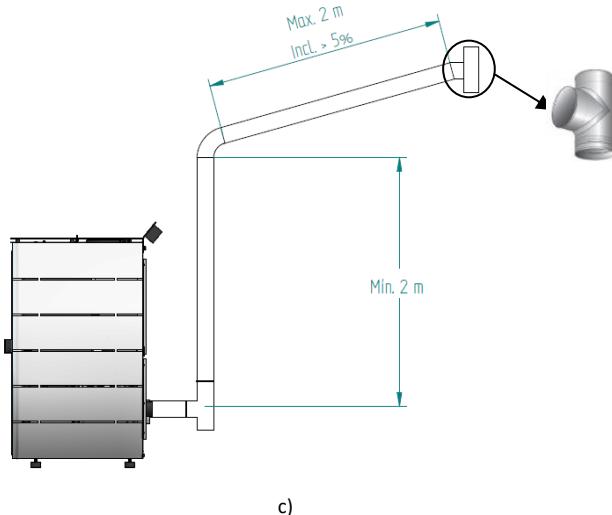


Figure 12 – Example of installations of type (a, b, c)



The length of the exhaust duct must not exceed 6 metres with the 80 mm diameter pipe.

9.5. Chimney installation

- As shown by the Figure 13, the installation of the wood burning stove *pellets* brings the exhaust pipe directly to the chimney. If the chimney is too large, it is recommended to pipe the smoke outlet with a pipe with a minimum internal diameter of 80 mm. Place a "T" on the bottom of the pipe for periodic inspections and annual maintenance, as shown in the figure below.

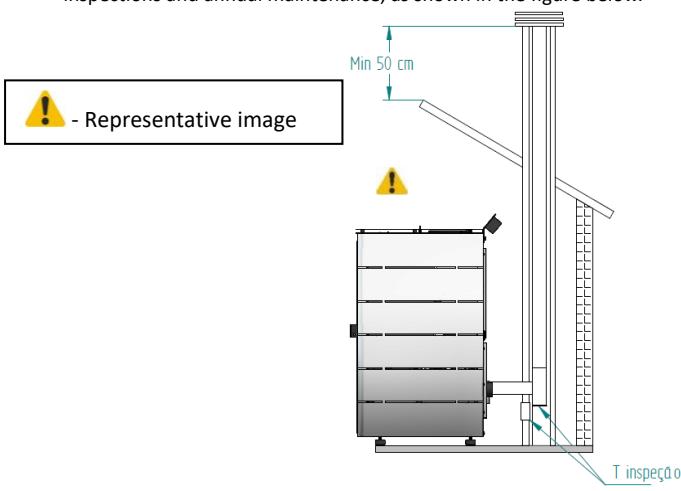


Figure 13 – Side view of the system with chimney, with inspection point example

- When the weather conditions are so adverse that they cause a strong disturbance in the smoke draft of the stove (in particular very strong winds), it is advisable not to use the stove.
- If the appliance is not to be used for a long time, the user must make sure that there are no obstructions in the chimneys before switching it on.

 The chimney must be equipped with a suitable windproof cover that complies with local regulations.

 **The use of stainless steel flexible pipe or plain steel pipe is NOT allowed in an installation.**

 YOU MUST NOT place more than 3 bends in a fume exhaust duct.

 Failure to comply with these requirements compromises the proper functioning of the stove. Strictly follow the instructions in the schemes. The stove works with the combustion chamber in depression, so it is absolutely necessary to have a smoke evacuation duct that extracts the flue gases properly.

 If the house has an air extraction system (e.g. kitchen extractor hood), it will be necessary to have an upper ventilation section, with a size adapted to the different equipment that extracts air from the house.

- Installing the stove in areas where kitchen hoods or fume extractors are located may impair the proper functioning of the stove.

 All smoking ducts must be accessible.

 The chimney or the fume exhaust ducts connected to the stoves must be cleaned at least once a year (check if there are any regulations in this area in the country). Failure to check or clean regularly increases the risk of chimney fire.

- **Material of the smoke exhaust ducts:** The pipes installed must be rigid, made of stainless steel with a minimum thickness of 0.5 mm, with joints to join the different sections and fittings.

• **Insulation:** Smoke ducts should preferably be double-walled with insulation to ensure that the fumes do not cool down on the way outside, which would lead to inadequate draught and condensation that could damage the appliance.

- **Exit T:** Always use a registered "T" at the exit of the stove.
- **Windproof terminal:** A windproof terminal must always be installed to prevent the return of fumes.
- **Chimney depression:** The figures illustrate three standard diagrams, with the appropriate lengths and diameters. Any other type of installation must ensure that a depression of 12 Pa (0.12 mbar) measured at hot and maximum power is generated.
- **Ventilation:** For the stove to function properly, the appliance must have an air inlet with a minimum section of 100 cm², preferably near the back of the stove. The stove has a round tube (Ø 50mm) that can be connected to the outside of the house.

10. Use of pellet stove

! In the equipment *pellets* A start-up service is required as mentioned in point 3.6 of sub-chapter 24.2 of this manual. In order to adjust the operating parameters of the stove (equipment to *pellets*) should adjust the dose as described in this manual. It is necessary to adjust the dose of *pellets* according to the gas temperature and consumption of *pellets* of the appliance at the rated power described in Table 2 - Technical Characteristicsto ensure that the equipment delivers the correct power.

Recommendations:

- Plug the 230 VAC power cord into an earthed electrical outlet. The electrical outlet (Figure 14 (a)) is located on the back of Luma equipment.



Figure 14 – Electrical outlet and its location

- Check that the *pellet* tank is filled. Inside the *pellet* tank there is a safety grid to prevent the user from accessing the auger.
- It should be checked that there is sufficient air circulation in the place where the installation is carried out, otherwise the equipment will not work properly. For this reason, you should pay attention to whether there are other heating equipment that consumes air for its operation (e.g., gas equipment, braziers, exhaust fans, etc.), it is not advisable to operate these equipment at the same time.
- As salamanders a *pellets* They have a probe to measure the ambient temperature. This probe is attached to the grille at the back (Figure 15). For the most accurate reading of the ambient temperature, avoid contact of the probe end with the machine frame. If you wish, you can also fix it on the wall next to the machine.

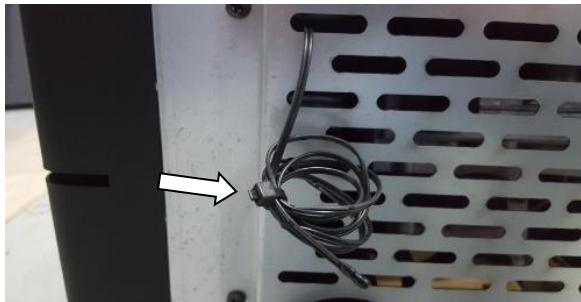


Figure 15 – Room temperature probe

- On the first use of the stove, the paint is cured, which can lead to the production of additional fumes. If this is the case, you should ventilate the place, opening the windows and doors to the outside.
- Avoid touching the equipment during the first firing so as not to leave permanent marks on the paint as it goes through a more plastic phase during its curing process. The ink cures at approximately 300°C for 30 minutes.

11. Fuel

- Pellets are the only fuel to be used for the stove to function. No other fuel may be used.
- Use only wood *pellets* certified to EN 14961-2 grade A1 with Ø of 6 mm and a length that can range from 10 to 30 mm.
- The maximum permissible moisture for *pellets* is 8% by weight. To ensure good combustion, pellets must maintain these characteristics, so it is recommended to store them in a dry place.
- The use of different *pellets* reduces the efficiency of the stove and leads to faulty combustion processes.
- Choose only certified pellets. On the other hand, before buying large quantities, we advise you to try a sample.
- The physicochemical properties of *pellets* (including size, friction, density, and chemical composition) can vary within certain tolerances and depending on the manufacturer. This can cause changes in the feeding process and consequently different dosages (with more or less *pellets*).
- The stove allows the adjustment of the dose of *pellets* in the start-up phase and in the power levels at $\pm 25\%$ (see point **Erro! A origem da referência não foi encontrada.** of the manual).



WARNING : The appliance must NOT be used as an incinerator.

12. Remote Control and Display

- The equipment includes a modern *display* that manages various functions that allow programming and interaction with the device.
- There is also a remote control that allows remote access to some of the equipment's functions.

Device	Functionality
	<ul style="list-style-type: none"> Visualization and interaction with equipment parameters and functions.
	<ul style="list-style-type: none"> The remote control allows you to turn the stove on and off, and also increase or decrease the power level of the

- The remote control allows you to switch the stove on and off and change the power level of the appliance (the stove cannot be in automatic mode). You may need to pair the remote control:



- 1- Press and hold the 2 buttons (combinations: 1-2, 1-3, 1-4, 2-3, 2-4, 3-4);
- 2- The LED starts flashing rapidly;
- 3- After 10s, the LED remains on;
- 4- After the LED stabilizes, stop pressing the buttons in less than 5s;
- 5- If you do not fail to press the buttons, the LED will turn off and the serial number will not be changed (protection against accidental pressure) and the remote control will no longer be paired with the stove.

List of serial numbers :

Button combinations	Associated frequency (bit)
1-2 (default)	00000100
1-3	00000101
1-4	00000110
2-3	00001001
2-4	00001010

List of codes:

Button	Associated code (bit)
Button 1 (ON)	Code : 11
Button 2 (+)	Code : 01
Button 3 (-)	Code : 00
Button 4 (OFF)	Code : 10

- This remote control is powered by two CR2016 3V batteries, similar to those in the photo below.



Figure 16 - Remote control batteries

Note: It is necessary to activate the control on the display, see point **Erro! A origem da referência não foi encontrada.** of the manual.

- The point 16 of this manual will explain all the functions of the stove.

When the appliance is connected to electricity, the appliance display indicates the status of the stove "OFF" and can also indicate the chrono activation, system errors, selected combustion power, selected ventilation power, current ambient temperature and selected ambient temperature set-point.



From the Input Menu when you press the key:

- "P1" is possible to exit the menu/submenu;
- "P2" it is possible to turn on the equipment, or turn off the equipment. The same button allows the reset of errors in case of blockage, pressing 3 seconds continuously, it also allows the activation of the Crono in the corresponding submenu;
- "P3" it is possible to access the user's menu 1 by pressing 3 seconds on the same button we can access the user's menu 2 and it also allows you to save changes;
- "P4" is possible to enter the Combustion Power menu;
- "P5" it is possible to enter the Info menu and also activate a Chrono time range;

- "P6" is possible to enter the Room Thermostat menu;
- "P3" + "P5" for 3 seconds it is possible to access the secondary information menu present in the services menu where it is possible to check a set of variables.

LED	Meaning
D  S  FS 	<ul style="list-style-type: none"> • When the present Led is active, it means that the Schedule is in Daily Mode ON, Weekly Mode ON or Weekend Mode ON.
	<ul style="list-style-type: none"> • When the present LED is active, it indicates which fans are running, local and remote.
	<ul style="list-style-type: none"> • When the present LED is active, it means that the requested room temperature has already been reached.



**THE STOVE SHOULD ALWAYS BE DEACTIVATED BY THE SAME METHOD THAT IT WAS ACTIVE.
DURING THE ACTIVATION PROCESS, THE EQUIPMENT SHOULD NEVER BE DISCONNECTED.**

13. Outburst

- Before starting to operate the equipment, make sure that the feed channel is filled with *pellets*. This check is carried out with the machine in *OFF*, enabling the pellet load function. When the first *pellets* start to fall into the burner, the machine is ready to start operating. Then disable the function.
- To start the equipment, it is necessary to press the *ON/OFF button* for 3 seconds. The display displays "Check-Up" until the verification phase is complete.
- The *pellets* will be conducted through the feed channel to the burner cup (combustion chamber), where they will be ignited with the aid of the heating element. This process can take between 5 and 10 minutes, depending on whether the pellet transport auger is pre-loaded or empty of fuel. After the ignition phase is finished, *the word "Normal"* should appear on the display.
- The heating power can be adjusted at any time by accessing the Combustion Management Menu in the "Personalisation Menu" menu.
- The user has the possibility to choose between five predetermined power levels. The selected power indication is visible on the *display*. The initial power state at the start of each start will be the value set before the last stop.
- When operating, the equipment will be hot, so care must be taken, especially not to touch the glass, the door handle and the exchanger's cleaning register.



THE SALAMANDRA SHOULD ALWAYS BE SWITCHED OFF BY THE SAME METHOD IT WAS SWITCHED ON. DURING START-UP, IT SHOULD NEVER BE UNPLUGGED.

14. Extinction

- The order to turn off the equipment is carried out by pressing the *ON/OFF* button for 3 seconds.
- Until this phase is complete, the *display* will indicate "Delete". The extractor will remain active until the deactivation time is met and the smoke temperature of 85 °C minus the delta of 2 °C is reached, to ensure that the material is all burned.

15. Recommendations for the use of the *pellet stove*

- Ensure that the stove is correctly connected to the 230V AC power supply.

