

*Dear Sir or Madam,
thank you for choosing our Iris stove.
Before using your stove, please read this booklet carefully so that you may exploit all its features to the full in complete safety.*

*Please remember that the 1st ignition must be carried out by the dealer, which verifies the installation and completes the guarantee.
The manufacturer cannot be held liable for any damage deriving from stove use following incorrect installation, incorrect maintenance or misuse.*

SAFETY INFORMATION

The stove is designed to heat the room it is installed in by radiation and by air movement from the front grilles. The heat is generated by automatic pellet combustion in the firebox.

The only risks which may derive from use of the stove are linked with non-compliance with the installation instructions, direct contact with live electrical parts (inside) or with the fire or hot parts (glass, pipes and hot air outlet), and the introduction of foreign substances. Only use pellets as fuel.

If components fail, the stove is fitted with safety devices which turn it off. This must be allowed to happen without interference. For correct operation, the stove must be installed in compliance with the instructions on page 16 and the door must not be opened during operation: combustion is managed automatically so no manual operations are needed.

Never put foreign substances in the firebox or hopper.

Do not use flammable products to clean the smoke duct.

Firebox and hopper components must only be cleaned using a vacuum cleaner.

The glass must be cleaned when COLD with a special product (e.g. GlassKamin) and cloth. Do not clean when hot.

Make sure the stove is installed and ignited by a qualified dealer, which must also complete the guarantee and take responsibility for correct installation.

During stove operation, the outlet pipes and door reach high temperatures.

Do not keep objects which are not able to withstand heat in the immediate vicinity of the stove.

NEVER use liquid fuels to light the stove or rekindle the embers.

Do not block ventilation openings in the room where the stove is installed or air inlets in the stove itself.

Do not wet the stove, and do not put wet hands near electrical parts.

Do not fit reducers on the smoke outlet pipes.

The stove must be installed in a suitable place as regards fire regulations, and provided with all the facilities (power supply and outlet) it requires for correct operation.

Before carrying out any maintenance, disconnect the device from the mains power supply.

OPERATING FEATURES

Iris is a pellet-fired stove which manages pellet combustion electronically.

The fuel (pellets) is taken from the storage hopper (A) and delivered to the combustion chamber (D) by a screw feeder (B) driven by a gearmotor (C).

The pellets are ignited by hot air produced by a heating element (E) which is drawn into the combustion chamber by a centrifugal fan (M).

The combustion smoke produced is drawn out of the firebox by the same centrifugal fan (M), and expelled from the nozzle (F) at the bottom rear of the stove.

Air is blown into the hollow space at the back of the firebox by a fan (G), where it is heated before coming out into the room from the front grille (I).

The amount of fuel and the smoke extraction/combustion air supply are controlled by an electronic circuit board in order to achieve highly efficient fuel consumption.

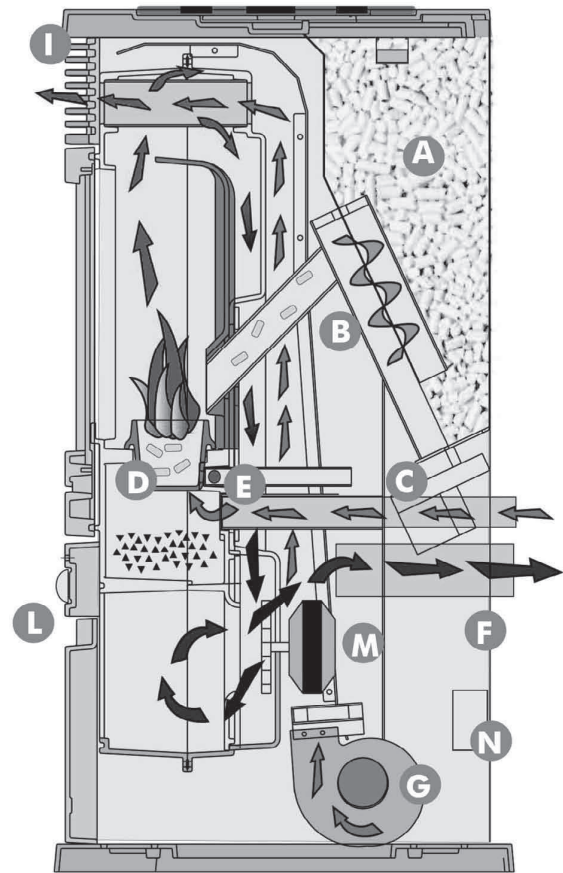
There is a display-control panel (L) and two knobs on the front panel under the door which allow all operating stages to be managed and displayed. The same functions may also be managed by remote control (optional).

