

# K100 & K300 Wood Pellet Stoves





# **INSTALLATION AND OPERATING INSTRUCTIONS**

This appliance is hot while in operation and retains its heat for a long period of time after use. Children, aged or infirm persons should be supervised at all times and should not be allowed to touch the hot working surfaces while in use or until the appliance has thoroughly cooled.

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002.

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#### Setting the Language for the first time.

Press and hold SET for 3 seconds to enter the settings.

Press SET again to enter submenu.

Press DOWN arrow once to scroll down to the middle option.

Press SET to select

Use Up and Down arrowsl todesired language.

Press SET to confirm selection.

# STANLEY PELLET STOVE WARRANTY

#### **CONDITIONS OF WARRANTY**

Your Stanley pellet stove is guaranteed against any part that fails (under normal operating conditions) as detailed in the following table with timelines specified from the date of installation of the appliance. If the unit is not installed within six months of date of purchase, the warranty will commence six months from the date of purchase.

Warranty Period	Parts Covered (Parts & Labour unless Stated)
Up to 1 Year	<ul> <li>Refractory materials (supply only)</li> </ul>
	<ul> <li>Rope seals, glass seals and cement seals.</li> </ul>
	Surface Finish on Seno models.
	Grates and fire bars.
	<ul> <li>Ceramic glass is covered for Thermal breakage (supply only).</li> </ul>
	Rust (if reported before installation)
	<ul> <li>Aesthetic Damage (provided reported on date of receipt)</li> </ul>
	Electrical components under normal operation.
Up to 2 Years	<ul> <li>All external casings &amp; enamel finishes (excluding impact damage or damage caused by overfiring). Pictures of damage must be submitted to WS Service Department.</li> </ul>

All warranty claims must be reported to the Waterford Stanley Service Department and must be submitted with the product serial number (located on the data plaque at the rear of the product), date of purchase, proof of purchase (if requested) and details of the specific nature of the problem.

The warranty is given only to the original consumer/purchaser only and is non- transferable. The appliance must be installed by a suitable qualified person and installed as per the requirements of the manual. Failure to comply with the Installation requirements or Building Regulations will void your warranty. Waterford Stanley reserve the right to replace any part due to manufacturing defect that fails within the warranty period under the terms of the warranty. The unit must be used for normal domestic purposes only and in accordance with manufacturer's operation instructions.

#### LIMITS OF LIABILITY

The warranty does not cover:

- \* Special, incidental or consequential damages, injury to persons or Property, or any other consequential loss.
- \* Any issue caused by negligence, misuse, abuse or circumstances beyond Waterford Stanley's control.
- \* Any issue with wear and tear, modification, alteration, or servicing by anyone other than an authorized service engineer.
- \* Installation and operational related problems such as draught related issues external to the stove, inadequate venting or ventilation, excessive flue offsets, negative air pressure caused by insufficient burning of improper fuel.
- \* Damage caused to the unit while in transit.
- \* Discolouration due to over firing, damage caused by impact, damage to baffles caused by over firing and fading of surface finish on casting.
- \* Stress fractures on bricks.
- \* Rust on cast iron parts unless reported prior to unit being installed.
- \* Aesthetic damage, rust & missing parts on units purchased off display.
- \* Electrical components where voltage variations are in excess of 10% of nominal 230V

**Note:** Adequate clearance must be maintained around the appliance to ensure the ease of part removal in the possible event of their damage/failure. Waterford Stanley are not responsible for any costs incurred in the removal of items installed in the vicinity of the appliance that have to be moved to facilitate a part replacement.

#### **IMPORTANT OPERATION / MAINTENANCE NOTES**

**N.B.:** The information in this manual is given as guidance, all local, national or EC regulations must also be complied with.

Before using this appliance, please read all parts of this instruction manual carefully, as the information it contains, is essential in order to use the appliance correctly,

Make sure you fully read and understand the instructions contained in this manual before using the Pellet Stove as a biomass heating unit.

Do not touch the stove especially the control panel with wet or damp hands.

Do not burn fuel with a high moisture content, ie damp pellets.

Do not tamper with the safety devices or adjustment features without prior authorization from Waterford Stanley

During the first firings it is recommended to ventilate the room as an unpleasant (not toxic) odour may be emitted as the paint is completing curement.

Empty the ash container and clean the combustion chamber after burning of every 30kg of pellets.

Check flueways before lighting especially after a shut down period.

Allow adequate air ventilation to ensure plenty of air for combustion at all times.

Never turn off an operating pellet stove unit by disconnecting the electric plug. Disconnecting the plug will prevent the extraction of combustion fumes;

The only fuel that should be used for operation of the pellet stove are pellets certified by EN 14961-2 grade A1 with a diameter of 6 mm and a length that can range from 10 to 30 mm.

Keep all combustible materials a safe distance away from unit, please see section for clearances to combustibles.

Never use aerosol spray near the appliance when it is in operation.

For safety reasons never leave children or the elderly unaccompanied while stove is in use. Use a fire guard.

This appliance should be regularly maintained by a competent service engineer.

