

# Riscaldamento a Pellet



## **DIADEMA ACS IDRO USER MANUAL**





We thank you for having chosen our company; our product is a great heating solution developed from the most advanced technology with top quality machining and modern design, aimed at making you enjoy the fantastic sensation that the heat of a flame gives, in complete safety.

Extraflame S. p. A.

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## WARNINGS

This instructions manual is an integral part of the product: make sure that it always accompanies the appliance, even if transferred to another owner or user, or if transferred to another place. If it is damaged or lost, request another copy from the area technician. This product is intended for the use for which it has been expressly designed. The manufacturer is exempt from any liability, contractual and extracontractual, for injury/damage caused to persons/animals and objects, due to installation, adjustment and maintenance errors and improper use. Installation must be performed by qualified staff, which assumes complete responsibility for the definitive installation and consequent good functioning of the product installed. One must also bear in mind all laws and national, regional, provincial and town council Standards present in the country in which the appliance has been installed.

Extraflame S.p.A. cannot be held responsible for the failure to comply with such precautions.

After removing the packaging, ensure that the content is intact and complete. Otherwise, contact the dealer where the appliance was purchased.

All electric components that make up the product must be replaced with original spare parts exclusively by an authorised aftersales centre, thus guaranteeing correct functioning.

#### **SAFETY**

- The stove must not be used by persons (including children) with reduced physical, sensory and mental capacities or who are unskilled persons, unless they are supervised and trained regarding use of the appliance by a person responsible for their safety.
- Children must be checked to ensure that they do not play with the appliance.
- Do not touch the stove when you are barefoot or when parts of the body are wet or damp.
- The safety and adjustment devices must not be modified without the authorisation or indications of the manufacturer.
- Do not pull, disconnect, twist electric cables leaving the stove, even if disconnected from the electric power supply mains.
- It is advised to position the power supply cable so that it does not come into contact with hot parts of the appliance.
- The power supply plug must be accessible after installation.
- Do not close or reduce the dimensions of the airing vents in the place of installation. The airing vents are essential for correct combustion.
- Do not leave the packaging elements within reach of children or unassisted disabled persons.
- The hearth door must always be closed during normal functioning of the product.
- When the appliance is functioning and hot to the touch, especially all external surfaces, attention must be paid
- Check for the presence of any obstructions before switching the appliance on following a prolonged period of inactivity.
- The stove has been designed to function in any climatic condition (even critical). In particularly adverse conditions (strong wind, freezing) safety systems may intervene that switch the stove off. If this occurs, contact the technical after-sales service and always disable the safety systems.
- In the event the flue catches fire, use suitable systems for suffocating the flames or request help from the fire brigade.
- This appliance must not be used to burn waste
- Do not use any flammable liquids for ignition
- During the filling phase do not put the bag of pellets to into contact with the product
- The majolicas are top quality artisan products and as such can have micro-dots, crackles and chromatic imperfections. These features highlight their valuable nature. Due to their different dilation coefficient, they produce crackling, which demonstrate their effective authenticity. To clean the majolicas, it is recommended to use a soft, dry cloth. If a detergent or liquid is used, the latter could penetrate inside the crackles, highlighting them.

#### **ROUTINE MAINTENANCE**

Based on Decree 22 January 2008 n°37 art.2, routine maintenance means interventions aimed at reducing degradation due to normal use, as well as dealing with accidental events entailing the need of first interventions, which however do not modify the structure of the system upon which one is intervening or its intended use according to the requirements laid down by the technical standards in force and by the manufacturer's use and maintenance manual.



## **HYDRAULIC SYSTEM**

Certain concepts referring to the Italian Standard UNI 10412-2 (2009) are described in this chapter.

As previously described, when installing, all national, regional, provincial and council Standards in force provided by the country in which the appliance has been installed must be complied with.

TABLE OF SAFETY DEVICES FOR CLOSED VESSEL SYSTEM FEATURED AND NOT FEATURED IN THE PRODUCT		
Safety valve	$\checkmark$	
Pump control thermostat (it is controlled by the water probe and the board program)	$\overline{\checkmark}$	
Acoustic alarm activation thermostat	-	
Water temperature indicator (display)	$\checkmark$	
Pressure indicator	-	
Acoustic alarm	-	
Automatic adjustment circuit breaker switch (managed by board program)	$\checkmark$	
Minimum and maximum pressure switch	$\checkmark$	
Water overheating automatic circuit breaker switch (block thermostat)	$\overline{\checkmark}$	
Circulation system (pump)	$\overline{\mathbf{V}}$	
Expansion system	$\overline{\checkmark}$	

During installation of the stove it is MANDATORY to adjust the system with a manometer in order to display the water pressure.

#### **INSTALLATION AND SAFETY DEVICES**

The installation, relative system connections, commissioning and inspection of correct functioning must be carried out with the highest professional standards, in full compliance with the national, regional and council Standards in force, as well as these instructions.

For Italy, installation must be carried out by professionally authorised staff (Ministerial Decree dated 22.01.08 n°37).

Extraflame S.p.A. declines all liability for damage/injury to objects/persons caused by the plant.

#### SAFETY DEVICES FOR CLOSED VESSEL SYSTEM

According to Standard UNI 10412-2 (2009)in force in Italy, closed systems must be equipped with: safety valve, pump control thermostat, acoustic alarm activation thermostat, temperature indicator, pressure indicator, acoustic alarm, regulation automatic circuit breaker switch, automatic circuit breaker block switch (block thermostat), circulation system, expansion system, safety dissipation system incorporated with the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system.

#### DISTANCES OF SAFETY DEVICES ACCORDING TO THE STANDARD

The temperature safety sensors must be fitted on the machine at a distance no greater than 30 cm from the flow connection. Whenever the generators lack a device, those missing can be installed on the generator flow pipe, within a distance no greater than 1 m from the machine.



COMPONENT	DISTANCE
Temperature safety sensors	On the machine or not exceeding 30 cm
Missing devices because not standard	Not exceeding one metre, on the flow pipe

Domestic or automatic feed heating appliances must: be equipped with a fuel block thermostat or be equipped with a cooling circuit installed by the appliance manufacturer.

The cooling circuit must be activated by a heat safety valve such to guarantee that the limit temperature set by the Standard is not exceeded.

Connection between the power supply unit and the valve must be free from interceptions.

The pressure upstream of the cooling circuit must be at least 1.5 bar.

## **TYPE OF SYSTEM**

There are 2 different types of system:

• Open vessel system and closed vessel system.

The product has been designed and made to work with closed vessel systems.

## **CLOSED VESSEL SYSTEM**

System in which the water it contains is not in direct or indirect communication with the atmosphere. Generally, the closed vessel system features one of the following expansion vessels:

- Pre-loaded closed expansion vessel with membrane impermeable to the passage of gases.
- Automatic closed expansion system with compressor and membrane impermeable to the passage of gases.
- Automatic closed expansion system with transfer pump and membrane impermeable to the passage of gases.
- Expansion system without diaphragm.

#### **GENERAL**

The closed systems must have:

- Safety valve
- Pump control thermostat
- Acoustic alarm activation thermostat
- Temperature indicator
- Pressure indicator
- Acoustic alarm
- Adjustment automatic circuit breaker switch
- Automatic blockage circuit breaker switch (thermostat blockage)
- Circulation system
- Expansion system
- Safety dissipation system incorporated in the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system

#### **SAFETY VALVES**

The load capacity of the safety valve must allow the discharge of a certain amount of vapour, not lower than: Q / 0.58 [kg/h] where: Q is the useful outlet power to the generator water expressed in kilowatt. The diameter of the minimum net transversal section of the valve inlet must not be lower than 15 mm. The valve load pressure, equal to the calibration pressure, increased by the overpressure, cannot exceed the maximum operating pressure of the heat generator. The design engineer must check that the maximum pressure existing in every point of the system, does not exceed the maximum operating pressure of every component. The safety valve must be connected to the highest part of the heat generator or outlet pipes, right next to the generator. The length of the pipes section included between the attachment to the generator and the safety valve must not be more than 1 m. The connection piping of the safety valve to the heat generator must not be traceable and must not feature,



in any point, a smaller section than the inlet of the safety valve or the sum of the inlet sections in the event of several valves belonging to a single pipe. The discharge piping of the safety valve must be make so as not to prevent the regular operation of the valves and not to cause people injuries; the discharge must flow right next to the safety valve and be accessible and visible. The diameter of the discharge piping must not however be lower than that of the outlet connection of the safety valve. By diameter of the outlet connection one refers to the minimum internal diameter on the valve outlet upstream of any internal threading.

#### **CLOSED EXPANSION VESSEL**

#### Warning: check that the preload of the expansion vessel is set at 1.5 bar.

The vessel maximum operating pressure must not be lower than the calibration pressure of the safety valve, increased by overpressure, typical of the valve itself, bearing in mind the eventual level difference between vessel and valve and the pressure generated by the pump operation. The capacity of the expansion vessel/s is evaluated according to the total system capacity as per the design. The closed expansion vessels must comply with the provisions regarding the planning, manufacturing, evaluation of conformity and use for pressure appliances. Shut-off parts or section reductions must not be inserted/made on the connection piping, which may consist of system portions. The insertion of a three-way shut-off valve which allows connection between the vessel and the atmosphere for maintenance operations, is allowed. Such device must be protected against accidental manoeuvres. The connection pipe must be made so as not to feature points with fouling or deposits. In the event of several heat generators which feed the same plant or the same secondary circuit, each heat generator must be connected directly to the expansion vessel or plant expansion vessels unit, altogether dimensioned for the total volume of water contained in the same plant or the same independent circuit. Where it is necessary to separate the individual heat generator from the expansion vessel or expansion vessels unit, a three-way valve, with the same characteristics listed above, must be applied on the connection piping between the generator and the vessel, in order to ensure, in every position, the connection of the generator with the expansion vessel or with the atmosphere. The expansion vessels, the connecting pipes, the bleed pipes and drain pipes must be protected from frost, where applicable. The solution used for this purpose is described in the design.

#### **COMMISSIONING CHECKS**

Before connecting the boiler:

- a) wash all system piping thoroughly in order to remove any residues which might compromise the correct functioning of certain system components (pumps, valves, etc.).
- b) check to verify that the flue has adequate draught, that it is not narrowed and that other appliances do not discharge into the flue.

This is to prevent unexpected power increases. The flue fitting can be mounted between the boiler and the flue only after this inspection. An inspection of the connections with pre-existing flues is recommended.