The pellet hopper is at the top of the stove.

The hopper is filled through a lid found at the back of the top. The internal structure of the stove is completely made of cast iron.

The external covering is available in the following colours and materials:

- ceramic: wine-red, grey, terracotta.
- ollite.



NOTES ON FUEL

The Iris pellet stove is designed to burn pellets.

Pellets are small 6 mm diameter (approx.) fuel cylinders made from sawdust and ground waste wood pressed at high pressure without adhesives or other foreign material.

In order NOT to jeopardize stove operation, do NOT burn other substances. The use of other materials (including wood), which can be detected by laboratory analyses, invalidates the guarantee.

EdilKamin has designed and tested the stoves for best performance with pellets with the following characteristics:

- diameter: 6 - 7 millimetres,
- maximum length: 40 mm,
- maximum moisture content: 8 %,
- heat output: 4300 kcal/kg (at least).

If pellets with different characteristics are used, the stove will need recalibrating (similar to the initial calibration carried out by the dealer upon 1st ignition).

Use of unsuitable pellets may lead to: a decrease in efficiency; operating anomalies; stoppages due to clogging, dirty glass, unburnt fuel, etc.

Pellets may be simply analysed just by looking at them.

Good: smooth, regular lengths, not very dusty.

Poor-quality: with horizontal and vertical splits, a lot of dust, highly variable lengths and mixed with foreign matter.

HEATING SPECIFICATIONS

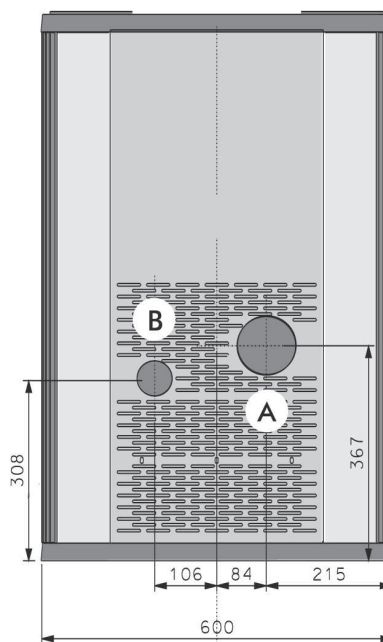
Hopper capacity	15	kg
Efficiency	89,2	%
Available power	3,4/8,3	kW
Time between refuellings (min/max)	7,5/20	hours
Fuel consumption (min/max)	0,7/2,0	kg/h
Heatable room dimensions (min/max) *	115/230	m3
Weight including packaging (min/max)	149/174	kg
Smoke duct diameter (A male)	80	mm
Air intake duct diameter (B male)	40	mm

* The heatable room dimensions are calculated on the basis of pellets with an lhv of at least 4300 kcal/kg and home insulation in compliance with Italian law 10/91.

* It is also important to consider the position of the stove in the room to be heated.

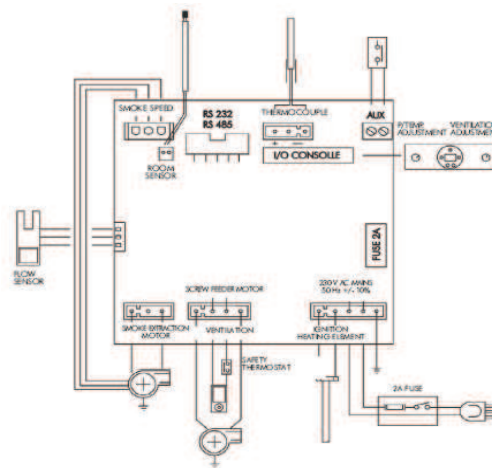
N.B.

- 1) bear in mind that external devices may cause interference.
- 2) caution: live parts. Servicing and/or inspections must be carried out by qualified staff.