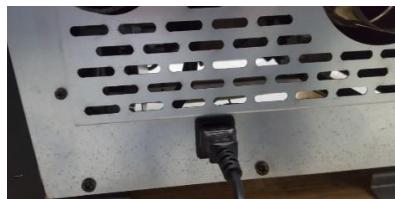


Figure 17 - Plug for connection to the mains

- Check that the *pellet tank* is filled. Inside the tank there is a safety grid to prevent the user from accessing the auger.
- Check that the burner cup is clean, well positioned, empty and free of obstructions before each ignition.
- In the event of a misfire, you must allow the stove to deactivate after finishing and cooling, clean the burner cup and try to restart. In case of consecutive failure, contact customer service.
- **THE STOVE'S COMBUSTION CHAMBER IS CONSTRUCTED OF SHEET STEEL PAINTED WITH HIGH-TEMPERATURE PAINT, RELEASING FUMES ON THE FIRST BURNS DUE TO THE CURING OF THE PAINT.**
- It must be checked that there is sufficient air circulation in the place where the installation is carried out, otherwise the equipment will not work properly. For this reason, you should pay attention to whether there are other heating equipment that consumes air for its operation (e.g. gas equipment, braziers, exhaust fans, etc.), and it is not advisable to use these equipment at the same time.
- Avoid switching the stove off and on intermittently, as it may cause damage to the electronic and electrical components of the equipment.
- Do not touch the equipment with wet hands, although the equipment is equipped with earth wires, improper handling may lead to a discharge. If you detect any electrical problems, contact the installer.
- Do not unplug the equipment from the outlet until the complete shutdown procedure has been completed ("OFF" on the display). Then, and if necessary, the power cable can be disconnected.
- Never open the stove door when it is switched on or running. If necessary, unplug the appliance

in advance and allow it to cool down.

- As salamandras a *pellets* They have a probe to measure the ambient temperature. This probe is fixed to the grille at the back (see Figure 18). For the most accurate reading of the ambient temperature, avoid contact of the probe end with the machine frame. If you wish, you can also fix it on the wall next to the machine.

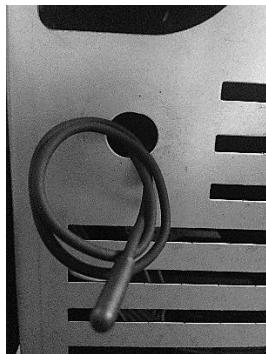


Figure 18 - Room temperature probe

- Before starting the machine, check that the baffle plate is correctly installed (see Figure 19).

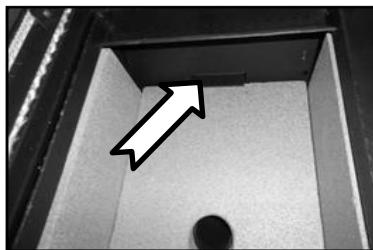
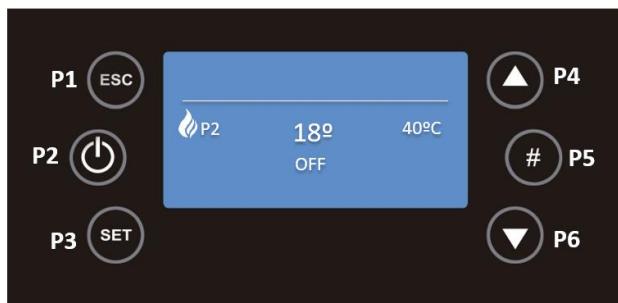


Figure 19 - Placement of the baffle plate

16. Columbus Electronics

The stoves are equipped with Columbus electronics, the display is as shown below.



16.1. Remote control



Figure 20 - Remote control via rádio

The remote control allows the stove to be switched on and off and the equipment can be changed (for this the stove cannot be on automatic). You may need to pair your controller, so you must:

- 1- Press and hold down the 2 buttons (combinations: 1-2, 1-3, 1-4, 2-3, 2-4, 3-4);
- 2- The led starts flashing rapidly;
- 3- After 10s, the led remains on;
- 4- After the led is fixed, stop pressing the buttons in less than 5s;
- 5- If you do not fail to press the buttons, the LED will turn off and the serial number will not be changed (protection against accidental pressure) and the control will no longer be paired with the stove.

List of serial numbers:

Button Combination	Associated frequency (bit)
1-2 (default)	00000100
1-3	00000101

1-4	00000110
2-3	00001001
2-4	00001010
3-4	00001100

Code List:

Button	Associated code (bit)
Button 1 (ON)	Code: 11
Button 2 (+)	Code: 01
Button 3 (-)	Code: 00
Button 4 (OFF)	Code: 10

This remote runs on two CR2016 3V batteries, similar to the one in the picture below.

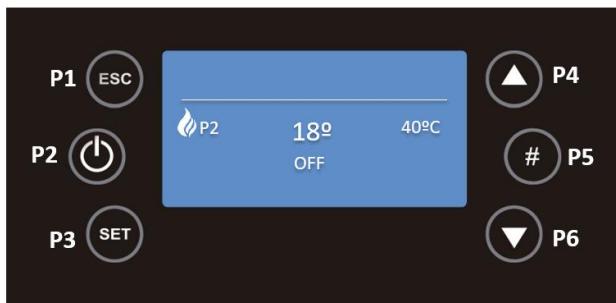


Figure 21 - Controller Batteries

Note: it is necessary to activate the command on the point view display 16.3.3 of the manual.

16.2. Display

When the appliance is connected to electricity, the appliance display indicates the status of the stove "OFF" and can also indicate the chrono activation, system errors, selected combustion power, selected ventilation power, current ambient temperature and selected ambient temperature set-point.



From the Input Menu when you press the key:

- "P1" is possible to exit the menu/submenu;
- "P2" it is possible to turn on the equipment, or turn off the equipment. The same button allows the reset of errors in case of blockage, pressing 3 seconds continuously, it also allows the activation of the Crono in the corresponding submenu;
- "P3" it is possible to access the user's menu 1 by pressing 3 seconds on the same button we can access the user's menu 2 and it also allows you to save changes;
- "P4" is possible to enter the Combustion Power menu;
- "P5" it is possible to enter the Info menu and also activate a Chrono time range;
- "P6" is possible to enter the Room Thermostat menu;
- "P3" + "P5" for 3 seconds it is possible to access the secondary information menu present in the services menu where it is possible to check a set of variables.

LED	Meaning
D  S  FS 	<ul style="list-style-type: none"> • When the present Led is active, it means that the Schedule is in Daily Mode ON, Weekly Mode ON or Weekend Mode ON.
	<ul style="list-style-type: none"> • When the present LED is active, it indicates which fans are running, local and remote.
	<ul style="list-style-type: none"> • When the present LED is active, it means that the requested room temperature has already been reached.



**THE STOVE SHOULD ALWAYS BE DEACTIVATED BY THE SAME METHOD THAT IT WAS ACTIVE.
DURING THE ACTIVATION PROCESS, THE EQUIPMENT SHOULD NEVER BE DISCONNECTED.**

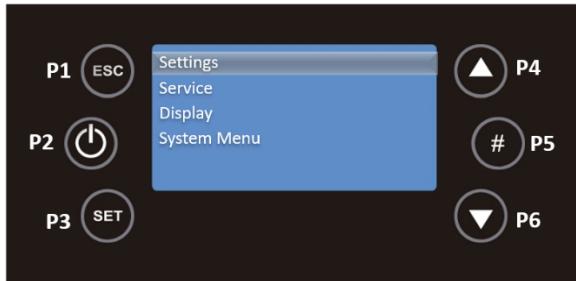
16.3. Settings Menu

16.3.1. Language

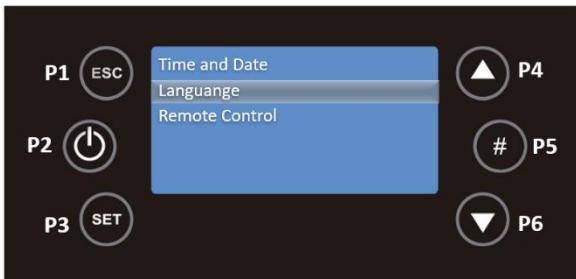
By pressing the P3 key for 3 seconds, you will then see the Settings, Service, Keyboard and System menus.

THE LATTER IS AN EXCLUSIVE ACCESS MENU TO THE TECHNICAL SERVICE AND REQUIRES A PASSWORD FOR THIS.

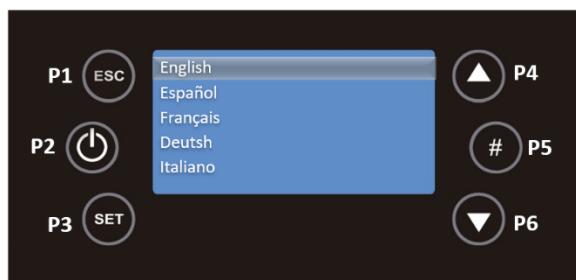
With the P4 and P6 keys you must select the desired menu and then press P3, to validate the choice, in this case it will be the Settings menu.



Select the Language submenu with the P6 key and to validate the entry in this submenu the P3 key.



Within this submenu, with P4 and P6 select the desired language and press the P3 key again to validate.

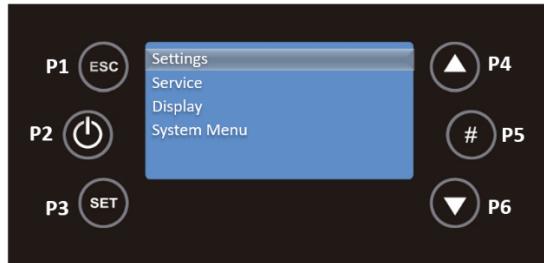


To exit the Language menu, press the P1 key.

16.3.2. Date and Time

- Hour

On the main screen, by pressing the P3 key for 3 seconds, you can access the Settings menu, pressing P3 again to enter this menu.



With the P3 key, select Date & Time.



In the Date and Time menu, select Time, with the P4 and P6 keys, and press the P3 key, the time will appear in editable mode, flashing, with P4 and P6 select the correct time and press P3 to validate.



The same should be done for the Minutes, with P6 select Minutes and press P3, the minutes will appear in editable mode, flashing, with P4 and P6 select the correct minutes and press P3 to validate.



- **Date**

In the same menu, select Day with the P4 and P6 keys and press P3, the day will appear in editable mode, flashing, with P4 and P6 select the correct day and press P3 to validate.



To edit the Month you must use the P4 and P6 keys to select this field and then P3, the month will appear in editable mode, with P4 and P6 select the desired month and press P3 again to validate.



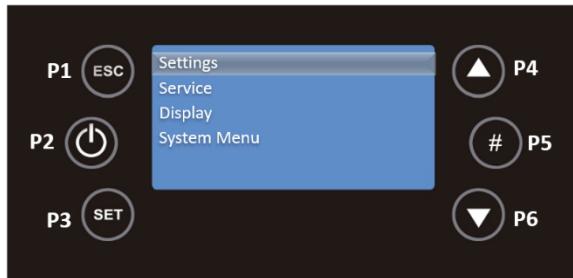
The Year follows the same procedure, press the P4 and P6 keys to move to the Year, use the P3 key to edit this field, the year will appear in editable mode. With P4 and P6 select the desired year and press P3 to validate.



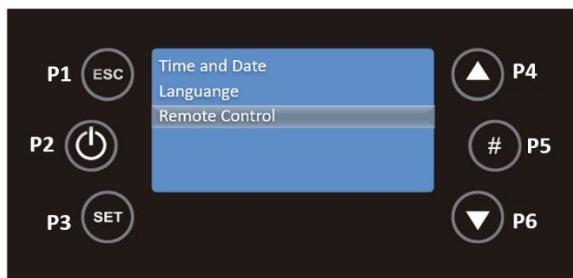
THE DAY OF THE WEEK (SUNDAY TO SATURDAY) CHANGES DEPENDING ON THE SELECTED DAY OF THE WEEK.

16.3.3. Remote control

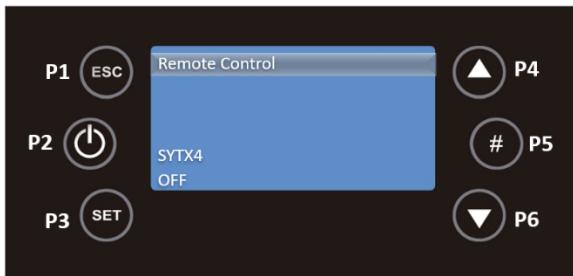
On the main screen, by pressing the P3 key for 3 seconds, you can access the Settings menu, pressing P3 again to enter this menu.



With the P6 key, select the Remote Control submenu and to validate the entry in this submenu, the P3 key.



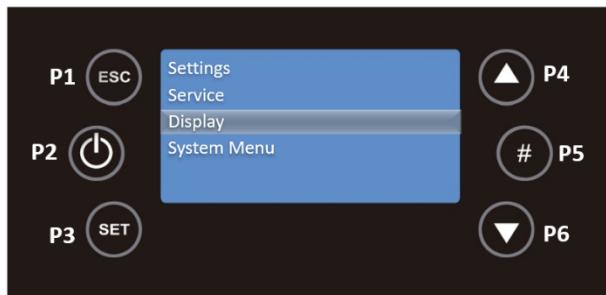
With the P4 and P6 keys you can activate or deactivate the Remote Control by pressing P3 to validate the action.



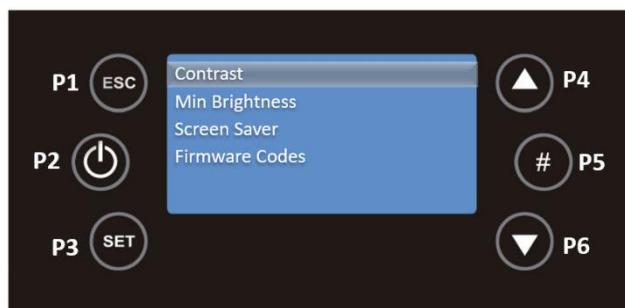
16.4. Keyboard Menu

By pressing the P3 key for 3 seconds, you will then see the Settings, Service, Keyboard and System menus.