#### **AUTOMATIC THERMOSTATIC MIXER VALVE (MANDATORY)**

The automatic thermostatic mixing valve is used in solid fuel boilers as it prevents cold water from returning into the exchanger.

Routes 1 and 3 are always open and, together with the pump installed on the return, they guarantee water circulation inside the biomass boiler exchanger.

A high return temperature allows efficiency improvement, reduces formation of smoke condensation and prolongs the boiler life span.

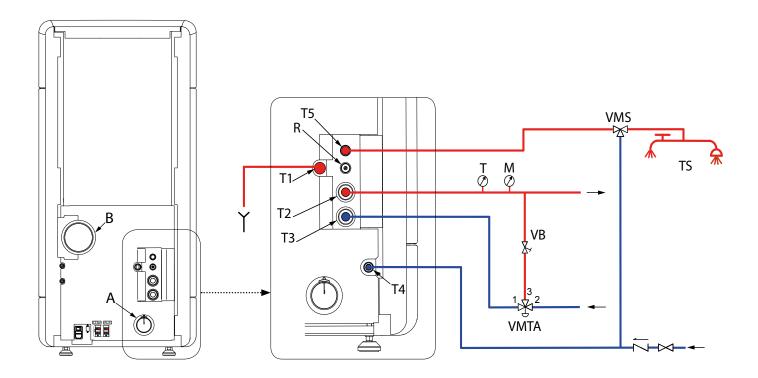
Valves on the market have different calibrations. Extraflame advises to use model 55°c with 1" hydraulic connections. Once the valve calibration temperature is reached, route 2 is opened and the boiler water goes to the system via the flow.



Valve sold as an accessory (optional)



## **HYDRAULIC PLANT BASIC LAYOUT**



KEY				
A	Combustion air inlet	Ø 60mm		
В	Smoke exhaust outlet	Ø 120mm		
T1	3 bar safety valve	1/2 "		
T2	Boiler flow / output	1"		
Т3	Boiler return / inlet	1"		
T4	Domestic cold water inlet	1/2 "		
Т5	Domestic hot water outlet	1/2 "		
М	Pressure Gauge			
Т	Thermometer			
TS	Domestic terminals			
R	R Feed valve			
VB	VB Balance valve			
VMTA	VMTA Thermostatic mixer valve 55°C			
VMS	Domestic water mixing valve			



IT IS RECOMMENDED TO CONSULT THE TEMPLATES MANUAL ON THIS WEBSITE FOR FURTHER INFORMATION RELATING TO THE HYDRAULIC CONNECTIONS, AIR INTAKE/FLUE EXHAUST AND DIMENSION SPECIFICATIONS OF THE PRODUCT IN QUESTION.

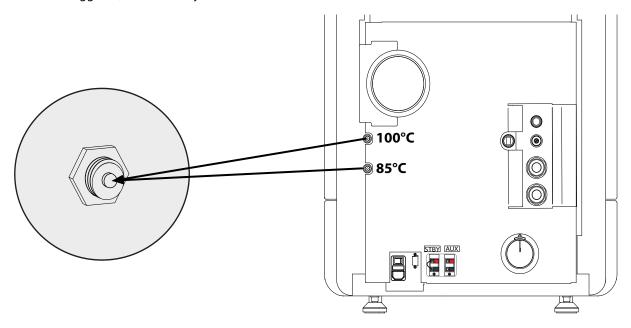


#### **STOVE POSITIONING**

For correct product functioning, it is recommended to position it so that it is perfectly level, using a spirit level.

## **REARMS**

The figures below illustrate the positions of the tank (85°C) and H2O (100°C) rearms. Contact the qualified technician if one of the rearms should be triggered, so as to verify the cause.

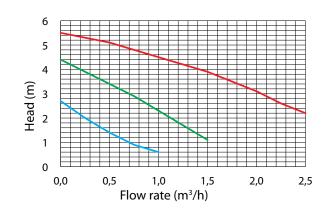


## **DIADEMA ACS IDRO FEATURES**

	DIADEMA ACS IDRO
Water content of the thermo-product heat exchanger (I)	21
Volume of expansion vessel integrated in the thermo-product (I)	8 <b>*</b>
3 bar safety valve integrated in the thermo-product	SI
Minimum and maximum pressure switch integrated into the thermo-product	SI
Pump integrated into the thermo-product	SI
Pump max. head (m)	5

f \* envision a possible additional expansion vessel depending on the system water content.

The diagram to the side illustrates the behaviour of the pump used on our thermo-products at the speeds that can be set.





## SAFETY DEVICES

SAFETY DEVICES	VES
KEY: * = PRESENT, -= NOT PRESENT	STOVES
<b>Circuit board</b> : it intervenes directly sending the product into alarm conditions until it has fully cooled down, in the event of: fumes motor breakage, pellet feed motor breakage, black out (if above 10 seconds), failed ignition	*
<b>Door micro switch:</b> With the door open, the operation of the burn pot cleaning system is blocked	_
<b>Electronic pressure switch:</b> in the event of inadequate depression, it sends the machine in alarm conditions	*
F 2.5 A 250 V fuse (stoves): protects the machine from violent current surges	*
85°C calibrated mechanical bulb with manual rearm: intervenes by blocking fuel feed whenever the pellet tank t° reaches the limit of 85°C. Rearm must be performed by qualified staff and/or the manufacturer's technical after-sales assistance.	*
<b>Pellet tank temperature control probe:</b> if the tank overheats, the machine automatically modulates to return to normal temperature values (* in the applicable models)	*
<b>Mechanical air pressure switch:</b> blocks the pellet in the event of insufficient depression (in the relevant models)	*

### REFERENCE STANDARDS

The installation must be in compliance with:

## • UNI 10683 (2012) heat generators fed with wood and other solid fuels: installation.

The chimneys must be in compliance with:

- UNI EN 13063-1 and UNI EN 13063-2, UNI EN 1457, UNI EN 1806 in the event of non-metallic chimneys:
- EN 13384-1 (13384) chimneys. Thermal and fluid dynamic calculation methods.
- UNI EN 1443 (2005) chimneys: general requirements.
- UNI EN 1457 (2012) chimneys: clay/ceramic flue liners.
- UNI/TS 11278 (2008) Metal chimneys/flue liners/flue ducts.
- UNI 7129 point 4.3.3 Fire Brigade provisions, local rules and regulations.

## NATIONAL, REGIONAL, PROVINCIAL AND TOWN COUNCIL REGULATIONS

One must also bear in mind all laws and national, regional, provincial and town council Standards present in the country in which the appliance has been installed.

#### **TERMS AND DEFINITIONS**

**Aeration:** Air renewal is required both for the disposal of the combustion products, and to prevent mixtures with a hazardous content of non-combusted gases.

**Closed hearth appliance:** Appliance designed for operation with closed combustion chamber.

**Forced draught appliance:** Appliance with ventilation in the fumes circuit and combustion with fumes flow at a positive pressure with respect to the environment.

**Chimney:** Structure consisting in one or several walls containing one or several outflow airways.

The purpose of this predominantly vertical element is to expel the combustion products at a convenient height from the ground.

**Smoke duct:** Component or components that connect the outlet of the heat generator to the chimney.

**Chimney cap:** Device that placed on the chimney outlet allows the dispersion of the combustion products even in presence of adverse weather conditions.

**Condensation:** Liquid products which form when the fumes temperature is lower or equal to the water dew point.

**Ducting pipe:** Pipe made up of one or several predominantly vertical elements, specifically suitable for collecting and expelling the fumes, as well as to withstand the relative components and any condensate over time,

suitable to be installed in a chimney, existing or new technical compartment, even in new buildings.

**Sealed installation:** Installation of an appliance with sealed operation, so that all the air required for combustion is taken from outside.

**Maintenance:** Set of procedures required to ensure and maintain safety and functionality over time and maintain the efficiency of the system within the prescribed parameters.

**Chimney system:** Chimney installed using a combination of compatible components, manufactured or specified by a sole manufacturer whose product liability covers the entire chimney.

**Fumes exhaust system:** Flue gas exhaust system, independent from the appliance made up of a smoke duct, chimney or individual flue and chimney cap.

**Radiation area:** Area immediately in front of the hearth in which the radiant heat caused by combustion is diffused.

**Reflux area:** Area beyond the extrados of the roof in which overpressure or depressions occur, which may affect the proper discharge of the combustion products.



#### **FUNCTIONAL OPERATIONS DIAGRAM**

State of the art installation and proper system operation include a series of activities:

#### 1. Preliminary activities:

- verification of the suitability of the installation site,
- verification of the suitability of the fumes exhaust system,
- verification of the suitability of the outside air inlets;

#### 2. Installation:

- implementation of ventilation and connection to the outer air inlets,
- implementation and connection to the fumes exhaust system,
- assembly and installation,
- electric and hydraulic connections,
- installation of insulation,
- ignition and operation test,
- installation of finishings and coverings;

#### 3. Issue of complementary documentation;

#### 4. Inspection and maintenance.

Other actions may be required in relation to specific requests of the competent authority.

#### **PRELIMINARY ACTIVITIES**

#### **GENERAL**

Verification of compatibility of the system, of any restrictions required by local administrative regulations, special or conventional requirements resulting from condominium regulations, constraints, laws or administration deeds must precede any other assembly or installation operation.

One must especially verify the suitability:

- of the installation premises, of the appliances already installed in the installation premises and in the adjacent and adjoining premises, also powered by different fuels, with particular reference to non-compliant installations.
- of the fumes exhaust system
- of the outside air inlets

#### SUITABILITY OF THE FUMES EXHAUST SYSTEM

Installation must be preceded by a compatibility test between the appliance and the fumes exhaust system, by verifying:

- the existence of documentation relating to the system;
- existence and content of the chimney plaque;
- suitability of the internal section of the chimney;
- absence of obstructions all along the chimney;
- predominantly vertical height and development of the chimney;
- existence and suitability of the chimney cap;
- distance of the outside wall of the chimney and of the smoke duct from
- combustible materials;
- chimney type and material;
- absence of other chimney connections.