ELECTRICAL SPECIFICATIONS

Power supply	230Vac +/- 10% 50 Hz
On/off switch	yes
Average power consumption	150 W
Power consumption during ignition	400 W
Remote control frequency (optional extra)	infrared
Protection on mains power supply	2A, 250 Vac 5x20 Fuse
Electronic circuit board protection	2A, 250 Vac 5x20 Fuse



SAFETY DEVICES:

THERMOCOUPLE:

On the smoke outlet. It measures the smoke temperature. It controls the ignition, operating and shutdown stages according to the parameters set.

AIR FLOW SENSOR:

On the intake duct. It trips when the flow of combustion air is not correct, therefore causing low pressure problems in the smoke circuit.

SAFETY THERMOSTAT:

It trips if the temperature inside the stove is too high. It stops pellet loading, thus causing the stove to go out.

ASSEMBLY AND INSTALLATION (Dealer)

Refer to the local regulations in the country of use for anything not expressly shown.

If the stove is to be installed in a block of flats, consult the block administration before installing.

COMPATIBILITY CHECK WITH OTHER DEVICES

The stove must NOT be installed in the same room as extractor fans or type B gas equipment.

ELECTRICAL CONNECTION CHECK (the plug must be in an accessible place)

The stove is fitted with an electrical power cord for connection to a 230 V 50 Hz socket, preferably protected with a thermal-magnetic circuit breaker. Voltage variations of greater than 10% may impair stove operation (if not already installed, fit a suitable residual current circuit breaker). The electrical system must comply with the law; in particular make sure the earth circuit is in working order. The power supply line must have a suitable cross-section for the equipment rating.

FIRE SAFETY DISTANCES AND LOCATION (fig. 4 page 18)

For correct operation the stove must be level.

Check the load-bearing capacity of the floor.

The stove must be installed in compliance with the following safety conditions:

- minimum safety distance at the sides and back from medium-level flammable materials: 40 cm
- easily flammable materials must not be located less than 80 cm from the front of the stove
- if the stove is installed on a flammable floor, a sheet of heat insulating material must be placed between the stove and the floor, which protrudes by at least 20 cm at the sides and 40 cm at the front.

If it is impossible to comply with the distances given above, technical/building measures must be taken to avoid all fire risks.

If the smoke outlet pipe is connected to walls made of wood or other flammable materials, it must be insulated with ceramic fibre or other materials with similar characteristics.

AIR INTAKE

The room where the stove is located must have an air intake with cross section of at least 80cm² to ensure replenishment of the air consumed by combustion.

Alternatively, the stove air may be taken directly from outside through a 4 cm steel extension of the pipe. In this case, there may be condensation problems and it is necessary to protect the air intake with a grille, which must have a free section of at least 12 cm². The pipe must be less than 1 metre long and have no bends.

It must end with section at 90° facing downwards or be fitted with a wind guard.

SMOKE OUTLET

The stove must have its own smoke outlet (discharge into common flues or other devices must not be used).

The smoke leaves the stove through the 8 cm diameter pipe at the back.

A T-section with condensation trap and bleeder must be fitted at the beginning of the vertical section.

The stove smoke outlet must be connected with the outside using black painted or steel pipes (resistant to 450°C), without obstructions.