Please keep the packing materials away from children;

The manufacturer will not be responsible for any modifications made to this appliance by or on behalf of the user. The manufacturer will not be responsible for any eventual damage or loss as a result of unauthorised modifications. In the event that parts need to be replaced, only use parts recommended by Waterford Stanley.

# INSTALLATION CHECKLIST

#### Flue System

- 1. Minimum Flue Height of 2 metres.
- 2. Tee piece fitted at base of flue.
- 3. Appliance should be connected using an 80mm connecting flue pipe, increasing to 125mm within 1.5 metres of the appliance
- 4. Horizontal run of connecting pipe must not exceed 600mm.
- 5. All flue pipework passing through walls must be sleeved & adequately insulated in line with current Building Regulations.
- 6. An appliance connected to a chimney must be lined with an 125mm flue liner.
- 7. The chimney/ flue termination must be located in accordance with building regulations part J.
- 8. The chimney serving this appliance should not serve any other appliance.
- 9. Access should be provided to the chimney serving the appliance to allow for cleaning.
- 10. It is a requirement by Building Regulations to have a carbon monoxide alarm fitted to any room with a solid fuel appliance.
- 11. A suitable cowl must be fitted at the flue termination to prevent excessive wind effects and rain entering the flue.

#### Location

- 11. Clearance to combustible materials must be adhered to as described in the Clearance to Combustible section.
- 12. The stove must be installed on a floor protector that covers the area under the stove and extends 9" to the front and 6" to the sides.
- 13. Clearance must be maintained to allow for maintenance and part replacement.

#### Ventilation & Combustion Air Requirements

14. The room in which the appliance is located should have an air vent of adequate size to support correct combustion (see Ventilation & Combustion Air Requirement Section for specific details).

- 15. The stove must not be installed in the same room as an extractor fan.
- 16. External air connection maximum length 600mm of straight pipe only.

Technical Speci	fications		
Parameters	K100	K300	Units
Height	910	965	mm
Width	558	542	mm
Depth	555	565	mm
Weight	82	101	kg
Diameter of the fume discharge pipe	80	80	mm
Hopper capacity	15	15	kg
Maximum heating capacity	180	180	m³
Maximum heat output	8	8	kW
Minimum heat output	3	3	kW
Minimum fuel consumption	1,1	1,1	kg / h
Maximum fuel consumption	1,9	1,9	kg / h
Rated electrical current	106	106	W
Electric power at start-up (<10 min.)	362	362	W
Rated voltage	230	230	V
Nominal frequency	50	50	Hz
Efficiency at nominal output	91,3	91,3	%
Efficiency at reduced output	96	96	%
Max. flue gas temperature	189	189	°C
Min. flue gas temperature	143,7	143,7	°C
CO emissions at rated thermal power	0,036	0,036	%
CO emissions at reduced thermal power	0,03	0,03	%
Combustion gas mass flow	7	7	g/s
Flue draught	12	12	Pa

Test results obtained from independent test laboratory using fuel of calorific value 4.9 kWh/kg.













#### Contents

The package of this unit contains: Free Standing Pellet Stove K100, or K300 Instruction manual Power cable; Infrared remote control; Cleaning bar handle; Covers according to selected model.

# Unpacking the Unit

To unpack the equipment, you must first remove the retractable bag that surrounds the cardboard box. Then remove the box, lifting it up, and remove the bag that surrounds the stove and the packaging. To complete the procedure, unscrew the four brackets that secure the unit to the wood pallet (Figure 1).



# Installing the Pellet Stove

Remove the instruction manual from the package, it must be passed to the homeowner following installation. Before installing the unit, please follow

these steps:

Check immediately after receipt if the delivered product is complete and in good state. Any defects should be noted before installing the appliance.

The unit is equipped with four feet at the base, adjustable in height, allowing for the easy regulation when installing the unit on a non-levelled surface.



#### Installation Requirements

- 1 Location, Suitable area to be heated. Floor support / Hearth.
- 2 Flue connection capable of producing 12pa flue draught.
- 3 Electrical requirements
- 4 Clearancesa) To combustiblesb) For servicing/ maintenance
- 5 Adequate air supply for combustion/ ventilation

# Location

The floor should be capable of supporting the weight of the product and hearth. A solid non combustible hearth of minimum thickness 12 mm, The hearth should extend 150 to the side and 225mm to the front



The appliance should be installed centrally in the area to be heated.

#### Flue/ chimney installation

The appliance must be connected using a connecting pipe of diameter 80mm. A Tee piece must be installed at the base of the chimney to allow for cleaning/ inspection. The main section of the flue should be installed using a diameter 125mm flue pipe which must begin within 1.5 metres of the appliance flue outlet

Single wall flue is permitted in the area to be heated, outside of that area the flue must be insulated.

If the flue is to be routed though an existing chimney it can be done using a flexible stainless steel pipe with a register plate at the base of the chimney, the area in the chimney external to the flue liner must be back filled with insulation.