## INSTALLATION

Installation in premises with fire hazards is forbidden. Installation in residential premises (except for sealed operation appliances) is also forbidden:

- in which there are liquid fuel-operated appliances with continuous or intermittent operation, which draw the combustion air in the room in which they are installed, or
- in which there are type B gas appliances intended for room heating, with or without production of domestic hot water and in adjacent and adjoining premises, or
- in which, in any case, the depression measured during installation between the internal and external environment is greater than 4 Pa

#### Installations in bathrooms, bedrooms and studio flats

Installation in bathrooms, bedrooms and studio flats is only allowed for sealed or closed hearth appliances with ducted combustion air taken from the outside.

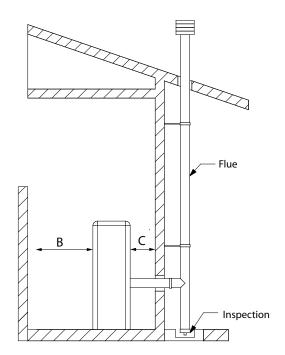
#### **Installation premises requirements**

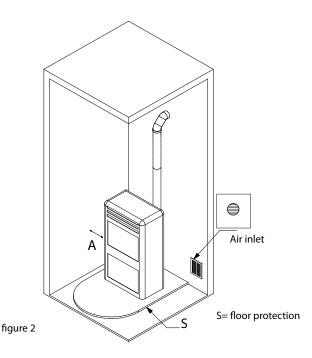
figure 1

The support surfaces and/or points must have a suitable load-bearing capacity to support the weight of the appliance, of the accessories and coatings.

The adjacent, side and rear walls and the supporting surface must be made of non-combustible material according to the table

REFERENCES	INFLAMMABLE OBJECTS	NON-INFLAMMABLE OBJECTS
A	200 mm	100 mm
В	1500 mm	750 mm
С	200 mm	100 mm





In any case the temperature of the adjacent combustible materials must not reach a temperature equal to or greater than the room temperature increased by 65°C.

The minimum volume of the premises in which to install the appliance must be greater than 15 m<sup>3</sup>.



#### **VENTILATION AND AERATION OF THE INSTALLATION PREMISES**

Ventilation is deemed sufficient when the room is equipped with air inlets according to the table:

#### Air inlet

See figure 2

Appliance categories	ppliance categories Reference standard		Minimum net opening value of the ventilation duct
Pellet stoves	UNI EN 14785	-	80 cm²

In any case ventilation is deemed sufficient when the pressure difference between the external and internal environment is equal to or less than 4 Pa.

In the presence of type B gas appliances with intermittent operation not intended for heating, they must have their own aeration and/or ventilation opening. The air inlets must meet the following requirements:

- they must be protected with grids, metal mesh, etc., but without reducing the net useful section;
- they must be made so as to make the maintenance operations possible;
- positioned so that they cannot be obstructed;

The air flow can also be obtained from a room adjacent to that of installation (indirect aeration and ventilation), as long as the flow takes place freely through permanent openings communicating with the outside.

The adjacent room cannot be used as a garage, warehouse of combustible material or for any other activity with a fire hazard, bathroom, bedroom or common room of the building.

## **FUMES EXHAUST SYSTEM**

#### **GENERAL REQUIREMENTS**

Each appliance must be connected to a suitable fumes exhaust system and ensure adequate dispersion of the combustion products into the atmosphere. The combustion products must discharged above the roof. Direct discharge from the wall or towards closed spaces is forbidden, even with clear skies.

In particular, it is forbidden to use flexible and extendible metal pipes.

The chimney should only receive the exhaust of the smoke duct connected to the appliance; collective flues or conveying exhausts from hoods above cooking appliances of any kind, or exhausts from other generators into the chimney itself or smoke duct are not allowed.

The smoke duct and the chimney must be connected with a continuity solution, in order to prevent the chimney from resting on the appliance.

It is forbidden to have other air supply channels and pipes for plant engineering transit inside the fumes exhaust systems, especially if over-sized.

The components of the fumes exhaust system must be chosen in relation to the type of appliance to be installed in compliance with:

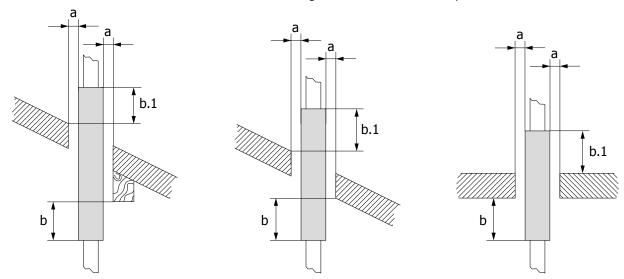
- in the event of metal chimneys, UNI/TS 11278, with particular attention to what is stated in the specification;
- in the event of non-metallic chimneys: UNI EN 13063-1 and UNI EN 13063-2, UNI EN 1457, .-UNI EN 1806; considering especially:
- temperature class;
- pressure class (fumes seal) at least equal to the seal required for the appliance;
- moisture resistance (resistance to condensation);
- class or level of corrosion and specification of the materials constituting the inner wall in contact with the fumes.
- soot fire resistance class;
- minimum distance from combustible materials

The installer of the fumes exhaust system, once the installation is complete and the relevant checks and inspections have been made, must fix the chimney plaque supplied by the manufacturer with the product in a visible manner, near the fireplace, and which must be completed with the following information:



- nominal diameter;
- distance from combustible materials, indicated in millimetres, followed by the arrow and flame symbol;
- installer data and date of installation.

Every time one must cross combustible materials, the following indications must be complied with:



SYMBOL	DESCRIPTION	QUOTA[MM]
b	Minimum distance of combustible materials from the intrados of the framework/floor/wall	500
b.1	Minimum distance of combustible materials from the extrados of the framework/floor	
a	Minimum distance from combustible materials defined by the manufacturer	G(xxx)

The single wall pipes are indicated in white.

The insulated double wall chimney systems are indicated in grey.

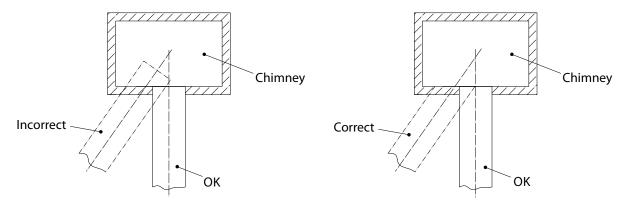
One can disregard the quota only in the event of using an appropriate heat protection screen (for example: wall plate) to protect the intrados of the framework/floor

#### **SMOKE DUCT**

#### General requirements

The smoke ducts must be installed in compliance with the following general requirements:

- they must be insulated if they cross through rooms that are not to be heated or outside the building;
- they must not cross rooms in which the installation of combustion appliances is forbidden, nor in other premises compartmentalised against fire or with a fire hazard, nor in rooms and/or areas that cannot be inspected;
- they must be installed so as to allow normal thermal expansion;
- they must be fitted to the opening of the chimney without protruding inwards;
- the use of flexible metal pipes to connect the appliance to the chimney is not allowed;



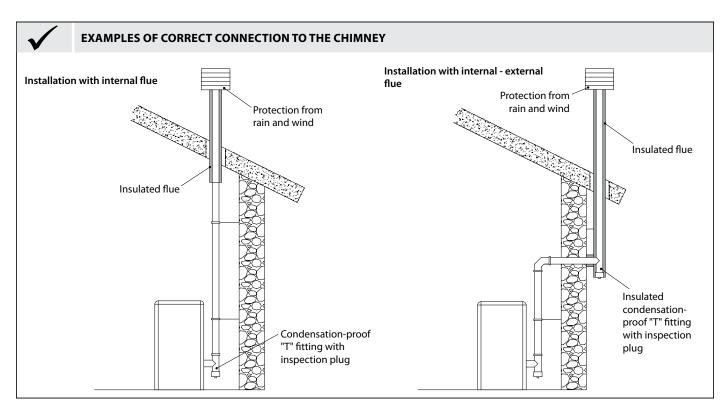


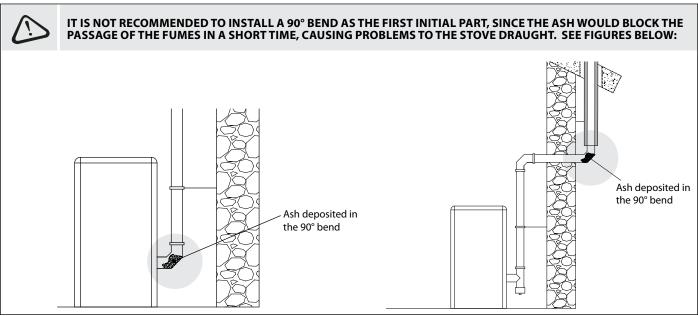
- counter-slope sections are not allowed;
- the smoke ducts must have, along their entire length, a diameter that is no less than that of the attachment of the appliance exhaust pipe; any section changes are allowed only on the inlet to the chimney;
- they must be installed so as to limit the formation of condensation and prevent their release from the joints;
- they must be positioned at a distance no less than that indicated in the product specifications from combustible materials;
- the smoke channel/duct must allow to collect the soot and to be cleaned using a swab and inspected after being disassembled, or through inspection openings when not accessible from inside the appliance.

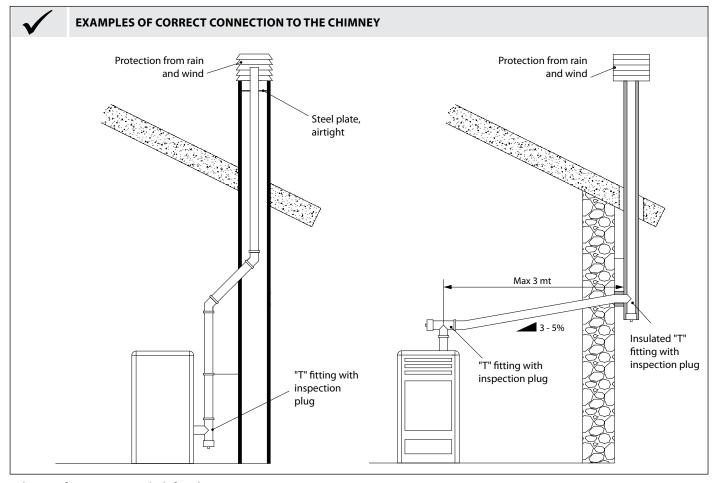
#### ADDITIONAL REQUIREMENTS FOR APPLIANCES FITTED WITH AN ELECTRIC FAN FOR FUMES EXPULSION

For the heat generator appliances equipped with electric fan for expelling fumes, the instructions below must be followed:

- The horizontal sections must have a minimum upward slope of 3%
- The length of the horizontal section must be minimal and, in any case, no longer than 3 metres
- The number of direction changes including the one due to the use of the "T" element must not be more than 4.