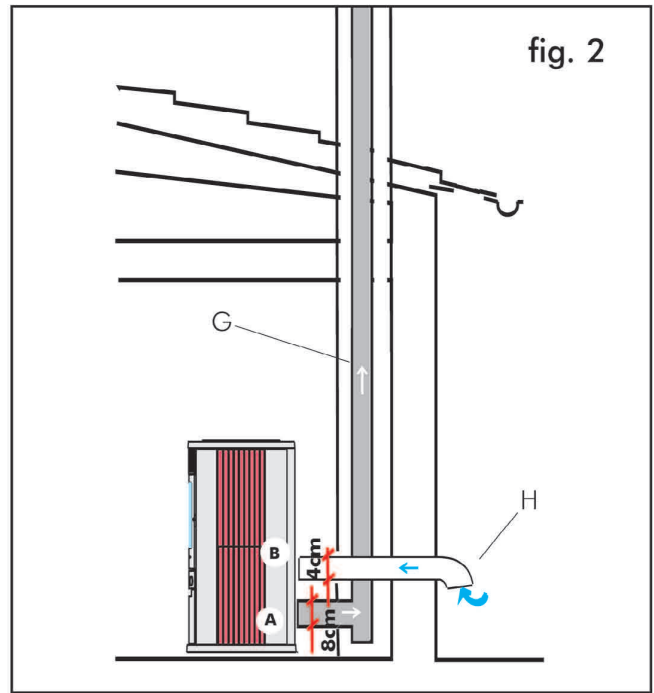
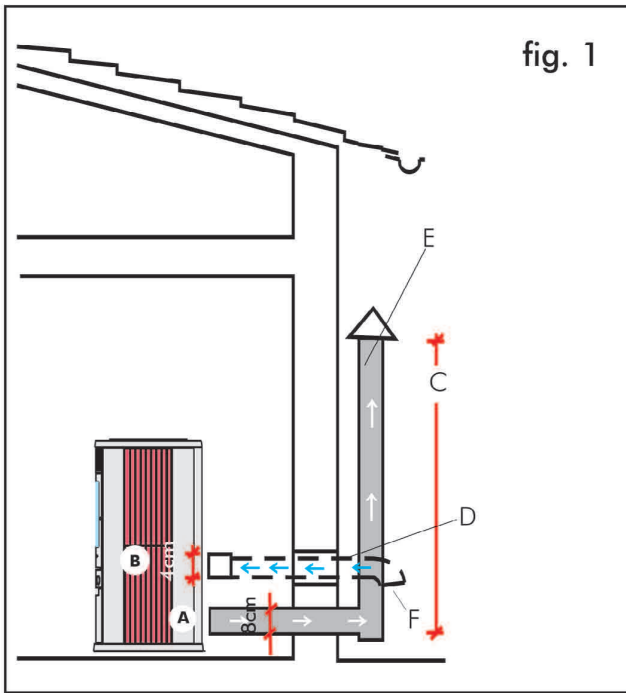
The pipe seals must be air-tight. Material that withstands up to 300°C must be used (silicone or high temperature mastic) to seal and insulate (if necessary) the pipes. The horizontal sections may be up to 2 m long. Up to three 90° bends may be used.

If the smoke outlet does not end in a flue, a suitably fixed vertical section (at least 1.5 m long unless clearly inadvisable for safety reasons) with wind guard at the end is essential. The vertical duct may be indoor or outdoor. If the smoke duct is outdoor, it must be insulated.

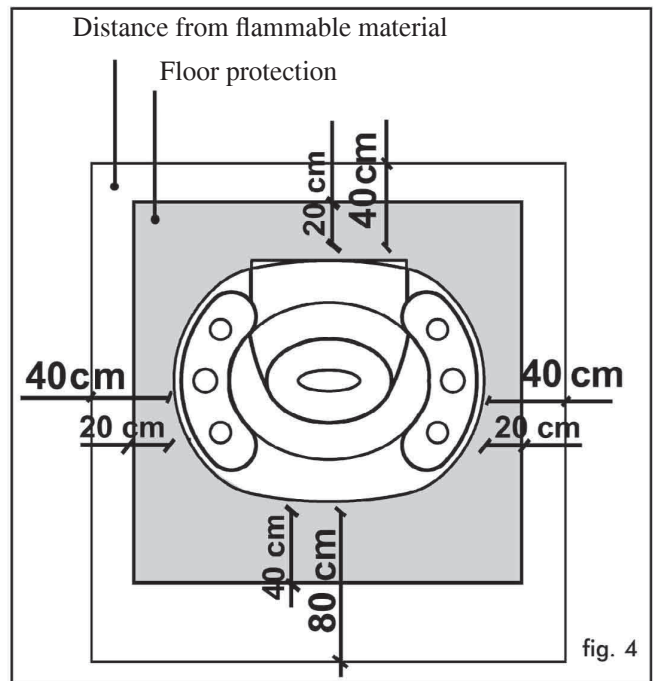
If the smoke duct ends in a flue, the flue must be authorized for solid fuel. If it is more than 150 mm in diameter, it must be renewed by inserting an internal pipe and sealing the smoke outlet from the brickwork.

All sections of the smoke duct must be inspectable. If it is fixed, cleaning inspection openings must be provided.

Possible installations are shown in figures 1 and 2 on page 18.