With the P4 and P6 keys you must select the desired menu and then press P3, to validate the choice, in this case it will be the Keyboard menu.



In this menu there are the functions Contrast, Min Brightness, Screen Saver and Firmware Codes.



16.4.1. Contrast

By pressing the P3 key to validate the choice of this function, with the P4 and P6 keys you can set the contrast between 0 and 30 for your screen. To return to the Keyboard menu, press P1.



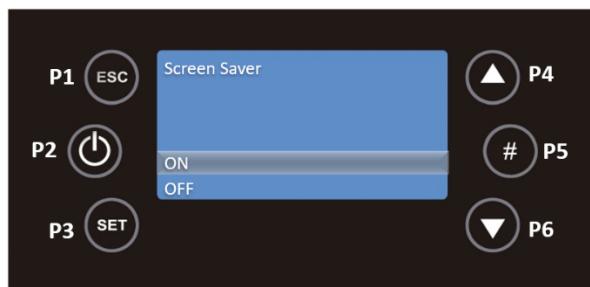
16.4.2. Min Brightness

In the Keyboard menu with P4 and P6 select the Min Brightness function by pressing the P3 key. With the P4 and P6 keys you can set the brightness between 0 and 20 for your display. To return to the Keyboard menu, press P1.



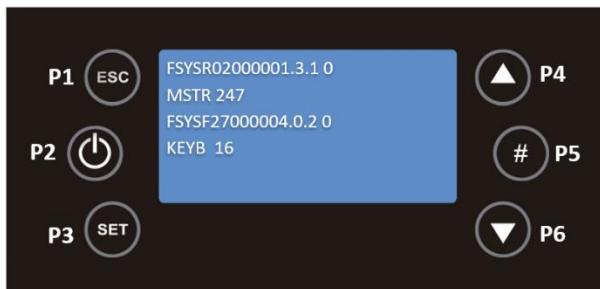
16.4.3. Screen Saver

In the Keyboard menu with P4 and P6 select the Screen Saver function by pressing the P3 key. In this function you can activate or deactivate the screen lock. To return to the Keyboard menu, press P1.



16.4.4. Firmware Codes

In the Keyboard menu with P4 and P6 select the Firmware Codes function by pressing the P3 key. This query-only function allows you to see the communication address of the control board, the type of board and firmware version.

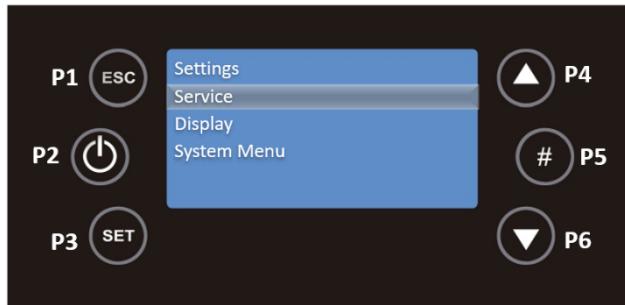


To return to the Keyboard menu, press P1. Double-pressing this key will display the Settings, Keyboard, Service, and System menus.

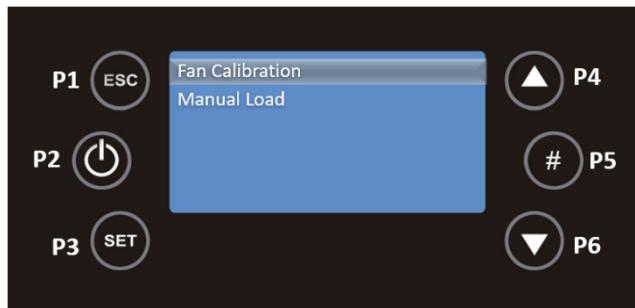
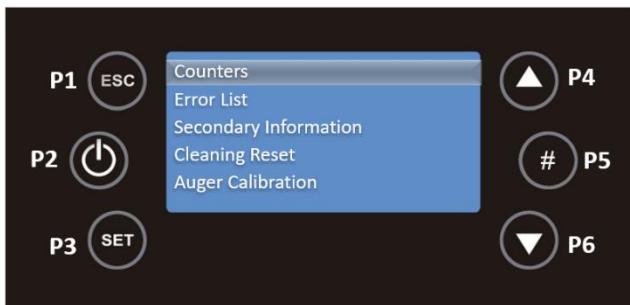
16.5. Menu Service

By pressing the P3 key for 3 seconds, you will then see the Settings, Service, Keyboard and System menus.

With the P4 and P6 keys you must select the desired menu and then press P3, to validate the choice, in this case it will be the Service menu.

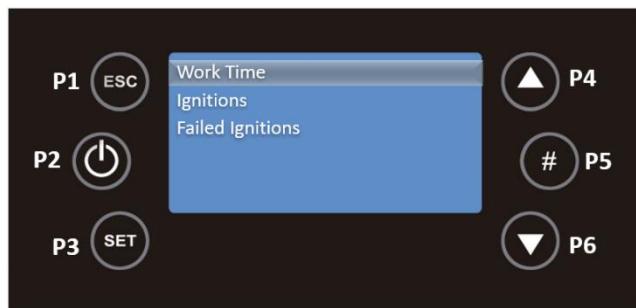


In this menu there are the following functions.

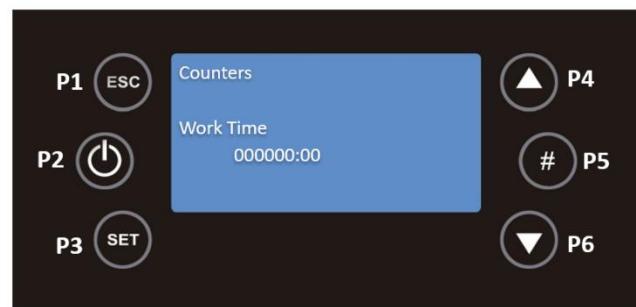


16.5.1. Counters

Select Counters, with the P3 key, to validate the entry in this submenu. This function allows you to see the working hours, the number of ignitions and the number of failed ignitions.

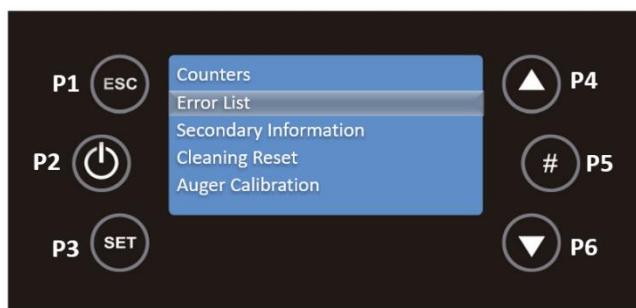


With the P4 and P6 keys, select the submenu you want to query and press P3 to validate. To return to the Service menu, press P1.

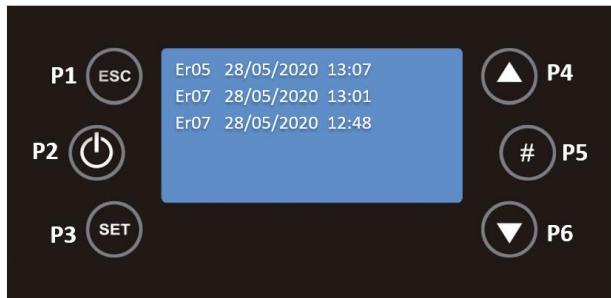


16.5.2. List of errors

In the Service menu with P4 and P6 select the Error List submenu, pressing the P3 key to validate.

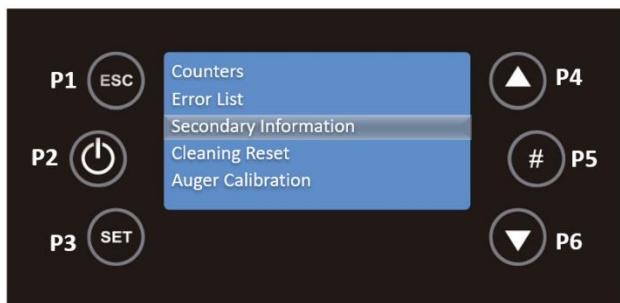


This submenu shows the last 10 errors that occurred, in each row the error code and the date and time it occurred are displayed. To return to the Service menu, press P1.



16.5.3. Secondary Information

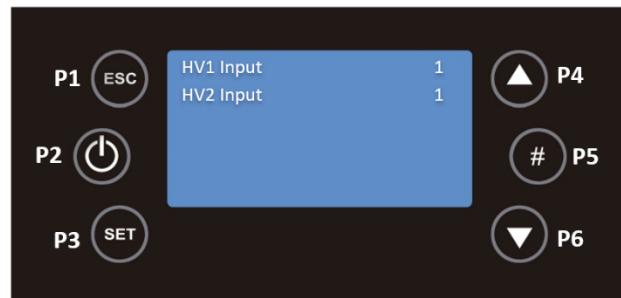
From the Service menu, select the Secondary Information submenu, with P4 and P6, and then press the P3 button.



In this function you can consult the product code, the status of the fume extractor, the auger, the ambient fan, and the status of the outputs.

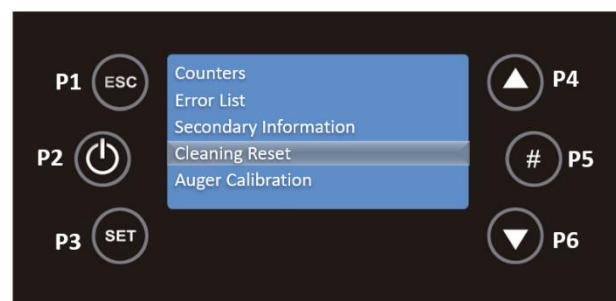


It is possible to check the smoke temperature, ambient temperature and the status of the inputs. Whether the input state is open (0) or closed (1).

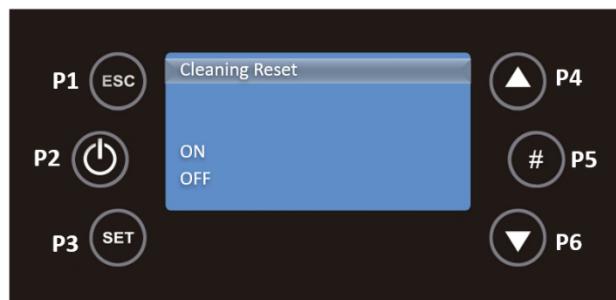


16.5.4. Cleaning Reset

In the Service menu with P4 and P6, select the Reset Cleaning function by pressing the P3 key.

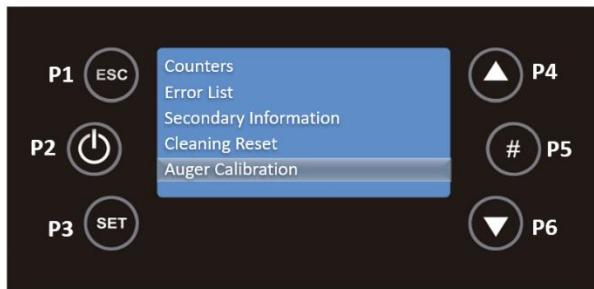


In this function you can turn this function on or off. To return to the Service menu, press P1.



16.5.5. Auger Calibration

In the Service menu with P4 and P6, select the Auger Calibration submenu, pressing the P3 key to validate.

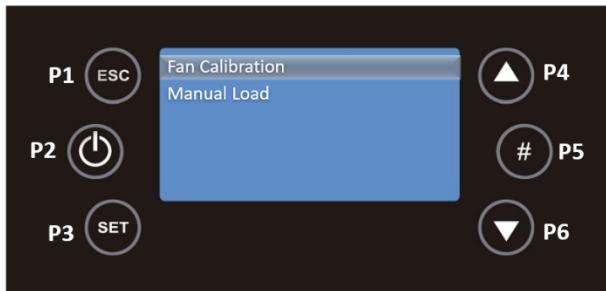


In this submenu with the P4 and P6 keys you can adjust the amount of *pellets* to be fed, between -7 (-14%) and 7 (+14%). To return to the Service menu, press P1.

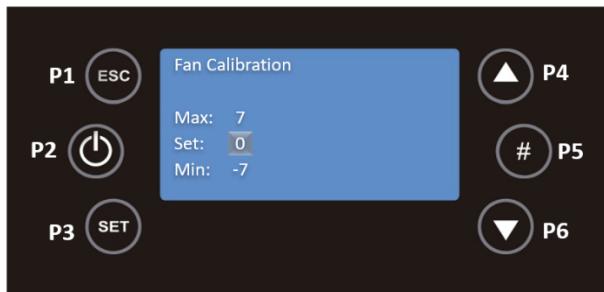


16.5.6. Fan Calibration

In the Service menu with P4 and P6, select the Fan Calibration submenu by pressing the P3 button.

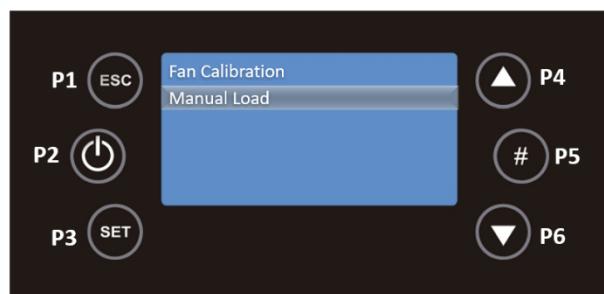


In this submenu with the P4 and P6 keys you can adjust the fan speed, between -7 (-21%) and 7 (+21%). To return to the Service menu, press P1.