It is mandatory to use airtight pipes.

#### **CHIMNEY**

In addition to the general requirements, the chimneys for releasing combustion products into the atmosphere must:

- operate under negative pressure (operation under positive pressure is not allowed);
- have a preferably circular internal section; square or rectangular sections must have rounded corners with a radius of no less than 20 mm (hydraulically equivalent sections may be used, as long as the ratio between the longer side and the shorter side of the rectangle, which circumscribes the section, is in any case no greater than 1.5);
- be designed for fumes be designed for fumes expulsion;
- be predominantly vertical and have no narrowing along their entire length;
- have no more than two direction changes with a slope angle no greater than 45°;
- be fitted with, in the event of operating in damp conditions, a device for reflux drainage (condensation, rainwater);

## **Ducted system**

A ducted system can be installed with one or more ducts, operating only with negative pressure with respect to the environment.

The flexible hose compliant with UNI EN 1856-2, with T400-G characteristics, meets the requirements.

#### **CHIMNEY CAPS**

The chimney caps must meet the following requirements:

- they must have a useful outlet section no less than double of that of the chimney/ducted system on which it is installed;
- they must be adapted in order to prevent the penetration of rain and snow in the chimney/ducted system;
- they must be built so that, in the event of winds coming from all directions and from any angle, the expulsion of combustion products is in any case ensured;
- they must be free from mechanical intake aids.



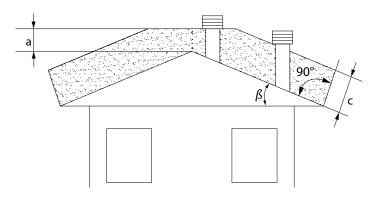
#### **COMBUSTION PRODUCTS OUTLET QUOTA**

The outlet quota is determined by measuring the minimum height between the roof covering and the lower point of the fumes expulsion section into the atmosphere; this quota must be outside the reflux area and at an adequate distance from obstacles which hinder or make the expulsion of the combustion products difficult or from openings or accessible areas.

#### Reflux area

The outlet quota must be outside the reflux area calculated according to the indications below. Near the ridge one considers the lowest between the two.

#### Buffer area for outlet quota



#### Clear area for outlet quota above the roof slope ( $\beta > 10^{\circ}$ )

REFERENCE	DESCRIPTION	CLEAR AREA (MM)
c Distance measured at 90° from the roof surface		1300
a	Height above the ridge of the roof	500

The outlet of a chimney/ducted system must not be near obstacles that may create turbulence areas and/or prevent proper expulsion of combustion products and maintenance operations to be carried out on the roof. Verify the presence of other chimney caps or skylights and dormers.

#### **FUMES EXHAUST SYSTEM PRODUCT REQUIREMENTS**

#### **Temperature class**

In the event of a pellet appliance, temperature classes below T200 are not allowed.

#### Soot fire resistance class

The fumes exhaust system interlocked with appliances supplied by solid fuels require soot fire resistance, and the specification must be indicated by the letter G followed by the distance from combustible materials in millimeters (XX) (in compliance with UNI EN 1443).

In the event of pellet appliances, the fumes exhaust systems must be airtight; if double designation elements are used (G and O, with or without seal elastomer) for connecting the appliance to the chimney, one must comply with the minimum distance XX in millimeters, indicated for designation G; in the event of fire due to soot, one must ensure the restoration of the initial conditions (by replacing the gaskets and damaged items and cleaning those remaining in use).

#### **Ignition tests**

Operation of the appliance must be verified with an ignition test, i.e.:

• for mechanical feed appliances, one must complete the ignition test, verify proper operation for at least the next 15 minutes and adjust the switch-off;

For appliances installed in a hot water heating system (closed fireplaces, thermo-stoves), testing must also extend to the entire hydraulic circuit.



#### **Coverings and finishings**

The coverings and finishings must only be applied after having verified the proper operation of the appliance according to the indicated modalities

#### **TECHNICAL INSTALLATION DOCUMENTATION**

When installation is complete, the installer must provide the owner or person acting for him, according to the legislation in force, with the declaration of conformity, supplied with:

- 1) the use and maintenance manual of the appliance and of the system components (such as for example, the smoke ducts, chimney, etc.);
- 2) photocopy or photograph of the chimney plaque;
- 3) system booklet (where applicable).

The installer must ask to be issued with a receipt stating that the documentation has been provided, and must keep it with a copy of the technical documentation relating to the installation.

#### Installation performed by several parties

If the individual installation steps are carried out by different parties, each must document the work carried out for the customer and the for the operator working on the next step.

#### **INSPECTION AND MAINTENANCE**

#### Frequency of operations

Maintenance of the heating system and of the appliance must be carried out on a regular basis according to the table below:

TYPE OF APPLIANCE INSTALLED	<15kW	(15- 35) kW
Pellet operated appliance	1 year	1 year
Water operated appliances (closed fireplaces, thermo-stoves, thermo-kitchens)	1 year	1 year
Boilers	1 year	1 year
Fumes exhaust system	4 t of fuel used	4 t of fuel used

For further details refer to the "cleaning and maintenance" chapter.

#### Inspection and maintenance report

At the end of the inspection and/or maintenance operations, a report must be issued and released to the owner, or person acting for him, who must confirm its receipt in writing. The report must indicate the situations encountered, the action taken, any components replaced or installed and any comments, recommendations and requirements.

The report must be kept with the relative documentation.

In the inspection and maintenance report one must mention:

- anomalies detected that cannot be removed, which pose a risk to the safety of the user or serious damage to building;
- components that have been tampered with.

If anomalies as per above were detected, the owner, or person acting for him, must be warned in writing, in the maintenance report, to refrain from using the system until the safety conditions have been fully restored.

The inspection and maintenance report must include the main information of the technician or company who performed the inspection and/or maintenance operations, with their contact details, date of intervention and the signature of the operator.



## PELLETS AND FEEDING

Pellets are made by subjecting wood shavings i.e. the rejects of pure wood (without paint) sawmill, carpenter products and products from other activities connected to working and transforming wood, to very high pressures.

This type of fuel is fully ecological as no glues are used to hold it together. In fact, the compactness of the pellets is guaranteed over time by a natural substance that is found in wood: lignin.

As well as being an ecological fuel, as wood residues are made the most of, pellets also have technical advantages.

While wood has a calorific value of 4.4 kW/kg. (with 15% humidity, therefore after about 18 months seasoning), that of the pellet is 5 kW/kg.

Pellet density is about 650 kg/m<sup>3</sup> and water content is equal to 8% of its weight. For this reason the pellets do not need to be seasoned in order to obtain a sufficiently adequate heat yield.

The pellet used must comply with the features described by Standards:

- EN PLUS UNI EN 16961 2 class A1 or A2
- Ö-NORM M 7135
- DIN PLUS 51731

Extraflame recommends using pellets with a <u>diameter of 6mm</u> with its products.

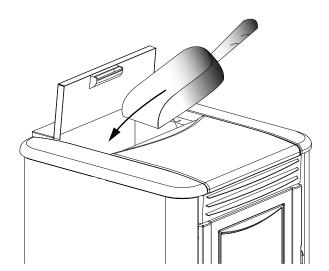
#### **PELLET STORAGE**

To guarantee combustion without problems, the pellets must be kept in a dry place.

Open the tank lid and load the pellets using a scoop.

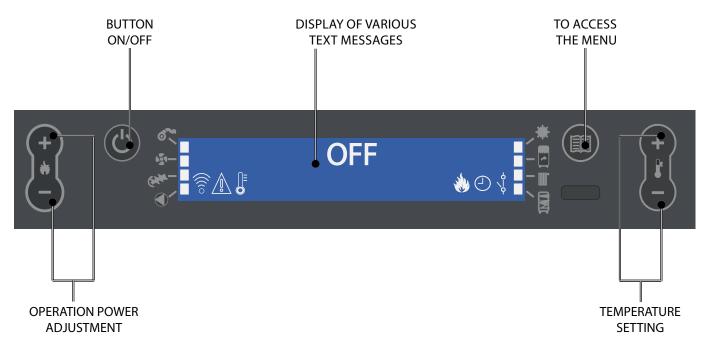


THE USE OF POOR QUALITY PELLETS OR ANY OTHER MATERIAL DAMAGES THE FUNCTIONS OF YOUR STOVE AND CAN VOID THE WARRANTY AND THE ANNEXED RESPONSIBILITY OF THE MANUFACTURER.