- A:** insulated steel flue
- B:** 1.5 m minimum height
- C-E:** air intake from inside room (minimum internal section: 80 cm²)
- D:** steel flue, inside existing brick-built chimney

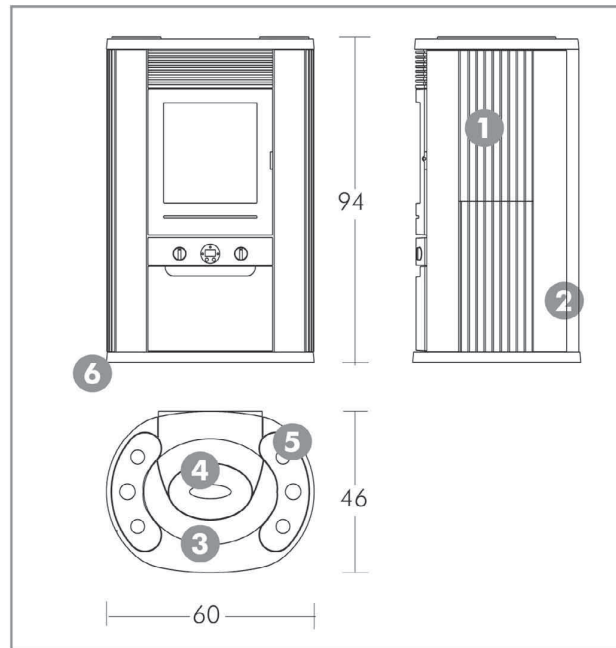


COVERINGS

Model with ceramic or ollite side covering.

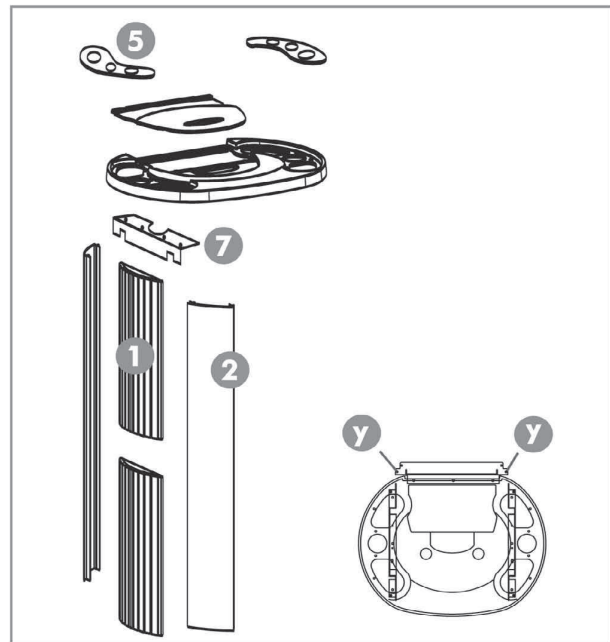
Covering parts list:

- 1 side tiles (4 pcs)
- 2 side aluminium panels (4 pc)
- 3 cast iron top
- 4 pellet hopper cover
- 5 top tiles
- 6 cast iron base



After positioning the frame according to the instructions shown in the **INSTALLATION INSTRUCTIONS** chapter, proceed as follows in the order shown:

- remove cast iron top by unscrewing the 16 screws under the top ceramic tiles (5) and the two screws located at the rear (y),
- remove the aluminium side panel (2) fastening component (7),
- slip the four ceramic side components into the aluminium side guides from above,
- replace the fastening component (7),
- replace the top and fasten it.



INTERFACE

Left knob (SX)

For power adjustment during manual operation and temperature adjustment during automatic operation. The operating mode may be set using the A/M key on the central panel. The display shows the power or temperature set.

Right knob (DX)

For room air flow adjustment, which in any case cannot be set lower than the minimum necessary to ensure cooling of the internal stove parts.

Panel On/Off key

To turn the stove on or off.

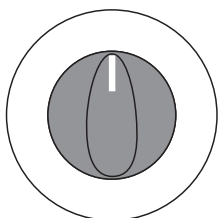
Panel A/M key

For switching stove operation from manual to automatic and vice versa.