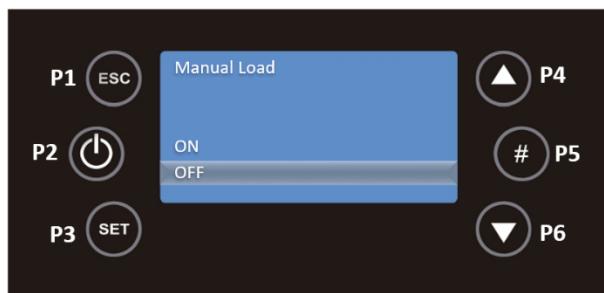


16.5.7. Manual Load

Select Cochlear Load, with the P3 key, to validate the entry in this submenu.



This function activates manual loading of *pellets*.

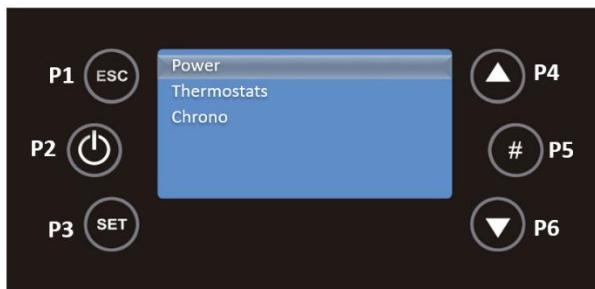


Double-pressing the P1 key will return to the main menus, Settings, Keyboard, Service, and System Menu.

THE LATTER IS AN EXCLUSIVE ACCESS MENU TO THE TECHNICAL SERVICE AND REQUIRES A PASSWORD FOR THIS.

16.6. Power Menu

By pressing the P3 button, you access the following menus, Power, Thermostats and Chrono. With the P4 and P6 keys you must select the desired menu and then press P3, to validate the choice, in this case it will be the Power menu.

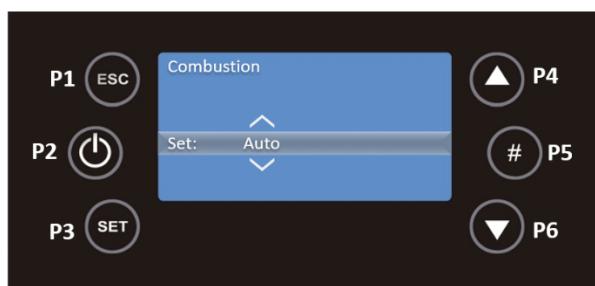


16.6.1. Combustion

Select Combustion with the P3 key to validate the entry in this submenu.



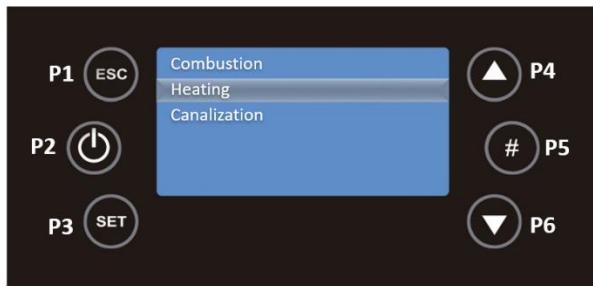
With the P4 and P6 keys you can modify the combustion power of the system. It can be set in automatic or manual mode: in the first case, the system will choose the combustion power; In the second case, the user selects the power from 0 to 5.



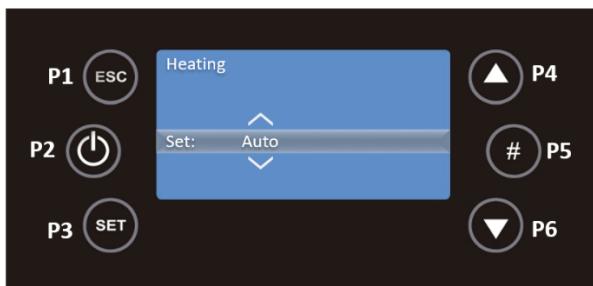
Press P3 to save your changes and use P1 to go back.

16.6.2. Heating

With P4 and P6 you should select Vent. Amb. and then press P3 to validate access to this submenu.



With the P4 and P6 keys you can modify the combustion power of the system. This submenu allows you to modify the ventilation power of the system. It can be set in automatic or manual mode: in the second case, the user selects the power from 0 to 5.



Press P3 to save your changes and use P1 to go back.

16.7. Thermostats Menu

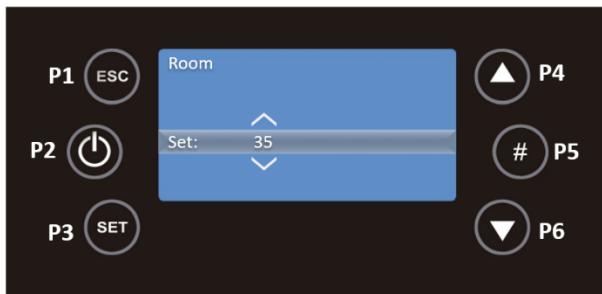
By pressing the P3 key, access the Thermostats menu, using the P6 key and then press P3, to confirm the choice of this menu.



In this menu, select the Environment submenu, using the P3 key.



You can set the target comfort temperature between 10 and 40°C with the P4 and P6 keys.

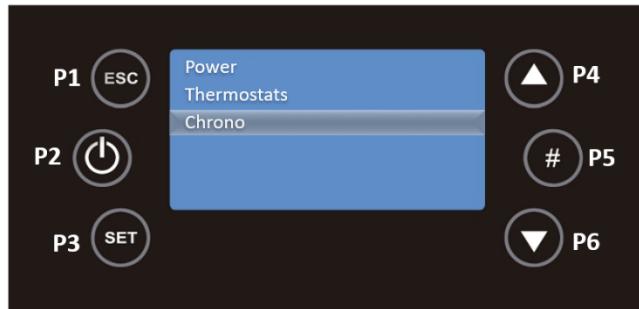


Press P3 to save your changes and use P1 to go back.

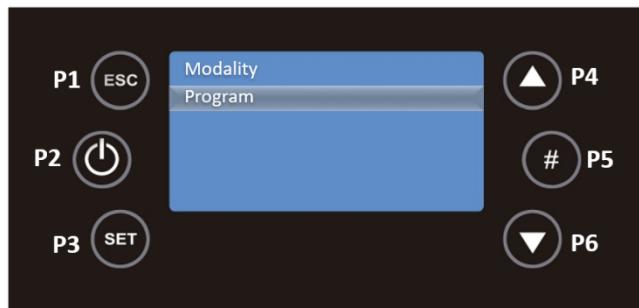
16.8. Menu Crono

The equipment has a time programmer that serves for the stove to turn on and off automatically. It can be daily (it is possible to select the desired day of the week and set up to 3 different times for the respective day), weekly (it is possible to select up to 3 times during a day, the same program will be applied every day of the week) and weekend (it is possible to select 3 times during the day for weekdays and weekends).

On the main screen, by pressing the P3 key, access the menus, Power, Thermostats and Chrono. With the P4 and P6 keys you must select the Chrono menu and then press P3 to validate the choice.



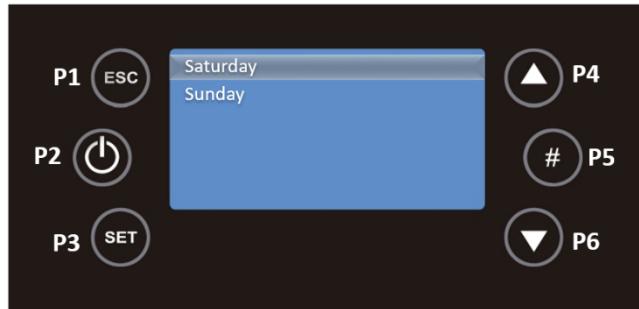
Then you must enter the Program submenu, using the P6 key to select and P3 to validate the choice.



Then with the P4 and P6 keys you must select Daily, Weekly or Weekend. You must press P3 to validate the choice.



For the Daily program , you must, with the P4 and P6 keys, select the day of the week, in this case the program for Monday is exemplified, and then press P3 to validate the choice.



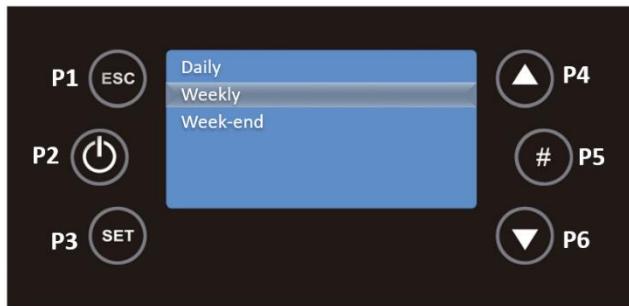
You should press P3 and this field will be in editable mode, flashing. Pressing P4 and P6 select the desired time and then use the P3 key to save. You should repeat this process for the time when the machine should turn off, using the P4 and P6 keys. Finally, you must captivate the range with the P5 key, and a checkmark will appear on the right side of the range.



In the image above, the system will turn on at 8:30 pm on Monday and turn off at 6:30 am on Tuesday. When programs are developed around midnight with the aim of starting the operation the day before and ending the operation the next day, it will be pertinent:

- Finish the last program the day before at 11:59 pm;
- Start the first program the next day at 00:00.

For the Weekly program, the programs are the same for all days of the week, from Monday to Sunday. You must, with the P4 and P6 keys, select Weekly, from the Program submenu, and press P3 to validate the choice.



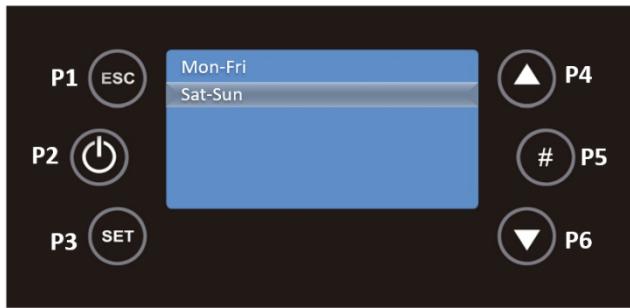
You should press P3 and this field will be in editable mode, flashing. Pressing P4 and P6 select the desired time and then use the P3 key to save. You should repeat this process for the time when the machine should turn off, using the P4 and P6 keys. Finally, you must captivate the range with the P5 key, and a checkmark will appear on the right side of the range.



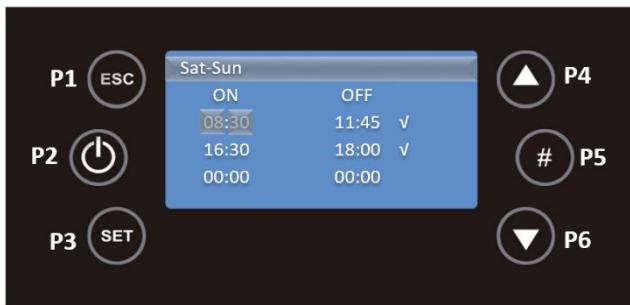
For the Weekend program, you must, with the P4 and P6 keys, select Weekend and press P3 to validate the choice.



For this modality, you must choose between the time slot from Monday to Friday and from Saturday to Sunday, by pressing the P3 key.

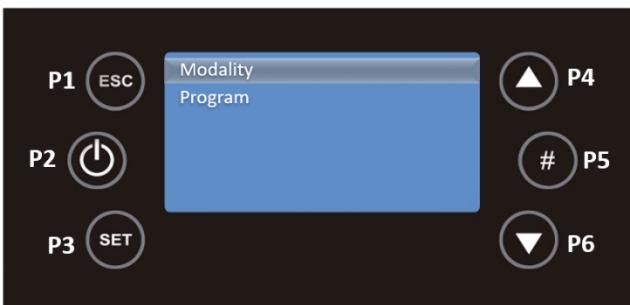


You should press P3 and this field will be in editable mode, flashing. Pressing P4 and P6 select the desired time and then use the P3 key to save. You should repeat this process for the time when the machine should turn off, using the P4 and P6 keys. Finally, you must activate the interval with the P5 key, and a checkmark will appear on the right side of the interval.

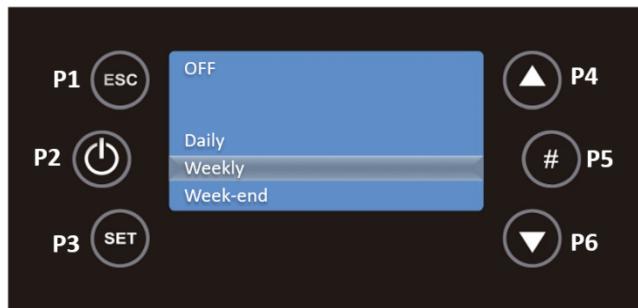


AFTER DEFINING THE PROGRAMS, IT IS NECESSARY TO DEFINE WHICH MODALITY YOU WANT TO ACTIVATE.

On the main screen, by pressing the P3 key, access the menus, Power, Thermostats and Chrono. With the P4 and P6 keys you must select the Chrono menu and then press P3 to validate the choice.