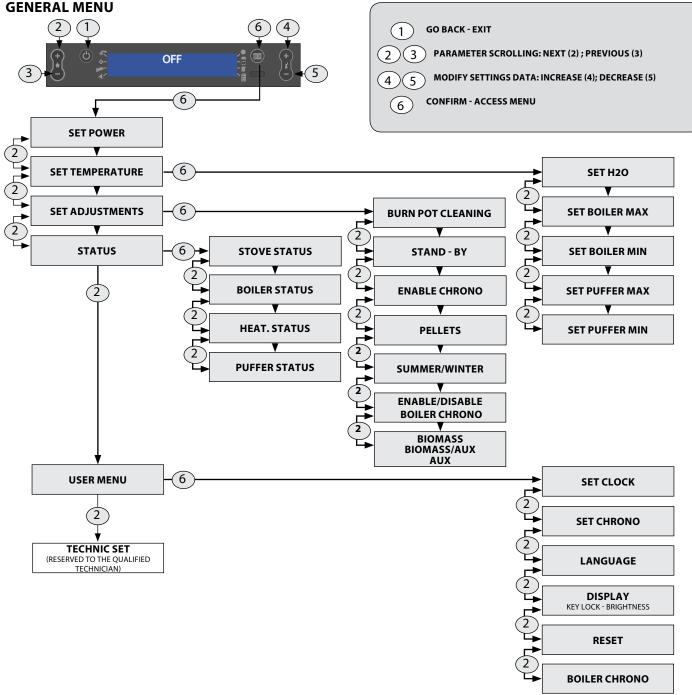


## **CONTROL PANEL**



DIS	DISPLAY ICONS KEY					
	Indicates the receipt of the radio signal On = during radio communication Off = no radio communication Flashing = serial port excluded		Indicates the stove modulation On = the stove is working at the set power Flashing = the power at which the stove is working is different to the power set, the stove is modulating (for various reasons)			
<u> </u>	Indicates the presence of an alarm. On: indicates the presence of an alarm Off: indicates the absence of alarms Flashing: indicates the deactivation of the depression sensor.	$\bigcirc$	It indicates weekly programming functioning Indicator on = weekly programming active Indicator off = weekly programming disabled			
=	Indicates the water temperature status $Off = the  T^\circ  read  by  the  probe  is  above  the  set  temperature \\ On = the  T^\circ  read  by  the  probe  is  below  the  set  temperature$	0,0	Indicates the contact of the external additional thermostat Contact closed: the contact of the external additional thermostat is closed and the STBY function is disabled. Contact open: the contact of the external additional thermostat is open and the STBY function is disabled. Flashing with contact closed: the contact of the external additional thermo- stat is closed and the STBY function is activated Flashing with contact open: the contact of the external additional thermo- stat is open and the STBY function is activated			
	It indicates functioning of the fumes motor.  Off = flue gas motor deactivated  On = flue gas motor active  Flashing = breakdown (contact technical after-sales service)	Salva	It indicates the summer / winter function Off: Activates the winter function On: Activates the summer function			
(So)	Not used		Indicates the DHW request Off = DHW satisfied, pump off Flashing: the DHW request exists but the work conditions are not satisfied, pump off On: the DHW is in request mode and the work conditions are satisfied, pump on			
Circ.	It indicates functioning of the pellet feed motor  Off = pellet feed motor deactivated  On = pellet feed motor active		Indicates the heating request Off: heating satisfied, pump off Flashing: the heating request exists but the work conditions are not satisfied, pump off On: the heating is in request mode and the work conditions are satisfied, pump on			
	It indicates pump operation  Off = pump deactivated  On = pump active  Flashing = the safety device is active (H2O temperature > 85°C)		Indicates the puffer request, if active.  Off: puffer satisfied, pump off Flashing: the puffer request exists but the work conditions are not satisfied, pump off On: the puffer is in request mode and the work conditions are satisfied, pump on			





#### **BASIC INSTRUCTIONS**

The following recommendations must be followed the first times the stove is ignited:

- Faint smells may be produced due to the drying of the paints and silicones used. Do not remain in the environment for long periods.
- Do not touch the surfaces as they could still be unstable.
- Air the room well several times.
- The hardening of the surfaces is terminated after several heating processes.
- This appliance must not be used to burn waste.

Before lighting the stove, the following points must be verified:

- The hydraulic system must be completed in compliance with the guidelines of the regulations and the manual.
- The tank must be full of pellets
- The combustion chamber must be clean
- The burn pot must be completely free and clean
- Check the hermetic closure of the fire door and the ash drawer
- Check that the power supply cable is connected correctly
- The bipolar switch in the rear right part must be positioned on 1.



DO NOT USE ANY INFLAMMABLE LIQUIDS FOR IGNITION!

DO NOT ALLOW THE BAG OF PELLETS TO COME INTO CONTACT WITH THE BOILING HOT STOVE DURING THE FILLING PHASE! IN THE EVENT OF CONTINUOUS NO IGNITION, CONTACT AN AUTHORISED TECHNICIAN.



## THE REMOTE CONTROL

All that can normally be implemented through the LCD can be adjusted using the remote control. The table below provides a detailed description of the various functions:



1	ON / OFF	Pressing the key for three seconds, the stove will switch on or off
2	POWER INCREASE	Pressing the key will increase the operating power
3	POWER DECREASE	Pressing the key will decrease the operating power
4	T° INCREASE	The set temperature can be increased by pressing this key
5	T° DECREASE	The set temperature can be decreased by pressing this key
6	ENABLE/DISABLE CHRONO	Pressing the key once will enable or disable the chrono
7	ENABLE DELAYED SWITCH-OFF	The delayed switch-off can be set by pressing this key. For example, if the stove is set to switch-off in an hour, it shall switch-off automatically once the set time elapses, displaying the countdown every minute for delayed automatic shutdown.
8	MENU	This key allows to access the user and technical menu (the technical menu is reserved for assistance)
9	INCREASE	The set temperature can be increased by pressing this key
10	ESC KEY	The key allows the user to exit any program or display and returns to the main menu without saving the data
11	ВАСК	The key returns to the display of the various menus
12	CONFIRMATION KEY	This key confirms the adjustments made during the user menu programming phase
13	FORWARD	The key moves forward in the various menus
14	ENABLE F1 FUNCTION	Pre-set key for future applications
15	DECREASE	The key decreases the value to be set
16	STOVE STATUS	Pressing this key will display the general status of the stove

Important note: the numbers shown on the remote control are purely indicative and are not present on the remote control supplied with the product.

#### **TYPE AND REPLACEMENT OF BATTERIES**

The batteries are housed in the lower part of the remote control.

To replace them, remove the battery holder (as indicated in the figure at the back of the remote control), remove or insert the battery according to the symbol on the remote control and on the battery itself.

For operation, 1 CR2025, 3V lithium buffer battery is required.





The batteries used contain metals harmful for the environment. They must therefore be disposed of separately in appropriate containers.



IF THE REMOTE CONTROL IS OFF BECAUSE IT HAS NO BATTERIES, THE STOVE CAN BE CONTROLLED FROM THE CONTROL PANEL ON TOP OF IT.

WHILE REPLACING THE BATTERY, PAY ATTENTION TO THE POLARITY BY OBSERVING THE SYMBOL ON THE INSIDE COMPARTMENT OF THE REMOTE CONTROL.



## COMMISSIONING SETTINGS

Once the power cable at the back of the stove has been connected, move the switch, also located on the back, to (I).

The switch at the back of the stove powers the stove board.

The stove remains off and a first screen appears on the panel reading OFF.

#### **ADJUSTING TIME, DAY, MONTH AND YEAR**

Set clock allows to adjust the time and date

#### **CONTROLS PROCEDURE**

- Press key 6 and SET POWER will appear
- Press key 2 several times until USER MENU is displayed
- Confirm using key 6
- SET CLOCK will appear.
- Confirm using key 6
- Use key 4 or 5 to select the day
- Proceed by pressing key 2
- Use the same procedure: 4 or 5 to set and key 2 to move forward; to adjust the hours, minutes, day, month and year
- Press key 1 several times to confirm and exit the menu

SET CLOCK				
DAY	MON, TUE, WED,SUN			
HOURS	023			
MINUTES	0059			
DATE	131			
MONTH	112			
YEAR	0099			

#### **ADJUSTING LANGUAGE**

It is possible to select the preferred language to display the various messages.

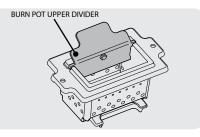
#### **CONTROLS PROCEDURE**

- Press key 6 and SET POWER will appear.
- Press key 2 several times until USER MENU is displayed
- Confirm using key 6
- **SET CLOCK** will appear.
- Press key 2 until SET LANGUAGE appears
- Confirm using key 6
- Select the language using key 4 or 5.
- Press key 1 several times to confirm and exit the menu

SET LANGUAGE			
	ITALIAN		
	ENGLISH		
LANGUAGE	GERMAN		
	FRENCH		
	SPANISH		



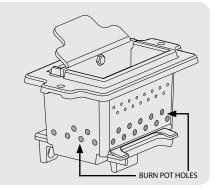
IT IS FORBIDDEN TO USE THE APPLIANCE WITHOUT THE DIVIDER AND/ OR GLASS PROTECTION (SEE THE FIGURE TO THE SIDE). ITS REMOVAL JEOPARDISES THE SAFETY OF THE PRODUCT AND IMMEDIATELY VOIDS THE WARRANTY PERIOD. IN THE CASE OF WEAR OR DETERIORATION REQUEST AFTER-SALES ASSISTANCE FOR REPLACEMENT OF THE PART (REPLACEMENT THAT IS NOT UNDER GUARANTEE AS THE COMPONENT IS SUBJECT TO WEAR).







SHOULD THE ALARM "CLEAN CHECK UP" BE TRIGGERED, MAKE SURE THAT THE BOTTOM OF THE BURN POT IS FREE FROM RESIDUES OR SCALING. THE HOLES ON THE SIDE OF THE BURN POT (SEE FIGURE TO THE SIDE) MUST BE COMPLETELY CLEAR, TO ENSURE PROPER COMBUSTION. (SEE CHAPTER "CLEANING UNDER USER'S RESPONSIBILITY") ONE CAN USE THE "PELLET FEED ADJUSTMENT" FUNCTION TO ADJUST THE COMBUSTION ACCORDING TO THE DESCRIBED REQUIREMENTS. IF THE ALARM PERSISTS AND THE ABOVE LISTED CONDITIONS HAVE BEEN CHECKED, CONTACT THE QUALIFIED AFTER-SALES ASSISTANCE CENTRE.





## **OPERATION AND LOGIC**



#### **IGNITION**

Once the points listed previously have been checked, press key 1 for three seconds to ignite the stove.

15 minutes are available for the ignition phase. After ignition and having reached the control temperature, the stove interrupts the ignition phase and passes to STARTING.

#### STARTING

During the start-up phase, the stove stabilises combustion, increasing it progressively, to then start ventilation and pass on to WORK.

#### **WORK**

During the work phase, the stove reaches the set power; see following item.

#### **SET POWER ADJUSTMENT**

Set the operating power (from 1 to 5).

Power 1 = minimum level - Power 5 = maximum level.

#### **SET H2O TEMPERATURE ADJUSTMENT**

Set the boiler temperature between 65 - 80°C.

#### **PUMP OPERATION**

The pump activates water circulation when the t° of the water inside the stove reaches 60°C. As the pump always functions above 60°, an always open heating area is recommended to make product functioning homogenous, preventing overheating blocks. Normally this area is defined "Safety zone".

#### **BURN POT CLEANING**

At pre-set intervals the stove performs burn pot cleaning, switching the machine off.

When the cleaning phase is finished, the stove will re-start automatically and continue its work going back to the power level selected.

#### **MODULATION and H-OFF**

As the water temperature approaches the set point, the boiler starts to modulate automatically bringing itself to the minimum power.

If the temperature increases beyond the set point, it will automatically switch off indicating **H-OFF** and will automatically go back on when the temperature drops below the set point.

#### **SWITCH-OFF**

Press key 1 for three seconds.

When the operation has been performed, the appliance automatically enters the switch- off phase, blocking the supply of pellets

The flue gas exhaust motor will remain on until the stove temperature has dropped below the factory parameters.