Where the flue pipe is installed external to the dwelling, it must use twin wall insulated stainless steel flue. The flue must have a vertical length of at least 2 metres. A horizontal length is not recommended other than at the rear of the appliance, the horizontal run should be no more than 600mm, on all other sections of flue it is recommended that they make an angle to the vertical of no more than 45 degrees.

The flue termination point/outlet must be above roof level and in accordance with building regulations part J.

**IMPORTANT:** All sections of the flue pipe must be accessible for inspection, and allow for internal cleaning, removal or replacement.

#### Electrical connection

**Important:** The appliance MUST be earthed.

Before installing the appliance, the power supply system must be checked to ensure it has an effective earth circuit.

**Important:** the power supply cable must be of sufficient cross-section for the power requirement of the appliance.

The supply voltage required for the stove is 220-240 V at 50 Hz. Voltage variations greater than 10% of the rated value may cause irregular operation, or damage to the electrical system. The appliance must be positioned so that the domestic power supply plug remains accessible.

If the power supply cable becomes damaged, switch off the power and have it repaired by an authorised Stanley service agent.



#### Clearances to combustibles

A clearance to combustibles of 100cm must be maintained above the stove see Fig 5



A clearance to combustible of 50cm must be maintained to either side of the stove , 30 cm to the rear and 150 cm to the front of the stove see Fig 10



In the event that the product is installed in a non combustible recess, clearances for servicing,must be provided, 200mm to the rear and 300mm to the sides.

#### **VENTILATION/COMBUSTION AIR**

The process of combustion requires oxygen, and therefore air. When in operation, the stove draws air through the 50mm diameter intake pipe at the rear of the appliance. The external air can be connected through a straight pipe of maximum length 60cm.

Otherwise the appliance will draw air from the room in which case provision must be made for the air requirement providing an air vent in the room. Poor combustion may result if the room is insufficiently ventilated.

A room containing an appliance (other than a room sealed appliance) should have a permanent ventilation opening of

free area of at least:

6,500 mm<sup>2</sup> where air

permeability is greater than 5.0 m<sup>3</sup>/(hr.m2),

8,150 mm<sup>2</sup> where air

permeability is less than 5.0 m<sup>3</sup>/(hr.m2).

Where a flue draught stabilizer is used the total free area should be

increased by 300 mm2

for each kW of rated output.

If the stove is located in a room containing another air using appliance, it is essential to provide ventilation equivalent to the sum of the air requirement for all appliances. the stove should not be installed in the same room as an extractor fan.

#### FUEL

The appliance is suitable for use with wood pellets certified to EN 14961-2 grade A1 with a diameter of 6 mm and a length that can range from 10 to 30 mm.

As fuel, pellets are completely environmentally friendly, as they are made entirely of natural wood, without glue or other chemical compounds. Pellets have a high calorific value (4.7 to 5.3 kW/kg), and low moisture content.

**IMPORTANT:** Pellets must be stored in a dry place. Use only good quality pellets, without sawdust.

**IMPORTANT NOTICE:** The small quantities of sawdust normally present at the bottom of the bags should not be emptied into the tank, but should be held inside the bag while pouring the pellets carefully so that the sawdust remains inside.

If sawdust accumulates in the tank, it should be removed periodically with a vacuum cleaner (with the door open and disconnecting the power plug from the electricity supply), to prevent it entering the loading system and causing serious malfunctions.

#### Using the Pellet Stove

Before starting up the unit, please check the following:

Ensure the unit is properly connected to the power mains using the 230V AC power cable.



Check if the pellet reservoir is supplied with pellets. Inside the pellet reservoir is a safety grid to prevent users from reaching the worm screw.

The combustion chamber of the stove and the door are built in steel sheet painted with high temperature paint, releasing fumes during the first ignition due to the cure of the paint. Avoid touching the equipment during the first burn so as not to leave permanent marks on the paint because it's going through a plastic phase during its curing process.

The stove has a probe for measuring the room temperature. This probe is attached to the grid on the rear panel For a good reading of the room temperature, avoid the contact between the end of the probe and the unit surfaces. You may also attach the probe to the wall beside the unit.



#### Remote Control

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).

It may be necessary 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 quickly;

3- After 10s, the led remains on;

4- After the led is steady stop pressing the buttons in less than 5s;

Button 1

Button 4

Button 2 Button 3

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5- If you do not stop pressing the buttons, the led turns off and the serial number is not changed (protection against accidental pressing) and the control is no longer paired with the stove.



This remote control works with two CR2016 3V batteries, similar to the one in the picture below.



Note: it is necessary to activate control using the remote control on the stove control panel.

# Control and Display Panel

When first connected the display indicates the "OFF" status of the stove,

it can also indicate the chrono activation, system errors, selected combustion power, selected ventilation power, current room temperature and selected room temperature set-point.



While in the Home Page by pressing the key:

"P1" is used to exit the menu/submenu;

"P2" is used to switch on the equipment, or, switch off the equipment. The same button allows the errors reset, by pressing 3 seconds continuously, it also allows the activation of Chrono in the corresponding submenu;

"P3" is used to access the user menu 1,

"P3" when held for 3 seconds is used to access the user menu 2,

"P4" is used to enter the Combustion Power menu;

"P5" is used to enter the Information menu and also activate a Chrono time slot;

"P6" is used to enter the Room Thermostat menu;

"P3" + "P5" for 3 seconds it is possible to access the secondary information menu present in the service menu where it is possible to check a set of variables.