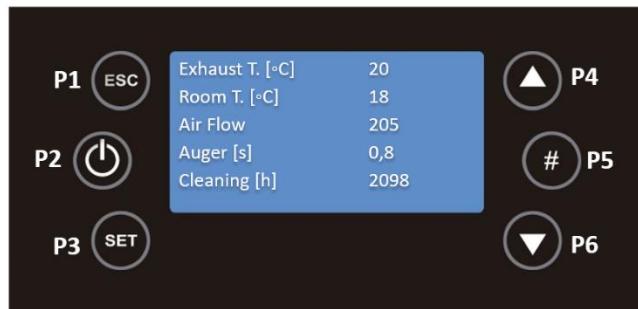
By selecting Mode with the P3 key, you can select which time mode you want. Use the P4 and P6 keys to select between Daily, Weekly, or Weekend, use the P2 key to enable/disable the choice, and P3 to save the changes.



The main screen after activating the mode has the Led **D**, **S** or **FS** active in the upper right corner.

16.9. User Info

In this menu, the user can view some information about the equipment, such as measured values and aspects related to electronics. In the home menu, press the P5 key once and the menu will appear.



With the P4 and P6 keys you can scroll through the different variables. The values displayed are the values measured online.

The following table is explicit to the meaning of each of the variables.

Table 1 - Meaning of the variables

T. Fumes [°C]	Read in degrees Celsius (°C) informs the exhaust temperature monitored by the thermocouple.
T. Amb. [°C]	Read in degrees Celsius (°C) informs the ambient temperature monitored by the NTC probe placed outside the stove.

Extractor [rpm]	Read in revolutions per minute tells you the rotation speed of the extractor.
Endless [s]	Read in seconds tells you time within 4 seconds that the worm motor is active and feed <i>pellets</i> to the burner.
Service [h]	Read in hours informs the number of hours missing to report anomalies due to lack of maintenance. They must be reset by the technical service at the time of maintenance. The maintenance period must respect the kilos of <i>pellets</i> burned.
Working time [h]	Read in Hours tells you the number of hours in On, Modeling, and Safety.
Ignitions [nr]	Read in number of occurrences informs how many ignitions have been made since they were reset.
Code. Artic.	Product Code.

17. Anomalies

Table 2 -Anomalies

<ul style="list-style-type: none"> • Probe — Failed to check the probes during the <i>check-up process</i>.
<ul style="list-style-type: none"> • Ignition Lock <i>ON/OFF</i> – When an external device (e.g. App or External Chrono) attempts to disable the equipment during the ignition process. The system will only shut down when it reaches the run mode phase, displaying the message "Blocked".
<ul style="list-style-type: none"> • Link Error — When there is no communication between the <i>motherboard</i> and the <i>display</i>.
<ul style="list-style-type: none"> • Cleaning/PCLr — Cleaning Period.
<ul style="list-style-type: none"> • Intermittent Hours — Incorrect time and date in the event of an extended power failure.
<ul style="list-style-type: none"> • Door — Open door.

ANOMALIES DO NOT CAUSE EQUIPMENT TO SHUT DOWN

18. List of Alarms / Defects / Recommendations

- All alarms trigger the machine to shut down with error display and alarm LED activation. You will need to reset the alarm and restart. To reset the machine, press the "ON/OFF" button for 3-4 seconds until the beep is emitted, accompanied by a message "Zero alarms in progress";
- If the *alarm reset* is successful, a new message is displayed — Zero alarms successful.
- In the "OFF" state, if for any reason the smoke temperature rises above 85°C (Th01), the

greenhouse enters the deactivation mode.

Table 3 - List of Alarms

Alarm	Code		Cause and Resolution
Excess temperature in the pellet vat	ER01	110 °C, even with the device off	<ul style="list-style-type: none"> - Room fan does not work – call for assistance - Faulty thermostat – call for assistance - Machine with poor ventilation
Alarme pressostato de fumos	ER02	Door open, lack of depression or pump failure for 180 s Only visible if extractor on On	<ul style="list-style-type: none"> - Close the door and remove the faulty pressure switch error - Exhaust pipe clog or faulty extractor
Flame extinguished or lack of pellets	ER03	Smoke temperature below: 55°C (Th03)	<ul style="list-style-type: none"> - Empty pellet tank - Variable thermocouple - Clogged pellet channel
Excess Temperature of Fumes	ER05	More than 300°C	<ul style="list-style-type: none"> - Room fan does not work or is at a low power level – increase the level to maximum (if the problem persists, call for assistance) - Insufficient print run - Over-dosing pellets - Various smoke probe
Fume extractor error	ER07	No rpm signal. Allows temporary unlocking and tension work P25=0	<ul style="list-style-type: none"> - Check connection - Check that the fan is not blocked - After correction of the malfunction, it is necessary to reselect operating mode P25=2
Erro no encoder do extrator de fumos	ER08	Encoder has signal, but failed to regulate Allows temporary unlocking and tension work P25=0	<ul style="list-style-type: none"> - Exhaust pipe clog or faulty extractor - After correction of the malfunction, it is necessary to reselect operating mode P25=2
Misfire	ER12	Maximum time: 900 s and Smoke temperature less than 50°C	<ul style="list-style-type: none"> - Empty auger channel – restart - Burnt resistance firing – replace resistance - Misplaced burning basket - Smoke temperature has not exceeded the value set at activation

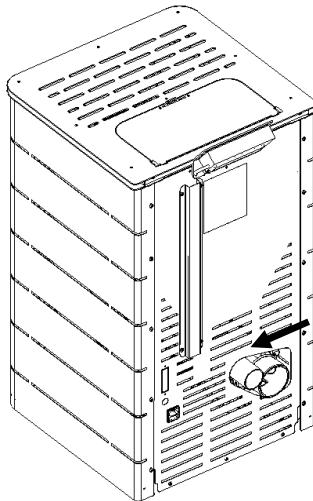
Power Cutoff	Voltage	ER15	Feed cut-off for more than 50 min	<ul style="list-style-type: none"> - Check supply voltage with the electricity supplier - Check the simultaneity of use of electrical appliances - In the event of a short power failure (<10s) the stove continues to work normally - If the system was in ON and the power failure occurs for more than 10s and less than 50 min, the stove develops a light after blackout
Communication failure with LCD control		ER16		<ul style="list-style-type: none"> - Check Connection Between Board and Display
Open door error (K600 only)		ER44	Door open for 60 sec	<ul style="list-style-type: none"> - Close the door – remove the error
Service	Service		Maximum Hours 2100 hr (T66) planned for maintenance achieved	<ul style="list-style-type: none"> - Contact your installer or repairer for punctual preventive maintenance of the equipment

THE MAINTENANCE ANOMALY ("SERVICE" MESSAGE ON THE DISPLAY) MEANS THAT THE STOVE HAS MORE THAN 2100 HOURS OF SERVICE. THE CUSTOMER MUST MAINTAIN THE EQUIPMENT AND ONLY THEN RESET THE HOUR COUNTER TO ELIMINATE THE ANOMALY MESSAGE. THIS DOES NOT INFLUENCE THE NORMAL OPERATION OF THE EQUIPMENT, IT IS JUST A WARNING.

19. Installation and operation with Chronothermostat (optional)

Pellet stoves are produced as standard with the control (*display*). Alternatively, the stove can be used with the application of a generic external control (chronothermostat), or another type of control as long as it is a voltage-free contact.

To connect the *pellet* equipment remotely via a chronothermostat or thermostat, the interface must be used.



Luma Model

Figure 22 – Location where the interface board is installed

20. Maintenance

- For the proper functioning of the appliance, it is essential to carry out a set of cleaning and maintenance operations. These can be done in a practical way with the help of a simple ash vacuum cleaner.
- The cleaning operation must be carried out after each burning of approximately 30 kg of *pellets*. Before any cleaning operation, it is essential that the stove is switched off and sufficiently cooled to avoid accidents.
- Deterioration of parts due to lack of cleaning or maintenance will result in the forfeiture of any right to the Mountain Fire warranty.
- To carry out the cleaning and maintenance of the equipment, it is suggested that the user has with him:
 - An ash vacuum cleaner;
 - A steel brush with 20-25mm diameter and 80cm length;
 - A wire brush.

20.1. Daily maintenance

A salamandra a *pellets* requires careful maintenance (see maintenance task label in point 19 or on the lid of *pellets* Figure 23). The main care to be taken is to regularly clean the ashes in the burning area of

the *pellets*. This can be done in a practical way with the help of a simple ash vacuum cleaner. The cleaning operation must be carried out after each burning of approximately 30kg of *pellets*.

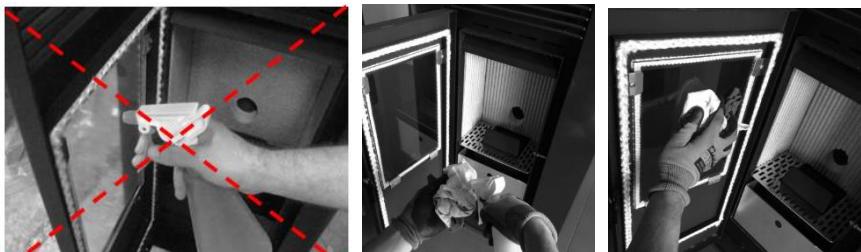
Note: Before carrying out any cleaning operation, it is imperative that the stove is switched off and cool enough to avoid accidents.



Figure 23 – Label with maintenance tasks

20.1.1. Glass cleaning

Glass can only be cleaned when it is completely cool; It must be cleaned with protective gloves and a suitable product, respecting the instructions for use and preventing the product from reaching the sealing cord and the painted metal parts – so as not to cause unwanted oxidation. The sealing cord is glued and should not be wet with water or cleaning products.



(a) (b) (c)

Figure 24 – Glass cleaning: a) incorrect cleaning of the glass; b) apply liquid to the cloth; c) Clean the glass with the cloth

20.1.2. Cleaning the interior of the stove

To carry out this maintenance, pull the cleaning bar of the exchanger located in the upper area (a), then open the door (b), vacuum the ash and clean the burner (c).



(a) (b) (c)

Figure 25 – Cleaning bar and door closer

20.2. Weekly maintenance

In this maintenance you must perform all the daily cleaning tasks described in the previous point; at the same time, remove the basket, grill and burner (Figure 26), and vacuum up existing ash.



(a) (b) (c)

Figure 26 – a) Basket of ashes; b) Grill; c) Burner

It is also necessary to clean the inside of the stove by simply opening the trapdoor, as shown in (Figure 27) and suck up the ashes inside the combustion chamber. Finally, assemble the parts in the reverse order in which they were removed and close the door of the appliance.

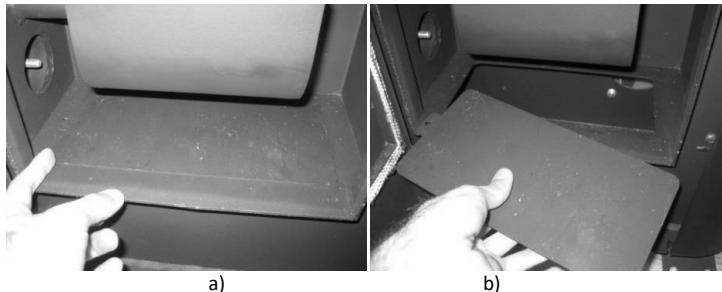


Figure 27 – Cleaning the interior of the stove



WARNING! The frequency of maintenance tasks is dependent on the quality of the *pellets*.

Note: see label with warnings and maintenance tasks in point 19.

20.3. Additional cleaning

For every 600-800 kg of *pellets* consumed, additional cleaning should be carried out.

To carry out this cleaning, it is necessary to remove the side covers, to have access to the side covers of the combustion chamber. To clean the interior, remove the screws or nuts (Figure 28-a and **Erro! A origem da referência não foi encontrada.** -a), remove the cover and remove the ashes with the vacuum cleaner. Use a steel brush with a diameter of 20-25 mm and a length of 80 cm to clean the smoke passage area (Figure 29-a and **Erro! A origem da referência não foi encontrada.** -a).

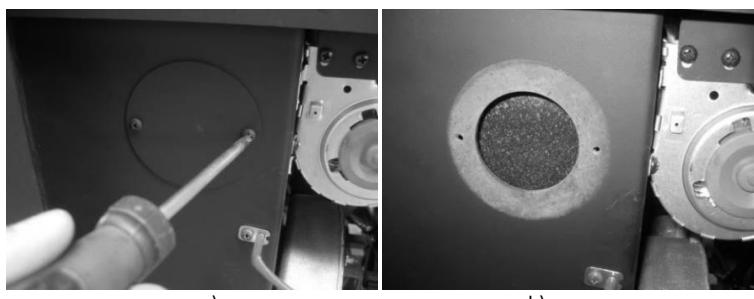


Figure 28 –Example Luma a) Remove the screws; b) Remove the cover

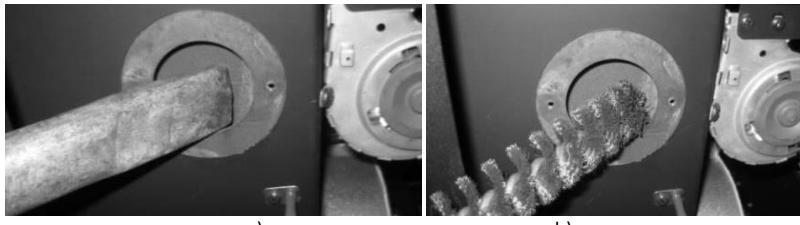


Figure 29 –Example Luma a) Vacuuming the interior; b) Cleaning with a brush

In the event that it is found that the fume extraction is not being carried out in the best conditions, we suggest cleaning the extractor, vacuuming its interior as indicated in the Figure 30. However, this operation is recommended at least once a year.