#### **RE-IGNITION**

The stove can only be re-ignited automatically or manually when the cooling cycle conditions and the preset timer have been satisfied.

## NO IGNITION



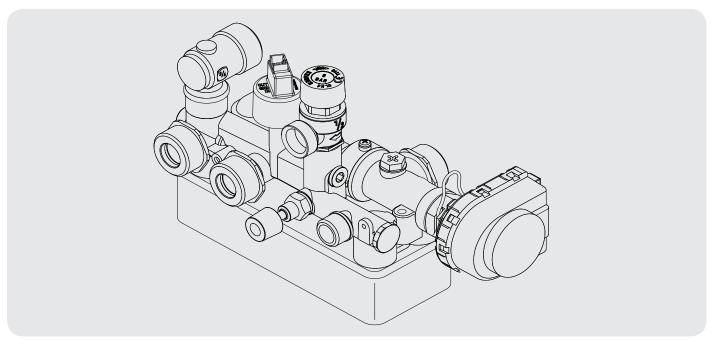
FIRST IGNITION COULD EVEN FAIL AS THE AUGER IS EMPTY AND IS NOT ALWAYS ABLE TO LOAD THE BURN POT WITH THE REQUIRED AMOUNT OF PELLETS ON TIME TO REGULARLY START THE FLAME.

IF THE PROBLEM OCCURS AFTER ONLY A FEW MONTHS WORKING, CHECK THAT ROUTINE CLEANING STATED IN THE STOVE BOOKLET, HAS BEEN CARRIED OUT CORRECTLY.



## INSTANT DOMESTIC HOT WATER PRODUCTION KIT

The thermo-stove is equipped with a kit for the production of domestic hot water consisting of a plate heat exchanger, a motorised diverter valve and a flow switch.



Domestic water production =  $11 \text{ I/min } (\Delta t 30^{\circ}\text{C})$ 

In absence of a request for domestic water, the heat generator heats the system water. In the event of a request for domestic water, the power of the generator is all used to produce domestic hot water (heat is not supplied to the heating system).

In order to ensure proper operation in the domestic mode, the thermo-stove must be switched on, in steady state conditions and in operation.

If the heat generator is in the H-OFF, T-OFF, STAND-BY, FINAL CLEANING and OFF conditions, it cannot supply heat for the production of hot water.

In the H-OFF, T-OFF conditions, the stove is switched off because it has satisfied all heat requests, in this case a request for domestic water will make the stove switch on again but one must wait for the time required for it to reach steady state conditions.

In the event of STAND-BY, the stove is switched off because it has satisfied the additional thermostat (STBY clamp), in this case a request for domestic water will not make the stove switch on again until the additional thermostat is in request conditions because the contact has priority over any request. Even in this case one must wait for the time required for steady state conditions.

Avoid sampling hot water with very limited flow rates. Flow rates below 3 litres per minute can make the thermo-stove switch from the OPERATION state to the H-OFF state with consequent appliance shutdown.

It is recommended to always leave a heating zone open in order to ensure the dissipation of any excess heat produced by the thermo-stove.

In order to prevent burns, one must fit a thermostatic mixing valve, in order to limit the temperature of the domestic water sent to the utilities.

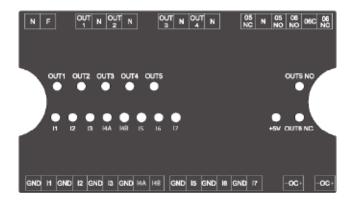
One must provide a suitable water filtration and softening system according to the specific hardness of the water in the place where the heat exchanger is installed.

The excessive deposit of limescale, as well as reducing the efficiency of the plate heat exchange, can compromise its operation.

Replacement of the plate heat exchanger in the event of excessive fouling it not covered by the warranty.



The kit for the production of domestic hot water (plate heat exchanger, motorised diverter valve and flow switch) is controlled by a board integrated in the stove (system expansion board kit), which allows various hydraulic configurations up to a maximum of four heating zones, a puffer and an auxiliary boiler.



NF	Neutral and phase	
OUT1/N	230 V 50 Hz output heating area 1 (max. 5A)	
OUT2/N	230 V 50 Hz output heating area 2 (max. 5A)	
OUT3/N	230 V 50 Hz output heating area 3 (max. 5A)	
OUT4/N	230 V 50 Hz output heating or puffer pump area 4 (max 5 A)	
05NC/N	230 V 50 Hz output (max. 5A) <b>normally closed</b> for DHW	
05NO/N	230 V 50 Hz output (max. 5A) <b>normally open</b> for DHW	
O6 NO/O6C	auxiliary output normally open	
O6 NC/O6C	auxiliary output normally closed	
I1/GND	area 1 input (dry contact)	
I2/GND	area 2 input (dry contact)	
I3/GND	area 3 input (dry contact)	
I4A/GND	area 4 input (dry contact)	
I4B/GND	Future preparation	
I5/GND	boiler / heat exchanger probe inlet	
I6/GND	upper puffer probe inlet	
I7/GND	lower puffer probe inlet	
ос	power line connection (+ = red, - = black)	

#### **MODES**

SUMMER - WINTER: the mode allows setting SUMMER or WINTER operation.

In the SUMMER mode the room thermostats relating to the heating system and the puffer are always satisfied; the thermostove works to satisfy the DHW.

In WINTER mode, all requests are considered (DHW, heating system and puffer)

#### **DHW**

DHW is controlled via the integrated instantaneous DHW exchanger (PH11=OFF) and always has priority over all other requests.

#### **HEATING**

The activation of the outputs relating to heating is affected by the operating modes (Summer/Winter) and by the presence or absence of the puffer.

With the puffer deactivated, the outputs are activated when there is a request and the temperature of the water in the boiler is hot enough.

With the puffer activated, the outputs are activated when there is a request and the temperature of the puffer is hot enough. One can enable the 4th Heating Zone. By setting parameter PH13 on "1".

To activate the puffer contact the dealer.

(Default setting PH13=0 = disabled)

#### **PUFFER**

With the puffer active (set PH12=ON) the thermo-stove operates to satisfy the requests of the puffer and DHW (always priority). Default setting: PH12= OFF - disabled

To activate the puffer contact the dealer.

#### **ATTENTION:**



THE PRODUCTION OF DHW IS ALREADY INTEGRATED IN THE MACHINE.
THE PRODUCTION OF DOMESTIC HOT WATER IS ONLY ENSURED WHEN THE STOVE IS SWITCHED ON (OPERATING)
OTHERWISE ONE MUST WAIT FOR THE STOVE TO SWITCH ON.

IN THE EVENT THE OPTIONAL INPUTS ARE USED (PUFFER OR HEATING) OF THE MACHINE IS IN THE FOLLOWING STATE: TOFF, HOFF OR STBY (REQUESTS SATISFIED) ONE MUST WAIT FOR THE MACHINE TO SWITCH ON AGAIN!



## ADDITIONAL ROOM THERMOSTAT

#### N.B.: Installation must be performed by an authorised technician

There is a possibility to thermostat a room adjacent to the room where the stove is positioned: just connect a thermostat following the procedure described in the next step (it is recommended to position the optional mechanical thermostat at a height of 1.50 m from the floor). Stove functioning with the external thermostat connected in the STBY clamp can be different on the basis of the activation or disabling of the STBY function.

The STBY clamp leaves the factory jumpered, therefore it is always with closed contact (on request).

#### ADDITIONAL ROOM THERMOSTAT FUNCTIONING WITH STBY ACTIVE

When the STBY function is activated, the -c LED flashes. When the contact or external thermostat is satisfied (open contact / temperature reached), the stove will switch off. As soon as the contact or external thermostat switches to the "not satisfied" status (closed contact/temperature to be reached) it will re-ignite.

N.B.: stove operation depends on the temperature of the water inside the stove and relative factory setting restrictions. If the stove is in H OFF (water temperature reached), any additional contact or thermostat request will be ignored.

#### ADDITIONAL ROOM THERMOSTAT FUNCTIONING WITH STBY DISABLED

When the STBY function is disabled, the -√--- LED is fixed.

When the contact or external thermostat is satisfied (open contact / temperature reached), the stove will go to minimum. As soon as the contact or external thermostat switches to the "not satisfied" status (closed contact / temperature to be reached) the stove will start to work again at the pre-set power.

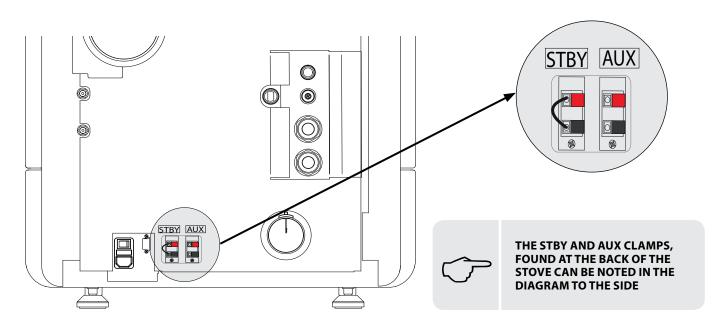
N.B.: stove operation depends on the temperature of the water inside the stove and relative factory setting restrictions. If the stove is in H OFF (water temperature reached), any additional contact or thermostat request will be ignored.

#### **ADDITIONAL ROOM THERMOSTAT INSTALLATION**

- Switch the appliance off using the master switch positioned on the rear of the stove.
- Remove the plug from the socket.
- Refer to the electrical diagram to connect the two thermostat cables onto the relative clamps positioned on the rear of the machine, one is red and the other one is black (STBY clamp).