Led	Meaning
D © W © WE ©	<ul> <li>When this Led is active it means that the Chrono is in Daily Mode ON, Weekly Mode ON or Weekend Mode ON.</li> </ul>
	<ul> <li>When this LED is active, it indicates which fans are running, local and remote.</li> </ul>
<b>₽</b>	<ul> <li>When this LED is active, it means that the required room temperature has been reached.</li> </ul>

Warning

THE STOVE MUST ALWAYS BE DEACTIVATED IN THE SAME WAY IT WAS ACTI-VATED. THE EQUIPMENT

MUST NEVER BE UNPLUGGED DURING THE ACTIVATION PROCESS.

#### Settings Menu

By pressing the P3 key for 3 seconds, you will display the

Settings,

Service,

Display

System Menu



# Language

Press P3 for 3 seconds to enter the settings. Press P3 again to enter submenu.

Press P6 to scroll down to language.

Press P3 to select language.

Use P4 & P6 to slect desired language.

Press P3 to confirm selection.



To exit the Language menu, press the P1 key.

# Time and Date

Pressing P3 key for 3 seconds, when in main screen you can access the Settings menu, Press P3 again to enter this menu.



Use the P3 key to select Date and 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 must be done for 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.



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 information and then P3, the month will appear in editable mode, with P4 and P6 select the desired month and then 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 will change automatically based in the date selected.

# **Remote Control**

Pressing P3 key for 3 seconds, when in main screen you can access the Settings menu, Press P3 again to enter this menu.



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



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

#### **Display Menu**

Pressing P3 key for 3 seconds, when in main screen you can access the Settings menu, Use the P6 key to scroll down to "Display" Press P3 again to enter this menu.



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



Using P3 to select and P4 & P6 to scroll Contrast can be adjusted between 0-30 Brightness can be adjusted between 0-20.

# Screen Saver

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



**Firmware Codes** 

In the Display menu with P4 and P6 select the Firmware codes function by pressing on the P3 key. This function, for reference only, allows you to see the communication address of the control board, type of control board and firmware version.



To return to the Display menu, press P1. Pressing this key twice will display the Settings, Display, Service and System menus.

# Service Menu

Pressing P3 key for 3 seconds, when in main screen you can access the Settings menu, Use the P6 key to scroll down to "Display" Press P3 again to enter this menu.



The following functions are available in this menu.



#### Counters

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



Using the P4 and P6 keys, select the submenu you wish to consult and press P3 to validate. To return to the Service menu, press P1.



# Error List

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



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



# Secondary Information

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



In this function you can check the product code, the status of the fan, the auger, the heating fan and the status of the outputs.



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



# **Cleaning Reset**

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

P1 (ESC) P2 ()	Counters Error List Secondary Information Cleaning Reset Auger Calibration	P4 (#) P5
P3 SET		<b>P</b> 6

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



# 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 keys P4 and P6 you can adjust the quantity of pellet to be fed, between -7 (-14%) and 7 (+14%). To return to the Service menu, press P1.



# Fan Calibration

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



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



#### Manual Load

Using P4 and P6 select the Manual Load submenu, pressing theP3 key to validate.



This function activates the pellet manual loading.



Pressing the P1 key twice will take you back to the main menus, Settings, Display, Service and System Menu.

# Note

SYSTEM MENU IS AN EXCLUSIVE ACCESS MENU FOR THE TECHNICAL SERVICE AND REQUIRES APASSWORD.

#### Power Menu

Press the P3 key to access the following menus, Power, Thermostats and Chrono. Use the P4 and P6 keys to select the required menu and then press P3 to confirm the choice, in this case the Power menu.



Combustion

Select Combustion with the P3 key, to validate the entry in this submenu.( This controls the feed rate of pellets to the stove)



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



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

# Heating

With P4 and P6 you must select Heating and then press P3 to validate access to this submenu.( This controls the speed of the heationg circulation fan)



With the P4 and P6 keys, you can modify the system's heating fan spped This submenu allows the system's heating power to be modified. It can be set in automatic or manual mode: in the second case, the user selects the power from 0 to 5.



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

Canalization (K500 only)

With P4 and P6 you must select Canalization and then press P3 to validate access to this submenu.)



This submenu allows you to modify the power value of the canalization fan. It is only displayed if you select a heating system that includes a second heating fan. With the P4 and P6 keys it can be set in automatic or manual mode: in the second case, the user selects the power from 0 to 5.



This submenu allows you to modify the power value of the canalization fan. It is only displayed if you select a heating system that includes a second heating fan. With the P4 and P6 keys it can be set in automatic or manual mode: in the second case, the user selects the power from 0 to 5.



# Thermostats Menu

Press key P3 to access the Thermostats menu, using key P6 and then press on P3 to validate the choice of this menu.