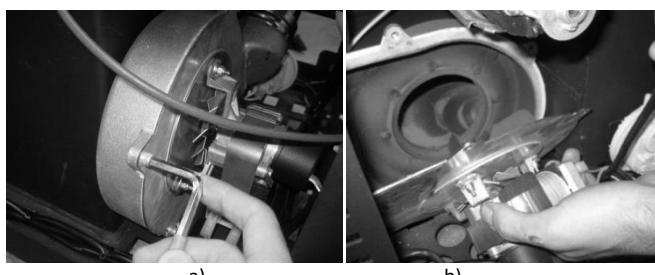


Figure 30 – a) Remove the screws; b) Remove extractor

⚠ WARNING! The frequency of maintenance tasks is dependent on the quality of the pellets.

Note: See label with warnings and maintenance tasks in point 21.

20.4. Review after a long period of inactivity

- Check that the gas outlet or combustion air inlet is not obstructed with foreign elements, for example nests, or with some type of infiltration.

20.5. Maintenance plan and record

To ensure the proper functioning of your stove, it is essential to carry out maintenance operations that are detailed in the chapter 20 of this instruction manual or on the label with the care and cleaning guide. Some tasks must be performed by a certified technician. Contact the installer. In order not to lose the warranty of your equipment, maintenance must be carried out at the intervals indicated in this manual, the technician must also fill out and sign the service booklet.

Customer Contact Information:

Name:	
Dwelling:	
Contact:	
Model:	
Serial No.:	

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquinho do motor da cuba de pellets		

Assinatura/Carimbo

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquinho do motor da cuba de pellets		

Assinatura/Carimbo

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquinho do motor da cuba de pellets		

Assinatura/Carimbo

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquinho do motor da cuba de pellets		

Assinatura/Carimbo

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		

Horas de serviço da caldeira:
Qtd. Pellets consumida: _____

Assinatura/Carimbo

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		

Horas de serviço da caldeira:
Qtd. Pellets consumida: _____

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		

Horas de serviço da caldeira:
Qtd. Pellets consumida: _____

Empresa/SAT:	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qtd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		

Empresa/SAT:			
Técnico:			
Data:			
Horas de serviço da caldeira:			
Qtd. Pellets consumida:			
Tarefas	Visto	Obs.	
Limpar queimador			
Limpar circuito de fumo e permutador			
Limpar compartimento do alçaço			
Aspirar serrim no interior da cuba de pellets			
Verificar pressão do vaso de expansão			
Verificar válvula de segurança 3 bar			
Verificar líquido do circuito hidráulico			
Limpar extrator de fumos			
Verificar e limpar o T de inspeção			
Limpar chaminé			
Verificar aperto parafusos motores			
Verificar casquilho do motor da cuba de pellets			

Empresa/SAT: Técnico: Data: Horas de serviço da caldeira: Qtd. Pellets consumida:		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do acúmulo		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extrator de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquilho do motor da cuba de pellets		

Empresa/SAT: Técnico: Data: Horas de serviço da caldeira: Ctd. Pellets consumida: _____		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão no vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar cipsóculo do motor da cuba de pellets		

Empresa/SAT: Técnico: Data: Horas de serviço da caldeira: Qty. Pellets consumida:	Tarefas	Visto	Obs.
Limpar queimador			
Limpar circuito de fumo e permutador			
Limpar compartimento do alçapão			
Aspirar serrim e interior da cuba de pellets			
Verificar pressão do vaso de expansão			
Verificar válvula de segurança 3 bar			
Verificar líquido do circuito hidráulico			
Limpar extractor de fumos			
Verificar e limpar o T de inspeção			
Limpar chaminé			
Verificar aperto parafusos motores			
Verificar aperto bucha do motor da cuba de pellets			

Empresa/SAT: Técnico: Data: Horas de serviço da caldeira: Ctd. Pellets consumida:

Empresa/SAT:	
Técnico:	
Data:	
Horas de serviço da caldeira:	
Ctd. Pellets consumida:	

Vermecer aperto parafusos motores	Empresa/SAT:	
	Técnico:	
	Data:	
Horas de serviço da caldeira:		
Qty. Pellets consumida:		
Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do aljapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		

Empresa/SAT:			
Técnico:			
Data:			
Horas de serviço da caldeira:			
Qtd. Pellets consumida:			
Tarefas	Visto		Obs.
Limpar queimador			
Limpar circuito de fumo e permutador			
Limpar compartimento do aljapão			
Aspirar serrim no interior da cuba de pellets			
Verificar pressão do vaso de expansão			
Verificar válvula de segurança 3 bar			
Verificar líquido do circuito hidráulico			
Limpar extractor de fumos			
Verificar e limpar o T de inspeção			
Limpar chaminé			

Verificar aberto baralhos motores	Empresa/SAT:
	Técnico:
	Data:
Horas de serviço da caldeira:	
Qty. Pellets consumida:	
Tarefas	Visto
Limpar queimador	
Limpar circuito de fumo e permutador	
Limpar compartimento do alçaço	
Aspirar serrim no interior da cuba de pellets	
Verificar pressão do vaso de expansão	
Verificar válvula de segurança 3 bar	
Verificar líquido do circuito hidráulico	
Limpar extracto de fumos	
Verificar e limpar o T de inspeção	
Limpar chaminé	
Verificar aperfeiçamento parafusos motores	
Verificar casquilho do motor da cuba de pellets	

Verificar aperto parafusos motores	Empresa/SAT:
	Técnico:
	Data:
Horas de serviço da caldeira:	
Qty. Pellets consumida:	
Tarefas	Visto
Limpar queimador	Obs.
Limpar circuito de fumo e permutador	
Limpar compartimento do alçaço	
Aspirar serrim no interior da cuba de pellets	
Verificar pressão do vaso de expansão	
Verificar válvula de segurança 3 bar	
Verificar líquido do circuito hidráulico	
Limpar extractor de fumos	
Verificar e limpar o T de inspeção	
Limpar chaminé	
Verificar aperto parafusos motores	
Verificar casquilho do motor da cuba de pellets	

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qty. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutterador		
Limpar compartimento do acoplão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aberto parafusos motores		

Empresa/SAT: _____
Técnico: _____
Data: _____
Horas de serviço da caldeira: _____
Qtd. Pellets consumida: _____

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçação		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extrator de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquilho do motor da cuba de pellets		

Assinatura/Carimbo

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qty. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutedor		
Limpar compartimento do aéreasão		
Aspirar serinim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto, parafusos motores		

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qtd. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperito parafusos motores		
Verificar casquilho do motor da cuba de pellets		

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qtd. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar coletor de óleo do alegria		
Aspirar lenim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extrator de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aferido, parafusos motores		

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Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qty. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alcapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extrator de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aberto para fusos motores		

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qtd. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçaço		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aperto parafusos motores		
Verificar casquilho do motor da cuba de pellets		

Assinatura/Carimbo

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qty. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alapapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aferir parafusos motores		

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qty. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar compartimento do alçapão		
Aspirar serrim no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extractor de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aerto parafusos motores		
Verificar casquilho do motor da cuba de pellets		

Empresa/SAT:
Técnico:
Data:
Horas de serviço da caldeira:
Qty. Pellets consumida:

Tarefas	Visto	Obs.
Limpar queimador		
Limpar circuito de fumo e permutador		
Limpar escoamento de eletrólito		
Aspirar semin no interior da cuba de pellets		
Verificar pressão do vaso de expansão		
Verificar válvula de segurança 3 bar		
Verificar líquido do circuito hidráulico		
Limpar extrator de fumos		
Verificar e limpar o T de inspeção		
Limpar chaminé		
Verificar aferir parafusos motores		

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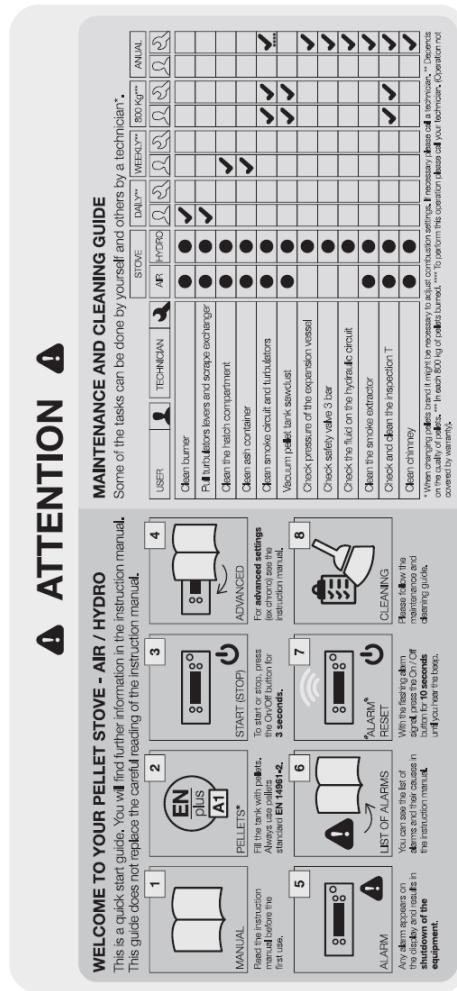


Figure 31 - Maintenance and Cleaning Guide

Note: The maintenance warning label is, by default, glued to the *pellet lid* of the stove in the Portuguese version, next to the stove manual there are labels in several languages (ES, EN, FR and IT) if necessary, remove the label in Portuguese and stick the one in the respective language of the country.

21. Electrical schematic of the pellet stove

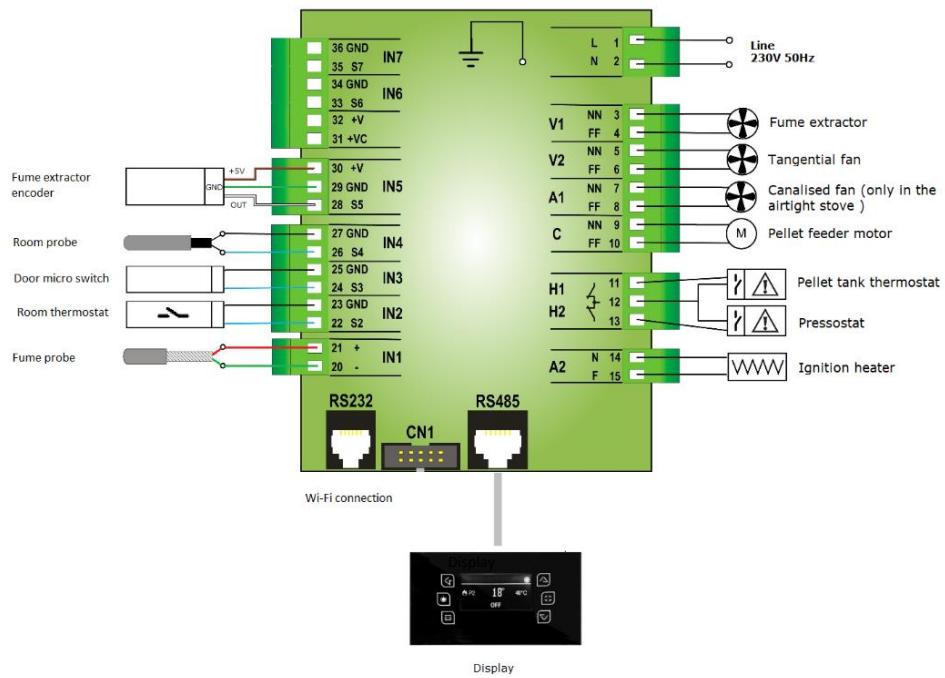


Figure 32 - Electrical Schematic

22. End of life of a *pellet stove*

- About 90% of the materials used in the manufacture of the equipment are recyclable, thus contributing to lower environmental impacts and contributing to the sustainable development of the planet. Thus, end-of-life equipment must be sent to licensed waste operators, so it is advisable to contact your municipality so that it can be collected correctly.

23. Sustainability

- Fogo Montanha conceives and designs solutions and equipment with biomass as the primary source of energy. It is our contribution to the sustainability of the planet – an economically viable and environmentally friendly alternative, safeguarding good environmental management practices in order to ensure efficient management of the carbon cycle.
- Fogo Montanha seeks to know and study the national forest park, responding efficiently to energy demands, always taking care to safeguard biodiversity and natural wealth, essential for the quality of life of the Planet.
- Fogo Montanha is a member of Sociedade Ponto Verde, which manages the packaging waste of the products that the company places on the market, so you can place the packaging waste from your equipment, such as plastic and cardboard, in the recycling bin closest to your home.
- Fogo Montanha is a member of Amb3E, which is the entity responsible for the collection of waste electrical and electronic equipment (WEEE); therefore, equipment with forced ventilation, at the end of life, must have an appropriate referral with regard to WEEE. When dismantling your equipment, you can place the electrical components at the WEEE collection point closest to your home.

24. Warranty

24.1. Model-Specific Conditions

- This model requires the start of the model as a procedure for activating the warranty. The start-up service may only be carried out by technical services authorised by the factory. This must be done up to 100 hours of service. The start-up service will be at the expense of the end user.
- To activate the warranty, it is necessary to send the duly completed start-up form to the following email: apoio.cliente@fogo-montanha.com.
- For more information, please refer to our *official website* for technical assistance via the following link:



24.2. General Warranty Conditions

1. Corporate name and address of the Producer and Object

Fire Mountain
Rua da Cova da Areia (E.M 605), 695
3750-071 Aguada de Cima
Portugal

This document does not constitute the provision by Fogo Montanha of a voluntary guarantee on the products produced and marketed by it (hereinafter "Product(s)"), but rather a guide, which is intended to be clarifying, for the effective activation of the legal guarantee that consumers benefit from on the Products (hereinafter "Warranty"). Of course, this document does not affect the Buyer's statutory warranty rights arising from a contract of sale with respect to the Products.