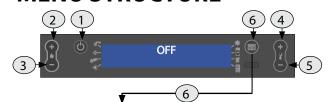
## **AUX**

Connection reserved for Extraflame conveyed waves accessories. Contact the dealer for further details





## **MENU STRUCTURE**



1 GO BACK - EXIT

2 3 PARAMETER SCROLLING: NEXT (2); PREVIOUS (3)

(4) (5) MODIFY SETTINGS DATA: INCREASE (4); DECREASE (5)

6 CONFIRM - ACCESS MENU

	MENU	TEXT	VALUE	FUNCTION	
<b>&gt;</b> [	SET POWER	POWER	01 - 05	Selecting the power	
		SET H2O	65° - 80°C	Selection of the boiler temperature set-point	
		SET BOILER MAX	""	CANNOT BE ACTIVATED	
	SET TEMPERATURE	SET BOILER MIN	""	CANNOT BE ACTIVATED	
		SET PUFFER MAX	50° - 78°C	Maximum Puffer set selection	
➤L		SET PUFFER MIN	45° - 65°C	Minimum Puffer set selection	
		BURN POT CLEANING	0+50%	Burn pot automatic cleaning frequency adjustment	
		STAND - BY	OFF - ON	Activation or deactivation of the stand-by function	
		ENABLE CHRONO	ON - OFF	Activation/deactivation of the weekly programmer	
		PELLETS	-30 +20%	Selecting the percentage of pellet feed	
	SET ADJUSTMENTS	SEASON	SUMMER/ WINTER	Season and priority selection (see specification)	
		ENABLE BOILER TIMER:	ON/OFF	CANNOT BE ACTIVATED	
		BOILER SETTING	BIOMASS/ BIOMASS- AUX/ AUX	Boiler mode selection	
<b>★</b> [	STATUS	STOVE STATUS	I	References reserved to the technician	

STATUS		STOVE STATUS	References reserved to the technician	
		l nav		To we at the cut
-		DAY	MONSUN	Setting the day of the week
		HOURS	0024	Adjustment of the hour
	SET	MINUTES	0059	Adjustment of the minutes
	CLOCK	DATE	131	Adjustment of the date
		MONTH	112	Adjustment of the month
		YEAR	0099	Adjustment of the year
		ENABLE CHRONO	OFF	Activation/deactivation of the weekly programmer
		START - PRG1	OFF - 00:00	Time 1st ignition
		STOP - PRG1	OFF - 00:00	Time 1 <sup>st</sup> switch-off
		MONDAY PRG1 OFF SUNDAY PRG1 OFF	ON/OFF	Ignition/switch-off consents for various days
		SET PRG1	65 - 80°C	Temperature setting for the 1st time span
		START - PRG2 00:10	OFF - 00:00	Time 2 <sup>nd</sup> ignition
		STOP - PRG2 00:10	OFF - 00:00	Time 2 <sup>nd</sup> switch-off
	SET CHRONO	MONDAY PRG2 OFF SUNDAY PRG2 OFF	ON/OFF	Ignition/switch-off consents for various days
USER MENU		SET PRG2	65 - 80°C	Setting room temperature for the 2 <sup>nd</sup> time slot
OSER MENO		START - PRG3 00:10	OFF - 00:00	Time 3 <sup>rd</sup> ignition
		STOP - PRG3 00:10	OFF - 00:00	Time 3 <sup>rd</sup> switch-off
		MONDAY PRG3 OFFSUNDAY PRG3 OFF	ON/OFF	Ignition/switch-off consents for various days
		SET PRG3	65 - 80°C	Setting room temperature for the 3 <sup>rd</sup> time slot
		START - PRG4 00:10	OFF - 00:00	Time 4 <sup>th</sup> ignition
		STOP - PRG4 00:10	OFF - 00:00	Time 4 <sup>th</sup> switch-off
		MONDAY PRG4 OFFSUNDAY PRG4 OFF	ON/OFF	Ignition/switch-off consents for various days
		SET PRG4	65 - 80 °C	Setting room temperature for the 4 <sup>th</sup> time slot
	LANGUAGE	ITAL - ENGL - DEUT - FRAN - ESPA		Selecting the language
	DISDLAY	KEY LOCK	ON - OFF	"Key lock function" activation / disabling
	DISPLAY	BRIGHTNESS	OFF - 1031	Selecting the display brightness
	RESET	RESET	ON/OFF	Resets the values modifiable by the user back to the default values.
	BOILER CHRONO	BOILER CHRONO	OFF - 00:00	Boiler weekly programmer CANNOT BE ACTIVATED



#### **SET POWER**

The following menu allows to set the power. Minimum power 1, maximum power 5.

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Confirm using key 6
- The **POWER** will be displayed.
- Press 4 to increase the setting and 5 to decrease it.
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status



#### **SET TEMPERATURE**

The following menu allows the boiler temperature to be set The possible settings are: 65 - 80°C.

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until SET TEMPERATURE is displayed.
- Confirm using key 6
- Press 4 to increase the setting and 5 to decrease it.
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status



#### **SET BOILER TEMPERATURE**

## **CANNOT BE ACTIVATED**

N.B.: DIADEMA ACS FEATURES AN INSTANTANEOUS HEAT EXCHANGER FOR THE PRODUCTION OF DOMESTIC HOT WATER AND <u>IT IS</u> NOT POSSIBLE TO SET THE BOILER TEMPERATURE

#### **SET PUFFER TEMPERATURE**

N.B.: the screen is not displayed if the puffer is disabled

#### **CONTROLS PROCEDURE**

- Press key 6
- Press key 2 until **SET TEMPERATURE** is displayed.
- Confirm using key 6
- Press key 2 until **SET PUFFER MAX** is displayed (adjust using keys 4-5)
- Press key 2 until SET PUFFER MIN is displayed (adjust using keys 4-5)
- Press key 6 to confirm press key 1 several times to exit the menu



## **SET ADJUSTMENTS**

continues on next page



#### **BURN POT CLEANING**

The menu allows to increase the frequency of the automatic burn pot cleaning.

#### **CONTROLS PROCEDURE**

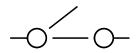
- Press key 6 and SET POWER will appear.
- Press key 2 several times until SET ADJUSTMENTS is displayed.
- Confirm using key 6
- "BURN POT CLEANING" will appear.
- To increase the automatic cleaning frequency press 4.
- To go back to standard values (00) decrease by pressing 5
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status.

#### **STAND - BY**

The Stby function is used if immediate stove switch-off or modulation via an additional thermostat is desired

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until **SET ADJUSTMENTS** is displayed.
- Press key 6.
- "STAND BY" will appear.
- Use keys 4 -5 to select enable "ON"/disable "OFF".
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status.



#### **ENABLE CHRONO**

The boiler chrono can be enables/disables from this menu

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until **SET ADJUSTMENTS** is displayed.
- Press key 6
- Press key 2 until ENABLE CHRONO is displayed
- Use keys 4 -5 to enable "ON"/ disable "OFF".
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status.



### **PELLET ADJUSTMENT**

The following menu allows to adjust the percentage of pellet feed.

If the stove has functioning problems owing to the quantity of pellets, adjust pellet feeding directly from the control board. The problems correlated to the amount of fuel can be divided into 2 categories:

#### NO FUEL:

- the stove can never develop a suitable flame, tending to remain very low even at high powers.
- at minimum power the stove tends to almost switch-off taking the stove into "NO PELLETS" alarm condition.
- when the stove displays the "NO PELLETS" alarm, there may be non-burned pellets inside the burn pot.

#### **EXCESS FUEL:**

- the stove develops a very high flame even at low power.
- the panoramic glass is very dirty, obscuring it almost totally.
- the burn pot tends to become encrusted, blocking the holes for air intake due to the excessive pellet feed, as it is only burned partially.



The adjustment to be performed is in percentage. Therefore a modification of this parameter will lead to a proportional variation of all stove feeding speeds.

Feeding is from -30% to +20%.

Follow the procedure on the display to perform this adjustment:

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until SET ADJUSTMENTS is displayed.
- Confirm using key 6
- Press key 2 until **PELLET** is displayed
- Press 4 to increase the load and 5 to decrease it
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status

#### **SEASON**

In SUMMER mode, the room thermostats relative to the heating system are satisfied. In addition to the areas, the request by a puffer is inhibited: the boiler will only operate to satisfy the DHW request. In WINTER mode, all requests are instead considered.

#### **CONTROLS PROCEDURE**

- Press key 6 and SET POWER will appear.
- Press key 2 until SET ADJUSTMENTS is displayed.
- Confirm using key 6
- Press key 2 until **SEASON** is displayed.
- Set **SUMMER** or **WINTER** with keys 4-5
- Press key 6 to confirm press key 1 several times to exit the menu



### **ENABLE BOILER TIMER**

#### **CANNOT BE ACTIVATED**

N.B.: Diadema ACS features an instantaneous heat exchanger for the production of domestic hot water and <u>it is not possible</u> to set the Boiler timer

#### **BOILER SETTING**

The menu allows to set the boiler in the BIOMASS mode, the boiler functions exclusively without controlling other auxiliary boilers present in the system; BIOMASS/AUX, where the boiler can also manage an auxiliary boiler or AUX where the pellet boiler is excluded from functioning to leave just the auxiliary in operation.

#### **CONTROLS PROCEDURE**

- Press key 6 and SET POWER will appear.
- Press key 2 until SET TEMPERATURE is displayed.
- Confirm using key 6
- Press key 2 until BOILER SETTING is displayed.
- Press keys 4-5 to configure the setting
- Press key 6 to confirm press key 1 several times to exit the menu

## **USER MENU**

#### **SET CLOCK**

• - see chapter: commissioning settings



#### **CHRONO**

The chrono allows to program 4 time spans within a day to use every day of the week. The switch-on and switch-off time can be set in every time slot, along with the days of use of the programmed time slot and the desired water temperature (65 - 80°C).



#### **PROGRAMMING EXAMPLE**

To confirm and continue programming, press button 6. Press button 3 to go

back to the previous parameter

Let's suppose that the weekly programmer function is to be used and 4 time slots are to be used in the following way:

1st time slot: from 08:00 to 12:00 every day of the week, excluding Saturday and Sunday 2nd time slot: from 15:00 to 22:00 only on Saturday and Sunday, both times with a water temperature setting of 75°C

CONTROLS PROCEDURE:  Press key 6 once and <b>SET POWER</b> will appear  Press key 2 until <b>SET USER</b> appears	SET USER	1ST TIME SLOT SWITCH-OFF  Use keys 4 - 5 to enter the time "12:00", which corresponds to the switch-off time of the 1st time slot.  To confirm and continue programming, press button 6. Press button 3 to go back to the previous parameter	STOP PRG1 OFF  STOP PRG1 12:00
Press key 6 to confirm <b>SET CLOCK</b> will appear.  Press key 2 until <b>SET CHRONO</b> appears	SET CHRONO	ENABLING THE 1ST TIME SLOT DAYS  To enable <b>ON</b> / disable <b>OFF</b> the days use keys 4 and 5  Keys 2 and 3 to scroll the various days, select from Monday to Friday on <b>ON</b> , excluding Saturday and Sunday ( <b>OFF</b> ) To confirm and proceed press key 6	MONDAYPRG1 ON : : : : FRIDAYPRG1 ON
Press key 6 to confirm and continue programming.  START PRG1 OFF appears	START PRG1 OFF	1ST TIME SLOT H2O TEMPERATURE SETTING  Using buttons 4 - 5 select the desired H2O temperature. (65-80°C)  To confirm and proceed press key 6	SET PRG1 75°C
1ST TIME SLOT SWITCH-ON  Use keys 4 - 5 to enter the time " <b>08:00</b> ", which corresponds to the switch-on time of the 1st time slot	START PRG1 08:00	2ND TIME SLOT SWITCH-ON* At this point, the second time slot must be programmed.	START PRG2 OFF

The sequence to be followed is the same and is repeated

as for the 1ST TIME SLOT switch-on.