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



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



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

#### Chrono Menu

The unit has a time scheduler that allows the stove to switch on and off automatically. It can be daily (you can select the day of the week you want and set up to 3 different times for the respective day), weekly (you can select up to 3 times during a day, the same program will be applied every day of the week) and weekend (you can select 3 times during the day for weekdays and weekends).

In the main screen, press the P3 key to access the menus, Power, Thermostats and Chrono. Use the P4 and P6 keys to select the Chrono menu and then press P3 to confirm the choice.



You must then enter the Programme submenu, using the P6 key to select and P3 to validate the choice.



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



For the Daily programme, you must use the P4 and P6 keys to select the day of the week, in this case the programme for Monday, and then press P3 to validate your choice.



You must press P3 and this option will be in editable mode, flashing. Press P4 and P6 to select the desired time and then use the P3 key to save. Repeat this process for the time at which the unit is to shut down, using P4 and P6. Finally, activate the interval by pressing P5, and a check mark will appear to the right of the interval.



In the image above the system will turn on at 20:30 on Monday and will turn off at 06:30 on Tuesday. When programs are developed around midnight with the intention of starting operation the day before and finishing operation the next day it will be relevant:

- Set the OFF time of the day before at 23:59;
- Set the ON time for the next day at 00:00.

For the Weekly programme, the programmes are the same for every day of the week, from Monday to Sunday. Use the P4 and P6 buttons to select weekly from the Programme submenu and press P3 to confirm the choice.



You must press P3 and this option will be in editable mode, flashing. Press P4 and P6 to select the desired time and then use the P3 key to save. Repeat this process for the time at which the unit is to shut down, using P4 and P6. Finally, activate the interval by pressing P5, and a check mark will appear to the right of the interval.



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



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



You must press P3 and this option will be in editable mode, flashing. Press P4 and P6 to select the desired time and then use the P3 key to save. Repeat this process for the time at which the unit is to shut down, using P4 and P6. Finally, activate the interval by pressing P5, and a check mark will appear to the right of the interval.



# AFTER DEFINING THE PROGRAMMES, IT IS NECESSARY TO DEFINE WHICH MODE YOU WANTTO ACTIVATE.

In the main screen, press the P3 key to access the menus, Power, Thermostats and Chrono. Use the P4 and P6 keys to select the Chrono menu and then press P3 to confirm the choice.



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



After activating the mode, the main screen will display D, W or WE active in the upper right corner.

#### Info Menu

In this menu the user can view some information about the device, such as measured values and aspects relating to the electronics. In the initial 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 On-Line.

The following table explains the meaning of each of the variables.

Exhaust T. [°C]	Read in degrees Celsius (°C) it tells you the exhaust temperature monitored by the probe.
Ambient T. [°C]	This is read in degrees Celsius (°C) and gives the ambient temperature monitored by the NTC probe placed outside the stove.
Fan [rpm]	Read in rpm, it tells you the rotation speed of the fan.
Auger [s]	Read in seconds and within 4 seconds the auger is active and feeding pellet to the burner.
Service [h]	Read in hour's shows the number of hours remaining to show faults due to lack of maintenance. These must be reset by the technical service during maintenance. The maintenance period must respect the kilos of pellets burned.
Working hours [h]	Read in hours tells you the number of hours in Run Mode, Modulation and Safety Mode.
Ignition [nr]	Read in number of occurrences informs how many ignitions have been carried out since they were reset to zero.
Cod. Artic.	Product Code.

#### Alarm / Fault Finding

Sond – Probe's anomaly during the control in Check Up.

- Ignition Block The message appears if the system has been is turned off during Ignition (after Preload) by an external device: the system will stop only when it goes in Run Mode.
- Link Error Lack of communication between the LCD or K control panels and the control board.
- Cleaning On Periodic cleaning in progress.

Flashing Hours - Wrong time and date in the event of prolonged power failure.

#### The above items do not do not send the equipment into shutdown.

To switch off the device, in case of emergency, you must do the normal shutdown of the equipment. To do this, press the off button for 3 seconds and allow it to deactivate until the word off appears on the display.

All alarms cause the machine to switch off with information about the error and activation of the alarm led. It will be necessary to reset the alarm and restart. To reset the machine, press the "On/Off" button for 3 to 4 seconds until you hear a beep accompanied by the message "Reset alarms in progress".

If the resetting of alarms is successful, new information is displayed - Reset alarms Successful. In the Off state, if for any reason the smoke temperature rises above 85°C, he unit enters deactivation mode.