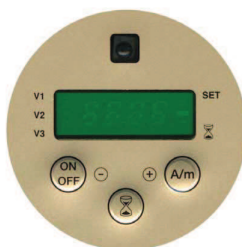
Only on IRIS WITH WEEKLY PROGRAMMER

Panel “hourglass” key

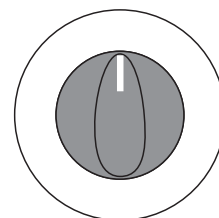
For setting the programmed on/off times



left knob



panel



right knob

Display unit messages

Ac: Ignition stage (flame appearance)

Ar: second Ignition stage (flame stabilizing) before the operating stage

Of: shutdown stage

P1 o P2 o P3: power level set

8-29: temperature set for automatic operation

H1..H7: stoppage problem identification number (see page 24)

Pu: automatic combustion chamber cleaning under way

⏸: motor stopping; wait a few tens of seconds before entering other commands.

When the stove is on standby, this flashes to show the mode it will restart in and when.

OPERATION

Before ignition. Control to put ON 1 the switch.

1st ignition: contact your dealer to calibrate the stove according to the pellets used and conditions of use.

The first few times the stove is ignited there may be a slight smell of paint, which disappears rapidly.

Before ignition, check:

- The stove has been installed correctly (see pages 17-18)
- The electric power supply.
- The door closes.
- The combustion chamber is clean.
- The display shows standby (flashing power or temperature).

Hold the ON/OFF key down for at least two seconds: the stove will automatically start loading pellets to start combustion (the display shows Ac). No flames appear for the first few minutes. Ac changes into Ar when the flame appears.

SCREW FEEDER LOADING.

If the pellet hopper empties completely, press the On/Off and A/M keys simultaneously to fill the screw feeder. This must be done before igniting the stove again if it has shut down due to running out of pellets. It is normal for a few pellets to be left in the hopper, which the screw feeder is not able to pick up.

IGNITION

Automatic ignition

Hold the ON/OFF key down for two seconds with the stove on standby to start the ignition procedure. The word START appears on the display for a few minutes (the ignition procedure does not actually take a preset time: it is automatically shortened if the electronics detect that certain tests are passed). The flame appears after about five minutes. It is normal for a little smoke to be seen in the combustion chamber before the flame appears. "Ar" appears on the display until the flame stabilizes.

Manual ignition

At temperatures of less than 3°C (too low for the heating element to glow) or if the heating element is temporarily out of order, a firelighter may be used for ignition. put a piece of well lit firelighter in the combustion chamber, close the door and press ON/OFF.

Operating modes (when the stove is working, press the A/m key to switch between modes)

Manual: adjust the working power (from P1 to P3 with the left knob) and the ventilation (with the right knob)

Automatic: set the temperature which the room is to reach; the stove automatically adjusts the working power to reach it (P3) or maintain it (P1).

If you set a lower temperature than current room temperature, the stove operates at P1 and consumes the corresponding quantity of pellets.

Note on flame variability

Any variations in the state of the flame depend on the type of pellet used, the normal variability associated with solid fuels and the periodic automatic combustion chamber cleaning (which does NOT replace the essential cold vacuum cleaning by the user before ignition).

Switching off

Hold the ON/OFF key down for two seconds while the stove is operating. The shutdown procedure starts and the word "Off" appears on the display (for a total of 10 minutes).

During shutdown:

- Pellet loading ceases.
- Ventilation turns up to maximum.
- The smoke expulsion motor turns up to maximum.

Never unplug the stove while it is shutting down

WEEKLY TIME PROGRAMMER BUILT INTO PANEL

The concept of the weekly time programmer built into the central panel

It is possible to set 3 ignition programmes

Pr01 with settable on and off times

Pr02 with settable on and off times

Pr03 with settable on and off times

It is possible to enable one or more of the three programmes on each day of the week (day1 = Monday, day2 = Tuesday...day7 = Sunday).

When on standby, the display alternates between showing the ignition mode (P1, P2, P3 or a temperature) and the clock. Refer to page 20 for each of the buttons to press.

Setting the clock

Press the "hourglass" once. When ESC appears, press On/off(-). When SET appears, press the "hourglass" again. HOUR:MIN appears. It is now possible to change the setting with the On/off (-) and Am (+) keys. Once the time is set, press the "hourglass" to confirm. The day number then appears (day1 = Monday, day2 = Tuesday...day7 = Sunday). It is now possible to change the day with the On/off (-) and Am (+) keys. Press the "hourglass" to confirm. When ESC appears, press the "hourglass" again to quit programming.