2. Identification of the product on which the Warranty applies

The activation of the Warranty presupposes the prior and correct identification of the Product object of the same with Fogo Montanha, to be promoted through the indication of the Product packaging data contained both in the respective purchase invoice and in the Product's characteristics plate (model and serial number).

3. Product Warranty Conditions

- 3.1. Fogo Montanha is liable to the Buyer for manufacturing defects of the Product in accordance with

the respective purchase and sale contract, within the following periods:

3.1.1. A period of 36 months from the date of delivery of the good, in the case of domestic use of the product, except for the provisions of the following paragraph regarding intensive use;

3.1.2. A period of 6 months from the date of delivery of the good, in the case of professional, or industrial, or intensive use of the products – Fogo Montanha understands professional, industrial, or intensive use as all products installed in industrial, commercial, or commercial spaces, or whose use exceeds 1500 hours per calendar year.

3.2. A functional test of the product must be carried out before carrying out the finishing of the installation (plasterboard, masonry, coatings, paintings, among others).

3.3. No equipment can be replaced after the 1st Burning without the express authorization of the Producer.

3.4. Any and all products must be repaired at the installation site without causing serious inconvenience to the parties, except if this proves impossible or disproportionate.

3.5. To exercise their rights, and provided that the period indicated in 3.1 is not exceeded, the Buyer must report in writing to Fogo Montanha the lack of conformity of the Product within a maximum period of:

3.5.1. 60 (sixty) days from the date on which it was detected, in the case of domestic use of the product;

3.5.2. 30 (thirty) days from the date on which you have detected it, in the case of professional use of the Product.

3.6. In the equipment of the pellet family, the start-up service is required to activate the warranty. This must be recorded within 3 months of the invoice date, or 100 hours of product work (whichever comes first).

3.7. During the Warranty period referred to in paragraph 3.1 above (and in order for it to remain valid), repairs to the Product must be carried out exclusively by the Official Technical Services of the Brand. All services provided under this Guarantee will be carried out from Monday to Friday within the working hours and calendar legally established in each region.

3.8. All requests for assistance must be submitted to Fogo Montanha's customer service, through the appropriate form on the www.fogo-montanha.com Site, or e-mail: apoio.cliente@fogo-montanha.com. At the time of technical assistance to the Product, the Purchaser must present, as proof of the Product Warranty, the purchase invoice for the same or another document demonstrating its purchase. In any case, the document proving the purchase of the Product must contain the identification of the same (under the terms referred to in 2 above) and its date of purchase. Alternatively and in order to validate the Product Warranty, the PSR - document proving the start of the machine (when applicable) may be used.

3.9. The Product must be installed by a qualified professional, in accordance with the regulations in force in each geographical area, for the installation of these Products and complying with all regulations in force, namely those regarding chimneys, as well as other applicable regulations for aspects such as water supply, electricity and/or others related to the equipment or sector and as described in the instruction manual.

An installation of a Product that does not comply with the manufacturer's specifications and/or that does not comply with the legal regulations on this matter, will not give rise to the application of this Warranty. Whenever a Product is installed outdoors, it must be protected against weather effects, such as rain and wind. In these cases, it may be necessary to protect the device by means of a cabinet or a properly ventilated protective box.

Appliances should not be installed in places that contain chemicals in their atmosphere, saline environments or with high humidity contents, as mixing them with air can produce rapid corrosion in the combustion chamber. In this type of environment, it is especially recommended that the appliance is protected with anti-corrosion products for this purpose, especially between operating seasons. As a suggestion, the application of graphite greases indicated for high temperatures with lubrication function and anti-corrosion protection is indicated.

3.10. In the equipment belonging to the pellet family, in addition to the daily and weekly maintenance contained in the instruction manual, it is also mandatory to carry out cleaning inside and the respective smoke evacuation chimney. These tasks should be carried out for every 600-800 kg of pellets consumed, in the case of stoves (air and water) and compact boilers, and for every 2000-3000 kg of pellets consumed, for automatic boilers. In the event that these quantities are not consumed, at least systematic preventive maintenance must be carried out on an annual basis.

3.11. It is the responsibility of the Buyer to ensure that periodic maintenance is carried out, as indicated in the instruction and handling manuals that accompany the Product. Whenever requested, it must be proven by the presentation of the technical report of the entity responsible for it, or, alternatively, by registering them in the instruction manual in the dedicated section.

3.12. To avoid damage to equipment caused by overpressure, safety elements such as pressure safety valves and/or thermal discharge valves, if applicable, as well as an expansion vessel adjusted to the installation, must be ensured, and its correct operation must also be ensured. It should be noted that: the referenced valves must have a value equal to or less than the pressure supported by the equipment; there must be no shut-off valve between the equipment and its safety valve; a systematic preventive maintenance plan should be provided to attest to the correct functioning of these security features; Regardless of the type of appliance, all safety valves must be piped to siphon sewage, to prevent damage to the house by water discharges. The Product Warranty does not include damage caused by the failure to channel the water discharged by said valve.

3.13. To avoid damage to equipment and attached pipes due to galvanic corrosion, it is advisable to use dielectric separators (cuffs) in the connection of the equipment to metal pipes whose characteristics of the materials applied potentiate this type of corrosion. The Product Warranty does not include damage caused by failure to use such dielectric separators.

3.14. The water or thermofluidic used in the heating system (Hydro stoves, boilers, stoves, central heating, among others) must comply with the legal requirements in force, as well as ensure the following physicochemical characteristics: absence of suspended solid particles; low level of conductivity; residual hardness of 5 to 7 French degrees; Neutral pH, close to 7; low concentration of chlorides and iron; and absence of air intakes due to depression or others. If the installation provides an automatic water make-up, it must consider upstream a preventive treatment system consisting of filtration, descaling and preventive dosing of polyphosphates (scale and corrosion), as well as a degassing stage, if necessary. If under any circumstances any of these indicators presents values outside the recommended range, the Guarantee will cease to be effective. It is also mandatory to place a non-return valve between the automatic filling valve and the mains water supply, as well as that the supply always has constant pressure, even with a lack of electricity, not depending on pumps, autoclaves, or others.

3.15. Except in the cases expressly provided for by law, a warranty intervention does not renew the warranty period of the Product. Rights arising from the Warranty are not transferable to the purchaser of the Product.

3.16. The equipment must be installed in accessible places and without risk to the technician. The necessary means for access to them will be made available by the Buyer, who will be responsible for any charges arising therefrom.

3.17. The Warranty is valid for the Products and equipment sold by Fogo Montanha only and exclusively within the geographical and territorial area of the country where the Product was sold by Fogo Montanha.

4. Circumstances that exclude the application of the Warranty

The following cases are excluded from the Warranty, with the total cost of the repair being borne by the Buyer:

4.1. Products with more than 2000 operating hours;

4.2. Refurbished and resold products;

4.3. Maintenance, overhaul, tuning of the Product, start-ups, cleaning, elimination of errors or anomalies that are not related to deficiencies in equipment components and replacement of batteries;

4.4. Components in direct contact with fire such as: vermiculite supports, deflector or protection plates, vermiculite, sealing cords, burners, ash drawers, wood chippers, smoke registers, ash grids, whose wear is directly related to the conditions of use. Degradation of the paint, as well as the appearance of corrosion due to its degradation, due to excess fuel load, use of an open drawer or excessive drawing of the installation chimney (the chimney must comply with the recommended draft in the Product's Technical Data Sheet-SFT). The breakage of the glass due to improper handling or

other reason unrelated to the deficiency of the Product. In the pellet family equipment, the ignition resistors are a wearing part, so they only have a 6-month warranty, or 1000 ignitions (whichever occurs first);

4.5. Components considered to be wearing, such as bearings, bushings and bearings;

4.6. Deficiencies of components external to the Product that may affect its correct functioning, as well as material or other damage (e.g. tiles, roofs, waterproofed roofs, pipes, or personal damage) caused by the improper use of materials in the installation or by the non-execution of the installation in accordance with the installation standards of the Product, applicable regulations or rules of good art, namely when the application of piping appropriate to the temperature in use, expansion vessels, non-return valves, safety valves, anti-condensation valves, among others, has not been promoted;

4.7. Products whose operation has been affected by failures or deficiencies of external components or by deficient sizing;

4.8. Defects caused by the use of accessories or replacement Components other than those determined by Fogo Montanha;

4.9. Defects resulting from non-compliance with the instructions for installation, use and operation or from applications that do not conform to the use for which the Product is intended, or from abnormal climatic factors, strange operating conditions, overload or improperly performed maintenance or cleaning;

4.10. Products that have been modified or manipulated by people outside the brand's Official Technical Services and consequently without explicit authorization from Fogo Montanha;

4.11. Damage caused by external agents (rodents, birds, spiders, etc.), atmospheric and/or geological phenomena (earthquakes, storms, frost, hail, thunderstorms, rain, etc.), aggressive humid or saline environments (e.g. proximity to the sea or river), as well as those resulting from excessive water pressure, inadequate power supply (voltage with variations greater than 10% compared to the nominal value of 230V), or, voltage in the neutral higher than 5V, or, absence of earth protection), pressure or supply of inadequate circuits, acts of vandalism, urban confrontations and armed conflicts of any kind, as well as derivatives;

4.12. Failure to use fuel recommended by the manufacturer is a condition of exclusion from the Warranty.

Explanatory note: In the case of pellet appliances, the fuel used must be certified to EN 14961-2 grade A1. Likewise, before buying large quantities you should test the fuel to check how it behaves.

4.13. The appearance of condensation, either by poor installation or by the use of fuels other than virgin wood (such as pallets or wood impregnated with paints or varnishes, salt or other components), which may contribute to the accelerated degradation of the equipment, especially its combustion chamber;

4.14. All Products, Components or components damaged in transport or installation;

4.15. Cleaning operations carried out on the appliance or its components, caused by condensation, fuel quality, poor adjustment or other circumstances of the place where it is installed. Likewise, interventions for the descaling of the Product (the elimination of limescale or other materials deposited inside the appliance and produced by the quality of the water supply) are excluded from the Warranty. Likewise, interventions such as air purging from the circuit or unlocking circulator pumps are excluded from this Warranty;

4.16. The installation of the equipment supplied by Fogo Montanha must include the possibility of easy removal of the same, as well as access points to the mechanical, hydraulic and electronic components of the equipment and installation. When the installation does not allow immediate and secure access to the equipment, the additional costs of means of access and security will always be borne by the Buyer. The cost of dismantling and assembling plasterboard bins or masonry walls, insulation or other elements such as chimneys and hydraulic connections that prevent free access to the Product (if the Product is installed inside a plasterboard, masonry or other dedicated space, it must comply with the dimensions and characteristics indicated in the instruction and use manual that comes with the appliance);

4.17. Interventions to inform or clarify at home the use of its heating system, programming and/or reprogramming of regulation and control elements, such as thermostats, regulators, programmers, etc.;

4.18. Interventions to adjust fuel in pellet appliances, cleaning, detection of water leaks in the pipes external to the appliance, damage caused by the need to clean the machines or gas evacuation chimneys;

4.19. Emergency interventions not included in the provision of the Guarantee, i.e., interventions on weekends and holidays, as they are special interventions not included in the coverage of the Guarantee and which therefore have an additional cost, will be carried out exclusively at the express request of the Buyer and subject to the availability of the Producer.

5. Inclusion of the Warranty

Fogo Montanha will correct, at no cost to the Purchaser, the defects covered by the Warranty, by repairing the Product. The replaced Products or Components will become the property of Fogo Montanha.

6. Responsibility of Fogo Montanha

Without prejudice to what is legally established, Fogo Montanha's liability, in terms of warranty, is limited to what is established in these Warranty conditions.

7. Tariff Services performed outside the scope of Warranty

Interventions carried out outside the scope of the Guarantee are subject to the application of the tariff in force.

8. Warranty Services performed outside the scope of Warranty

Interventions carried out outside the scope of the Warranty carried out by the official technical

assistance service of Fogo Montanha have a 6-month warranty.

9. Warranty Spare Parts supplied by Fire Mountain

The parts supplied by Fogo Montanha, within the scope of the commercial sale of spare parts, that is, not incorporated into the equipment, do not have a warranty.

10. Replaced Parts Scope Technical Assistance Service

Used Parts from the moment they are removed from the equipment as a whole acquire waste status. Fogo Montanha, as a producer of waste within the scope of its activity, is obliged by the legislation in force to deliver it to a licensed entity that carries out the necessary waste management operations under the terms of the law and therefore prevented from giving it any other destination, whatever it may be. Consequently, the customer will be able to view the used parts resulting from the service, but will not be able to keep them in his possession.