Alarm	Code		Troubleshooting
Pellet drum temperature is too high	Er01	110 °C, even with the equipment OFF	<ul> <li>Room fan not working - call for service</li> <li>Thermostat defective - call for service</li> <li>Ventilation defective</li> </ul>
Pressure regu- lator alarm	Er02	Door open, draught too low or extractor fault for 180 sec. Only visible if puller is set to ON.	<ul> <li>Close door and remove faulty pressure switch</li> <li>Faulty exhaust pipe obstruction or extractor</li> </ul>
Extinguishing for exhaust under temperature	Er03	Temperature below 55ºC (Th03)	<ul> <li>Pellet reservoir is empty</li> <li>Faulty thermocouple</li> </ul>
Extinguishing for exhaust over temperature	Er05	Over 300 °C	<ul> <li>Room fan does not work or is at a low power level - increase level to maximum (if problem persists call for service)</li> <li>Insufficient extraction</li> <li>Excess pellets</li> <li>Faulty smoke sensor</li> </ul>
Encoder fan error: no Encoder signal	Er07	No rpm signals. Allows unlocking and work- ing by voltage in a provisional way P25=0	<ul> <li>Check connection</li> <li>Check that the fan is not blocked</li> <li>After remedying the fault, you</li> <li>must select operating mode P25=2</li> <li>again</li> </ul>
Encoder fan error: Combustion Fan regulation failed	Er08	Encoder has signal but failed regulation. Can be released and working temporarily by voltage P25=0	<ul> <li>Blockage of exhaust pipe or defective extractor</li> <li>After remedying the fault, you must select operating mode P25=2 again</li> </ul>
Failed ignition	Er12	Maximum time: 900 s and exhaust temperature below 50°C	<ul> <li>Empty auger channel - restarting</li> <li>Ignition resistance burnt out - replace resistance</li> <li>Firing basket incorrectly placed</li> <li>Exhaust temperature did not exceed the value set on activation</li> </ul>

Alarm	Code		Troubleshooting
Lack of voltage supply	Er15	Lack of voltage supply for more than 50 min	<ul> <li>Check supply voltage with your electricity supplier</li> <li>Check the simultaneous use of electrical appliances</li> <li>In the event of a short power failure (&lt;10s) the stove continues to operate normally</li> <li>If the system was in the ON state and the power failure occurs for more than 10s and less than 50 min, the stove will switch on after blackout</li> </ul>
Communication error RS485	Er16		- Check connection between board and display
Open door error (First Advance 12kW only)	Er44	Door opens for 60 sec	- Close the door - remove the error - Air mass sensor damage
Service	Service	Maximum Hours: 2100 hr (T66) planned for maintenance achieved	- Contact your installer for occasional preventive maintenance of the equipment

THE MAINTENANCE FAULT ("SERVICE" MESSAGE ON THE DISPLAY) MEANS THAT THE STOVE HAS MORE THAN 2100 HOURS IN SERVICE. THE CUSTOMER MUST HAVE THE EQUIPMENT SERVICED AND ONLY THEN RESET THE HOUR METER TO ELIMINATE THE FAULT MESSAGE. THIS DOES NOT INFLUENCE THE NORMAL OPERATION OF THE EQUIPMENT; IT IS ONLY A WARNING.

#### Operation.

After loading the pellets into the hopper, press and hold the ON/OFF

button for 3s, to start the stove. During the lighting phase, the display will show the message "Ignition" until this phase is completed.

The pellets are fed through the supply channel to the burning pot (combustion chamber), where they will be ignited using an igniter. This process may take 5 to 10 minutes, depending on whether the worm screw used to push through the pellets has been previously filled or not. Once the ignition phase is completed, the message "On" appears on the display. The heating power can be adjusted at any time by pressing the power selection button for approximately 1 second. You can select from the five pre-set power levels that are available. The selected power is indicated on the display. The initial power status at each start-up will correspond to the power level set before the last stop.

**Note** Before starting the machine check that the baffle plate is correctly positioned.

Fig 10 shows the baffle position as viewed from inside the firebox. Item 1 on the picture highlights that the tab on the baffle must overlap down over the vermiculite lining at the rear of the firebox. Item 2 shows the gap to the front between the baffle and the body of the appliance, this should be approx 20mm

#### Stop

The stop command of the device is carried out by pressing the ON / OFF button for 3s. The display will show "Desativação" (Disabling) until full completion of this phase.

The extractor will operate until the fume temperature of 64°C is reached, to guarantee that all the material has been burnt. Note

Do not shut down the appliance by isolating the electrical supply .

Turning Off the Unit

You should only switch off the appliance after you have completed the shutdown procedure, make sure the display shows "Off". If necessary, disconnect the Power supply.



#### **CO ALARM**

The fitting of CO Alarms in the same room as the appliance is a compulsory requirement under current Building Regulations. For ROI an additional CO Alarm must be fitted either inside each bedroom or within 5 metres of the bedroom door, refer to Building Regulations Part J. Further guidance on the installation of a carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturers instructions.

#### Assembly Instruction for Installing the control panel, side panels, hopper cover and grill.

#### Installing the Casings on K100.

Before installing the casings you should check immediately whether the packing is complete and in perfect condition, possible damages or parts missing must be reported before proceeding with installation. Following procedure describes how to install the casings for the K100 unit.

#### Equipment required.

Philips Screwdriver, PH2 10mm open ended spanner.

Required parts



Place the display located inside the pellet hopper on the back of the unit, as shown in Figure 12. To perform this task, slightly unfasten the screws located in the rear of the unit. When securing the display it may be necessary to adjust the height.