Enabling programmes

Press the "hourglass" once. When ESC appears, press Am(+). When Pr off appears, press the "hourglass" again. When "off" appears, press On/off(-) or Am(+) to change it to "on". Press the "hourglass" to confirm. When ESC appears, press the "hourglass" again to quit programming. When the stove is in Pr mode, it responds to programmed on and off times.

Setting a programme (e.g. Pr01)

Press the "hourglass" once. When ESC appears, press Am(+) repeatedly until Pr01 appears (after Pr On, set as described above).

Confirm with the "hourglass". ON P1 appears followed by the programme 1 ignition time.

This time can be changed using the On/off(-) and Am(+) keys.

Confirm by pressing the "hourglass".

OfP1 appears, followed by the programme 1 off time. This time can be changed using the On/off(-) and Am(+) keys.

Confirm by pressing the "hourglass".

Ofd1 appears (i.e. programme 1 is not enabled for day 1, Monday). To enable it, press Am(+). Ond1 appears, i.e. programme 1 is enabled on Monday.

Press the "hourglass" to move on to the second day, and so on until day7.

Press the "hourglass" to quit.

The Pr 02 and Pr 03 on and off times and the days on which they are enabled can be set in a similar way.

When the programmes are enabled, a green light appears next to the hourglass symbol.

ADVICE IN THE EVENT OF PROBLEMS

PROBLEM	CAUSE	SOLUTIONS
display-control panel off	no mains voltage	make sure the power cord is connected check the fuse (on the power socket)
remote control (optional) not working	excessive distance from stove	move nearer stove
	remote control battery flat	check battery and replace if necessary
outlet air not hot	too much soot in heat exchanger	clean the heat exchanger from inside the firebox
no flame appears (remember that it only appears 5 minutes after pressing the On/Off key)	the screw feeder has not been filled	Fill screw feeder (see ignition paragraph)
ignition failure	build up of unburnt material in combustion chamber	clean combustion chamber
The ignition/off does not start at the time required	Incorrect setting: clock programme enabling programme enabling for the day	Check according to the instructions on page 22

POSSIBLE CAUSES OF SHUTDOWN

If necessary, the reason for stoppage is shown on the display.

H1 low pressure alarm: problem connected with air circulation

H2 Smoke expulsion motor failure

SF (H3) flame stop

AF (H4) ignition failed

H5 power failure stoppage

H6 thermocouple failure or disconnection

H7 excessive smoke temperature

The message is displayed until the ON/OFF key on the panel is pressed.

Do not restart the stove until the problem has been looked into and the cause removed.

To start the stove up again after a shutdown, let the shutdown procedure end (10 minutes marked by a beep) then press the ON/OFF key.

Never unplug the stove while it is shutting down due to problems. It is important to report what the panel says to the dealer.

Advice for each of the cases mentioned above is shown on the next page.

The chimney pots and smoke ducts connected to solid fuel devices must be brushed once a year (check whether there are regulations on the subject in the country of installation). If inspection and regular cleaning are not carried out, the probability of a chimney pot fire increases. In the event of a chimney pot fire, proceed as follows:

do not use water to extinguish;

empty the pellet hopper;

contact specialist staff after the accident before starting up again.

ADVICE IN THE EVENT OF PROBLEMS

H1) Low pressure alarm (this trips if the flow sensor detects insufficient combustion air flow)

The flow may be insufficient because the door is open, the door does not close properly (e.g. bad seal), there is an air intake or smoke extraction problem, or the combustion chamber is clogged.

Check:

- door closure
- combustion air intake duct (clean, paying attention to the flow sensor components):
- clean the flow sensor with dry air (like that used for PC keyboards)
- stove location: it must not be installed against a wall
- combustion chamber position and cleanliness (clean with frequency according to the type of pellet)
- smoke duct (clean)
- installation (if it does not comply with regulations or the smoke outlet has too many bends)
- flow sensor threshold (SF in the parameters)

If you suspect the sensor is malfunctioning, carry out cold tests. If the conditions are changed (for example by opening the door) and the value does not change, there is a sensor problem.