11. Administrative Expenses

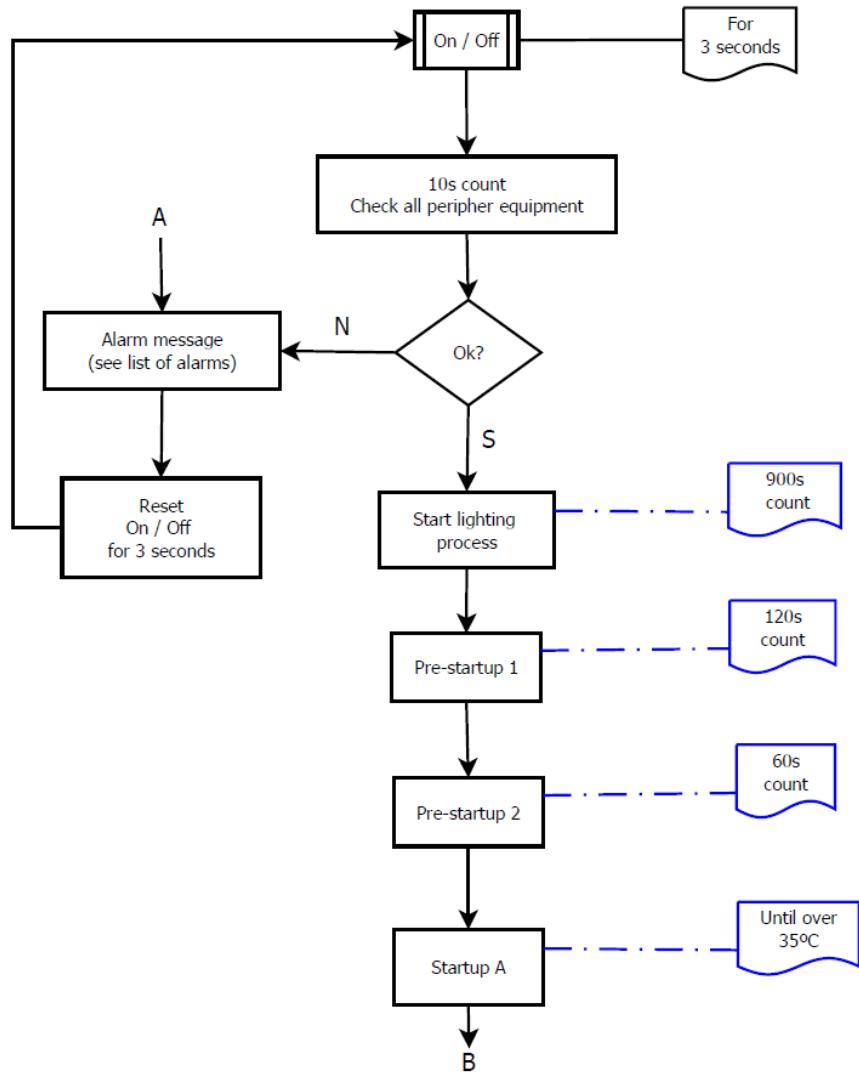
In the case of invoices referring to services performed whose payment is not made within the stipulated period, default interest will be added at the maximum legal rate in force.

12. Competent Court

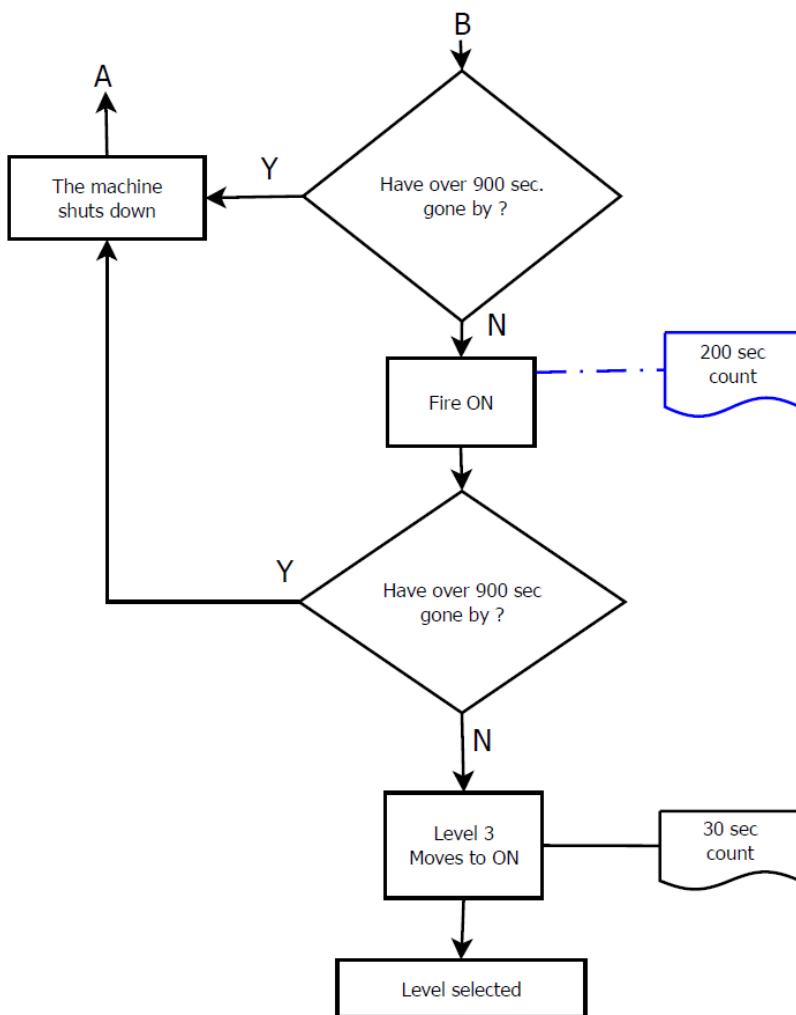
For the resolution of any dispute arising from the purchase and sale contract with the object of the Products covered by the Warranty, the Contracting Parties attribute exclusive jurisdiction to the jurisdiction of the district of Águeda, with express waiver of any other.

25. Attachments

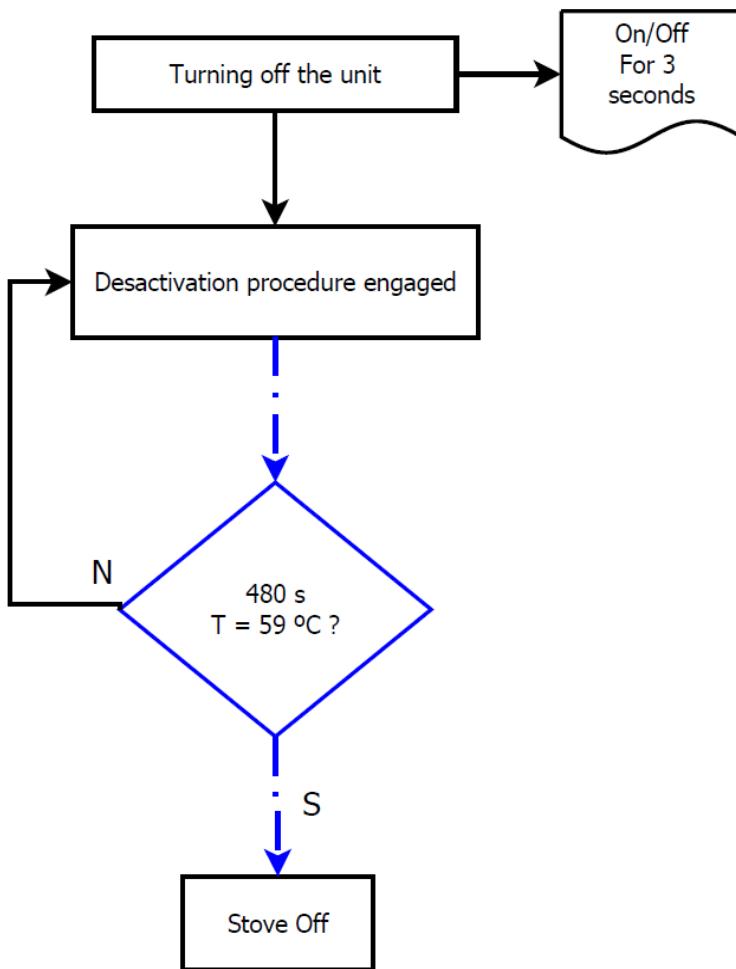
- Lighting (Phase 1)



- Lighting (Phase 2)



- Switching off the machine



26. Parameters shown in the Rating Plate and Technical Data Sheet

P_{part} - P_{nom}	Potência Parcial-Nominal / Potencia Partial-Nominal / Parcial-Nominal output power / Potenza Parziale-Nominal / Potenza Parziale-Nominal
PW_{part} - P_{wnom}	Potência água Parcial-Nominal / Potencia agua Partial-Nominal / Water Parcial-Nominal output power / Puissance eau Partielle-Nominale / Potenza acqua Parziale-Nominale
PSH_{part} - PSH_{nom}	Potência aquecimento espaço Parcial-Nominal / Potencia calefacción del espacio Partial-Nominal / Space heat output power Parcial-Nominal / Puissance de chauffage de l'espace Partielle-Nominale / Potere di riscaldamento dello spazio Partial-Nominal
H_{part} - η_{nom}	Eficiência Parcial-Nominal / Eficiencia Parcial-Nominal / Partial-Nominal efficiency / Efficacité Partiel-Nominal / Efficienza Parziale-Nominale
h_S	Eficiência Sazonal / Eficiencia Estacional / Seasonal Efficiency / Rendement Saisonnière / Efficienza Stagionale
CO_{part} - CO_{name} (13%O₂)	Emissões CO(13%O₂) Parcial-Nominal / Emisiones CO(13%O ₂) Parcial-Nominal / Emissions CO(13%O ₂) Partial-Nominal / Émissions CO(13%O ₂) Partiel-Nominal / Emissioni CO(13%O ₂) Parziale-Nominale
NOx_{part} - NO_{xnom} (13%O₂)	Emissões NOx(13%O₂) Parcial-Nominal / Emisiones NOx(13%O ₂) Parcial-Nominal / Emissions NOx(13%O ₂) Partial-Nominal / Émissions NOx(13%O ₂) Partiel-Nominal / Emissioni NOx(13%O ₂) Parziale-Nominale
OGC_{part} - OGC_{name} (13%O₂)	Emissões OGC(13%O₂) Parcial-Nominal / Emisiones OGC(13%O ₂) Parcial-Nominal / Emissions OGC(13%O ₂) Partial-Nominal / Émissions OGC(13%O ₂) Partiel-Nominal / Emissioni OGC(13%O ₂) Parziale-Nominale
PM_{part} - PM_{name} (13%O₂)	Emissões PM(13%O₂) Parcial-Nominal / Emisiones PM(13%O ₂) Parcial-Nominal / Emissions PM(13%O ₂) Partial-Nominal / Émissions PM(13%O ₂) Partiel-Nominal / Emissioni PM(13%O ₂) Parziale-Nominale
T_{part} - T_{snom}	Temp. Fumos Parcial-Nominal / Temp. Humos Partial-Nominal / Smoke temp. Parcial-Nominal / Temp. Fumées Partiel-Nominal / Temp. Fumi Parziale-Nominale
Tclass	Designação Chaminé segundo norma chaminés / Designación de chimeneas según normas de chimeneas / Chimney designation according to chimney standards / Designazione del camino secondo le norme sui camini
dead	Diâmetro da chaminé / Chimney diameter / Flue pipe / Diamètre de cheminée / Diameter of the road
p_{part} - p_{nom}	Tiragem recomendada Parcial-Nominal / Tiro recomendado Parcial-Nominal / Recommended draught Partial-Nominal. / Tirage conseillé Partiel-Nominal / Tiraggio consigliato Parziale-Nominale

$\varphi_{f,g\ part} - \varphi_{f,g\ nom}$	Caudal mássico Parcial-Nominal / Masa de humos Parcial-Nominal / Mass flow Partial-Nominal / Débit massique Partiel-Nominal / Flusso di massa Parziale-Nominale
And	Tensão / Tension / Voltage / Tension / Tensione
f	Freqencia / Frequency / Fréquence / Frequenza
eISB	Potência elétrica Standby / Energía eléctrica Standby / Standby electric power / Puissance électrique Standby / Energia elettrica Standby
elmax	Potência elétrica nominal / Energía eléctrica nominal / Nominal electric power / Puissance électrique nominal / Energia elettrica nominal
elmin	Partial electric power / Partial electric power / Puissance électrique partiel / Energia elettrica parziale
Wmax	Energia elétrica máxima / Energía eléctrica máxima / Nominal electric power / Puissance électrique nominal / Energia elettrica máximo
Pw	Max Pressure / Max Press / Max Pressure / Max Press / Max Press
dR ds dP dC dF dL dB	Distância mínima a materiais combustíveis (trás - d_R/laterais-d_s/frente-d_F/topo-dC/Frontal ao Pavimento-d_F/lateral frontal-d_L/pavimento-dB) Distancia mínima a materiales combustibles (detrás/laterales/frente/topo/frente piso/lado fronta/pisol) Minimum distance to combustible materials (rear/side/front/top/front to floor/front side/bottom) Distance minimale aux matériaux combustibles (derrière/côté/avanta/haut/sol/face avant) Distanza minima da materiali combustibili (dietro/lato/anteriore/sotto/pavimento/lato anteriore)
s	Isolamento Requerido / Aislamiento Requerido / Isolation requise / Isolamento Richiesto
Vh	A perda de ar em repouso, se especificada / Perdida de breath en reposo, si se especificaato / Shortness of breath at rest, if specified / Essoufflement au repos, si spéciifié / Mancanza di respiro a riposo, se specificato
L, H, W	Dimensões com embalagem / Dimensiones con embalaje / Dimensions with packing / Dimensions with packaging / Dimensioni con imballaggio
m	Peso líquido / Peso neto / Net weight / Poids net / Peso netto



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