#### Note

When installing the display handle it with care because there is a cable from the central unit of the stove connected to it. Disconnecting this cable will prevent the proper operation of the equipment.

Fit the lower holes on the side covers (figure 13) to the guides located at the bottom of the machine (Figure 14).





c) Next, attach the side casing by sliding it downwards. During the assembly of the casing, make sure the flap on the top side (1) is placed overlapping the structure and, simultaneously, covering the rear side of the unit on the outside, as shown in Figure 15 & 16



d) Repeat the process described above for the other side panel and secure using four screws from the kit, two on each side, as shown in Figure 17





Secure the side panels to the back of the unit using 10 screws from the kit, as shown in Figure 18.



The cover is equipped with four guide pins (1) in the bottom to ensure its proper placement. These guide pins must be fitted onto the springs in located in the structure. **Note:** 

You may need to gently press the guide pins onto the structure to secure them.



#### Installing the Casings on K300.

Before installing the casings you should check immediately whether the packing is complete and in perfect condition, possible damages or parts missing must be reported before proceeding with installation. Following procedure describes how to install the casings for the K300 unit.

Equipment required.

Philips Screwdriver, PH210mm open ended spanner.8mm open ended spanner.Hexagonal / allen key 4mm

Required parts



a) Fit the top plate as shown in figure 21. To ensure that the top is properly seated, it contains four pins on the bottom that should fit the springs in the frame.



Fit the front grille, matching the holes in the grille to the holes in the appliance (figure 22).



M5 Nut Qty 2

100



Fig. 21

Fasten the upper part of the grill with two self tapping screws location C, fixed directly to the cover previously placed. Then fix with M5x12 screws at locations marked A and fix with M5x12 screws and M5 nuts at locations marked B, see figure 24.



# Fitting Side Covers

When fitting the side covers, first fit the tabs, (note 1 fig 25) to the slots (note 2 fig 26) and then the studs 3 (note 3 fig 27) on the side covers to the spring clips (note 4 fig 28) on the chassis.







#### Pellet Reservoir / Hopper

To access the pellet reservoir, open the lid on the top of the unit by pushing down and sliding the clip top the left.



The reservoir will hold approx 15 kg on the K100 with the K300 holding approx 18kg to fill the hopper carefully cut the corner of the bag so the pellets can be poured into the hopper without spilling outside of the rubber seal. Do not pour dust into the hopper as it can impair the feed screw mechanism.

#### Daily Maintenance/ Ash Removal

The stove requires careful maintenance see label on the hopper lid, it is recommended to keep a maintenence log as outlined in maintenance log section. The most important thing is to periodically remove the ashes from the pellet burning chamber. For your convenience, you may use a household vacuum cleaner. The cleaning operation must be performed after burning approximately **30kg of pellets**.

Fig. 30



Prior to cleaning, the stove must be turned off and allowed to cool to prevent injury.

# **Glass Cleaning**

The glass can only be cleaned when it is completely cold. It must be cleaned with a suitable product in accordance with the instructions for use and care must be taken to prevent the product from reaching the sealing cord and painted metal parts - so as not to cause undesired effects. The rope seal is fixed with adhesive so any contact with water or any other liquids must be avoided. If using a glass cleaning spray, apply the product to a cloth first as opposed to applying it directly to the glass.



Fig. 31 – Incorrect cleaning of the glass



Fig.32 & 33 – Correct cleaning of the glass. Cleaning the glass:

- a) moisten a soft cloth with liquid;
- b) clean the glass using the cloth

#### Weekly Maintenance/Cleaning the flueways.

To perform this maintenance, pull the cleaning bar from the heat exchanger see fig 34, then open the door (b), vacuum the ash and clean the burner (c).



### Grate removal

Fig. 35A





# Ash pan removal







There is a trapdoor hidden under the ashpan which can be removed for cleaning.



Clean the area under the trap door with a vacuum cleaner, carefully replace the trapdoor in the correct location. It is critical that this component is returned to the correct location and seated properly.



# **Additional cleaning**

**Note** The frequency of maintenance depends on the quality of the pellets burned.

Additional cleaning should be performed for every 600-800 kg of pellets burned. Remove the side covers, to access the side lids of the combustion chamber. To clean the interior of the unit, remove the screws

Removal of cleaning access panels K100

Removal of cleaning access panels K300







Following removal of the panels . Using a 20-25mm wide 80cm long steel brush,thoroughly clean the channels and vacuum clean the residue. If you noticed that the flue gas extraction is not effective, we recommend cleaning the interior of the extractor with a vacuum cleaner, as shown in figure 46. This operation should be performed, on an annual basis at a very minimum, more frequent cleaning may be required.









### Note

A "service" warning on the display (maintenance due) indicates that the unit has exceeded 2100 operating hours. In this case, the client must perform the unit's maintenance procedure (following the instruction on the Technical Manual). Once this procedure is completed the hour meter may be reset, to clear the waning message. This message does not impact the normal operation of the unit. It is simply a warning.

#### Note

The errors can be reset only when the error information is flashing on the display. To reset the error, press the "Mode" button once while displaying the error.