The low pressure alarm may also occur during ignition, since the flow sensor starts monitoring 90 seconds after the ignition cycle starts.

H2) Smoke expulsion motor failure (this trips if the smoke extraction speed sensor detects a fault)

- Check smoke extractor operation
- Check speed sensor connection
- Make sure the smoke duct is clean

SF (H3) Flame stop (this trips if the thermocouple detects a smoke temperature lower than the value set, which it interprets as the absence of flames)

There may be no flames because

- there are no pellets
- too many pellets have smothered the flames
- the maximum temperature thermostat has tripped (this is very unusual since there would also be an excessive smoke temperature).

AF(H4) Ignition failed ((this trips if no flames appear and the start-up temperature is not reached within a maximum of 15 minutes).

There are two distinct cases:

the flame does NOT appear	Flames appear, but AF appears on the display after Ar.
Check: - combustion chamber position and cleanliness - arrival of combustion air in the combustion chamber - if the heating element is working - room temperature (if lower than 3°C use a firelighter) and damp Try to light with a firelighter.	Check: - if the thermocouple is working - start-up temperature set in the parameters

H5) Power failure stoppage

Check the electrical connection and for voltage drops.

H6) Thermocouple failure (this trips if the thermocouple fails or is disconnected)

Check connection between the thermocouple and the circuit board

Check operation with cold tests.

H7) Excessive smoke temperature (shutdown due to excessive smoke temperature)

Excessive smoke temperature may be caused by:

the type of pellet, smoke extraction fault, blocked duct, incorrect installation, or gearmotor “drift”.

SERVICING

Regular maintenance is essential for good stove operation.

Before carrying out any maintenance, disconnect the device from the mains power supply.

DAILY CLEANING

Clean with a vacuum cleaner. The whole process only takes a few minutes a day.

USING A VACUUM CLEANER, when the stove is cold

- Open the door, vacuum the hearth, vacuum the space around the combustion chamber where ash falls (there is NO extractable ash pan).
- Remove the combustion chamber or clean it with a scraper, and unblock any blocked holes on all sides.
- Vacuum clean the combustion chamber compartment, clean touching edges and replace the combustion chamber
- If necessary clean the glass (cold)

NEVER VACUUM CLEAN HOT ASH, since it may damage the vacuum cleaner

After a few months use dry air (PC keyboard type) to clean the flow sensor in the combustion air intake pipe.

EMPTY THE HOPPER AND VACUUM CLEAN THE BOTTOM IF THE STOVE IS NOT IN USE, and in any case every 15 days.

EVERY SEASON (by the Dealer)

- General internal and external cleaning
- Carefully clean the heat exchange pipes

NEVER loosen the Allen screws inside the firebox: the loader will fall

- Carefully clean and descale the combustion chamber and corresponding compartment
- Clean fan and mechanically inspect the play and fastenings
- Clean smoke duct (replace gasket on the smoke outlet pipe)
- Clean smoke extractor fan compartment, clean flow sensor and check thermocouple
- Clean, inspect and descale ignition heating element compartment and change heating element
- Clean/check display-control panel
- Visually inspect electric cables, connections and power cord
- Clean pellet hopper and check screw feeder-gearmotor assembly play
- Change door seal
- Test screw feeder loading, ignition, operation for ten minutes and shutdown

If the stove is used frequently, it is advisable to clean the smoke duct every 3 months.

OPTIONAL EXTRAS

REMOTE CONTROL (OPTIONAL cod. 254160)

It is possible to buy a remote control to turn the stove on and off and adjust it remotely.

REMOTE IGNITION BY PHONE (OPTIONAL cod. 281900)

The stove may be turned on remotely by phone by having the Dealer connect a dialler to the electronic circuit board (AUX port).

CE STANDARDS and COMPLIANCE DECLARATION

The IRIS stove is certified according to standards

prEN 14785 and EC 50165

EdilKamin declares that the IRIS stove complies with the following C.E. marking European Directives

73/23/EEC and later modification 93/68/EEC

89/336/EEC and later modifications 93/68/EEC

92/31/EEC

93/97 EEC

In the case of installation in Italy, refer to UNI (Italian Standards Institution) 10683/98 or later modifications. In every other country, check the laws and national regulations on the subject.