#### Maintenance Plan and Log

To ensure the proper operation of the unit, maintenance operations must be performed, as described in sections "Weekly cleaning" through to "Additional cleaning "of this Instruction Manual . There are specific maintenance tasks that must be performed by authorised technicians only. Please contact the person responsible for installing the unit. To make sure the warranty remains valid, the maintenance operations performed on this unit must comply with the frequency requirement specified in the manual, and the service technician must fill and sign the maintenance log.

# Service / Cleaning schedule

Empty the ashpan after each burning of 30kg of pellets.

Vacuum the burner and under the trapdoor etc on a weekly basis.

Brush and vacuum all residue from side channels after each burning of 600-800kg of pellets.

Full service by Technician including all of the above and cleaning of the flue and flue fan etc must be carried out on an annual basis, full details are provided on the label fixed to the hopper cover.

	Company		
	Engineer	-	
	Date		
	Service hours		
	Quantity of pellets Burned		
Task		Charle	Notes / Observation
Task	hurper	Check	Notes / Observation:
Task Clean Clean	burner flue gas circuit	Check	Notes / Observations
Task Clean Clean Vacuu	burner flue gas circuit um pellet dust from hopper	Check	Notes / Observations
Task Clean Clean Vacut Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan	Check	Notes / Observations
Task Clean Clean Vacut Clean Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan the flue gas Tee piece	Check	Notes / Observations
Task Clean Clean Vacuu Clean Clean Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan the flue gas Tee piece chimney	Check	Notes / Observation:
Task Clean Clean Vacut Clean Clean Clean Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan the flue gas Tee piece chimney cthat screws are tight	Check	Notes / Observations

	Company		
	Engineer		
	Date	_	
	Service hours		
	Quantity of pellets Burned		
		100	and so and a second so and a
Task		Check	Notes / Observations
Task	burner	Check	Notes / Observations
Task Clean Clean	burner flue gas circuit	Check	Notes / Observation:
Task Clean Clean Vacuu	burner flue gas circuit um pellet dust from hopper	Check	Notes / Observation:
Task Clean Clean Vacuu Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan	Check	Notes / Observations
Task Clean Clean Vacuu Clean Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan the flue gas Tee piece	Check	Notes / Observations
Task Clean Clean Vacuu Clean Clean Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan the flue gas Tee piece chimney	Check	Notes / Observations
Task Clean Clean Vacut Clean Clean Clean	burner flue gas circuit um pellet dust from hopper the flue gas fan the flue gas Tee piece chimney cthat screws are tight	Check	Notes / Observations

	Company		
	Engineer		
	Date		
	Service hours		
	Quantity of pellets Burned		
Tark		Check	Notes / Observation
Task	hurpar	Check	Notes / Observation:
Task Clean	burner	Check	Notes / Observation:
Task Clean Clean	burner flue gas circuit m pallet dust from borner	Check	Notes / Observation:
Task Clean Clean Vacuu Clean	burner flue gas circuit m pellet dust from hopper the flue gas fan	Check	Notes / Observation:
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Task Clean Clean Vacuu Clean Clean	burner flue gas circuit m pellet dust from hopper the flue gas fan the flue gas Tee piece chimpey	Check	Notes / Observation:
Task Clean Clean Vacuu Clean Clean Clean	burner flue gas circuit m pellet dust from hopper the flue gas fan the flue gas Tee piece chimney that screws are tiebt	Check	Notes / Observation:





		K100 Exploded	K300 Exploded
Part No	Description	view no.	view no.
CO030300000050	Igniter Steel	44	
CO030300000006	Igniter Ceramic		50
IS0899012000000	Stainless washer	48	
CO072800000000	Rubber motor stop	28	
CO031500000030	Pressure switch 10-20 Pa	22	
CO120602000003	Extractor Fan gasket K100	Part of 37	
CO120602000002	Extractor Fan gasket k300		Part of 6
CO031200000009	Encoder board	Part of 37	Part of 6
IS660000000007	Display Panel	33	5
IS660000000004	Circuit board k100	19	
IS660000000014	Circuit board K300		21
IC049000000004	Extractor Fan k100	37	
IC049000000006	Extractor Fan k300		6
CO030800000004	Tangential fan K100	38	
CO030800000011	Tangential fan k300		15
IS3525000260000	Burn pot	4	44
CO031000000150	Motor worm screw	24	18
IS0101050260019	Baffle	3	45
IS101320000006	Vermiculite side Panels	2	48
IS1012200000004	Vermiculite Back	8	47
IC0402000030000	Ash Pan k100	6	
IC0402000030003	Ash Pan k300		41
CO030100000046	Exhaust Temp Sensor.		
CO030100000048	Ambient Temp Sensor		
CO0201053200000	GLass K300		
IS2030040400038	Glass K100		

# Electrical diagrams



# Life cycle of a free-standing fire unit

Approximately 90% of the materials used to manufacture these units are recyclable, contributing towards a reduced environmental impact and a more sustainable planet.

End-of-life units should be processed by licensed waste operators. We recommend contacting your local council to ensure the unit is collected and handled pursuant to any legal requirements.







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