#### \*2ND TIME SLOT SWITCH-ON

At this point, the second time slot must be programmed. The sequence to be followed is the same and is repeated as per the "1ST TIME SLOT SWITCH-ON". On this occasion it is only necessary to enter the time, for example start at 15:00 and Stop at 22:00 and to activate the days Saturday and Sunday by setting them at "ON".

#### RECOMMENDATIONS

The ignition and switch-off times must be within the arc of one day, from 0 to 24 and not over several days:

Before using the chrono function, set the current day and time. Therefore check that the points listed in the "Set clock" sub-chapter have been followed, so that the chrono function works. As well as programming it, activate it as well.

#### **EXAMPLE**

Switch-on time 07:00 Switch-off time 18:00

CORRECT

Switch-on time 22:00

Switch-off time 05:00

**INCORRECT** 



TO ENABLE THE CHRONO FOLLOW THE INSTRUCTIONS AS DESCRIBED IN THE "ENABLE CHRONO" CHAPTER. WHEN THE WEEKLY PROGRAMMER IS ACTIVE, THE RELEVANT ICON WILL LIGHT UP ON THE CONTROL PANEL



#### **ADJUSTING LANGUAGE**

see chapter: commissioning settings

#### **DISPLAY**

The "DISPLAY" menu contains two sub-menus:

- Key lock
- Brightness.

### - KEY LOCK

The menu allows to lock the display keys (like with mobile phones).

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until USER is displayed.
- Confirm using key 6
- Press key 2 until "DISPLAY".
- Confirm using key 6
- **KEY LOCK** will appear confirm with key 6
- Use keys 4 -5 to enable "ON"/ disable "OFF".
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status.

## USING THE KEY LOCK AFTER ACTIVATION:



TO LOCK THE KEYBOARD, PRESS KEYS 1 AND 5 AT THE SAME TIME UNTIL THE FOLLOWING APPEARS: "KEYS LOCKED"

TO UNLOCK THE KEYBOARD, PRESS KEYS 1 AND 5 AT THE SAME TIME UNTIL THE FOLLOWING APPEARS: "KEYS FREE"



#### - BRIGHTNESS

This menu allows to adjust the brightness of the display. The possible settings range from OFF - 10 to 31. Activating OFF, the back light of the display will go off after a preset delay.

The back light will go on as soon as a key is pressed or if an alarm should be triggered in the machine.

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until **USER** is displayed.
- Confirm using key 6
- Press key 2 until **DISPLAY** appears and confirm with key 6
- Press key 2 until BRIGHTNESS appears and confirm with key 6
- Press keys 4-5 to select the brightness
- Press key 6 to confirm and key 1 to return to the previous menus up to the initial status.





#### RESET

Allows to reset all values modifiable by the user to the default values. The data is:

#### **CONTROLS PROCEDURE**

- Press key 6 and **SET POWER** will appear.
- Press key 2 several times until **USER** is displayed.
- Confirm using key 6
- Press key 2 until "RESET" appears.
- Confirm using key 6
- Press keys 4-5 to select **ON** and press key 6.
- "DONE" will appear on the display to confirm

- ◆SET H2O = 75°C
- ◆SET POWER = 5
- ◆ENABLE CHRONO = OFF
- ◆START PRG1=OFF
- ◆STOP PRG1 = OFF
- ◆MONDAY PRG1 = OFF
- ◆...all chrono parameters OFF
- ◆ PELLET = 00%
- ◆BURN POT CLEANING=00%
- ◆STAND BY = OFF

#### **BOILER CHRONO**

#### **CANNOT BE ACTIVATED**

N.B.: Diadema ACS features an instantaneous heat exchanger for the production of domestic hot water and <u>it is not possible</u> to set the Boiler timer

## **OTHER FUNCTIONS**

#### **AIR DISCHARGE**

This function allows to bleed any air in the stove. Once the function has been activated, the pump indicator light is activated on the display (for 15 minutes 30 seconds the pumps will be powered, alternating with 30 seconds of downtime).

To activate the function:

With the stove "OFF" press keys 1 and 4 at the same time, enter the password "77" using keys 4 and 5 and confirm with key 6. Cut the power to interrupt.

#### **FIRST LOAD**

This function allows to activate the pellet feeding motor reducer for continuous functioning.

To activate the function:

When the stove is cold and "OFF" press keys 2 and 5 at the same time for a couple of seconds, the scrolling message "first load" will appear on the display.

To interrupt continuous loading simply press key 1.



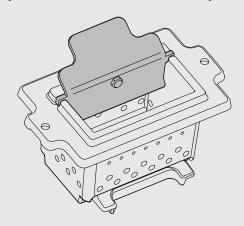
## **CLEANING UNDER USER'S RESPONSIBILITY**

#### **DAILY**

#### **Burn pot:**

Through a mechanical system, the burn pot is cleaned at set intervals automatically by the boiler. In the picture below one can see the burn pot with the opening underneath it.

It is in any case recommended to remove any ash residue using a vacuum cleaner, at least once every 2 days.

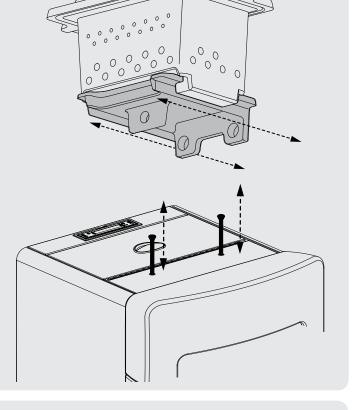


#### **Scrapers:**

The heat exchangers must only be cleaned when the stove is cold!

Cleaning the heat exchangers allows to ensure constant heat output over time.

This type of maintenance must be performed at least once a day. To do this, just use the relevant scrapers positioned in the upper part of the stove, making upward movements and vice versa several times.

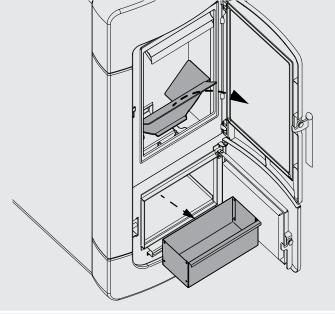


#### WEEKLY

#### Clean the combustion chamber and the ash drawer:

Empty the ash drawer every week or when required.

It is recommended to remove the ash in the combustion chamber at least once a week using a suitable vacuum cleaner.



MAKE SURE THAT THE ASH IS COMPLETELY COLD BEFORE EMPTYING IT INTO A SUITABLE CONTAINER.



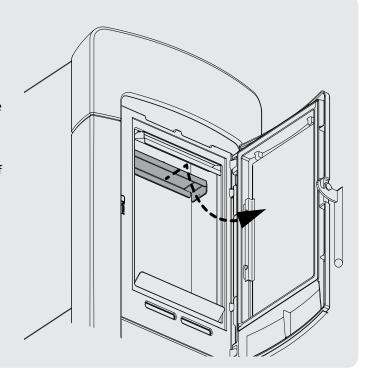
## **CLEANING UNDER USER'S RESPONSIBILITY**

#### **MONTHLY**

#### Cleaning the deflector:

The fumes deflector located in the upper part of the combustion chamber must be removed on a monthly basis. (see figure to the side)

To remove it simply pull out the central fumes deflector as if it were a drawer.



## **ROUTINE MAINTENANCE**

In order to guarantee proper functioning and safety of the device, the operations indicated below must be performed every season or more often when necessary.

#### DOOR, ASH DRAWER AND BURN POT GASKETS

The gaskets ensure the tightness of the stove and its consequent proper operation.

They must be checked periodically: in the event they are worn or damaged they must be replaced immediately.

These operations must be carried out by a qualified technician.

#### **CONNECTION TO THE FLUE**

Vacuum and clean the pipe that leads to the flue yearly or whenever necessary.

If there are horizontal sections, the residues must be removed before they can obstruct flue passage.

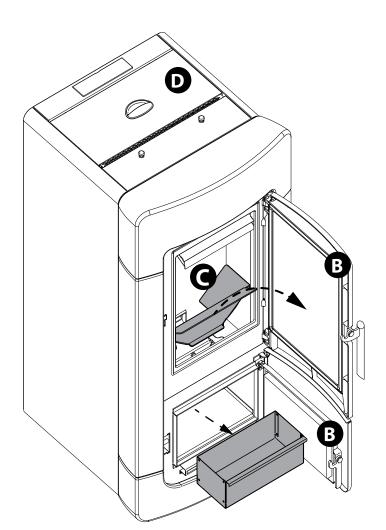
## ALWAYS FOLLOW THE INSTRUCTIONS IN MAXIMUM SAFETY CONDITIONS!

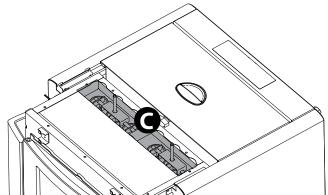


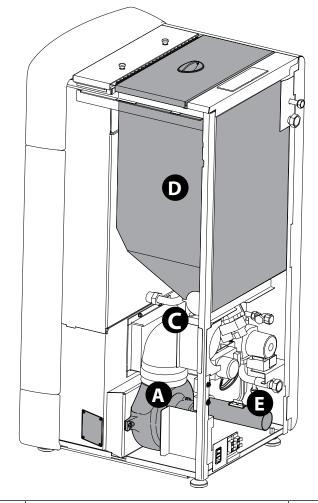
- WITH THE STOVE FULLY COOLED DOWN, SWITCHED OFF AND DISCONNECTED FROM THE MAINS ELECTRICITY SO
- FAILURE TO CLEAN JEOPARDISES SAFETY!
- FOR PROPER OPERATION, THE STOVE MUST UNDERGO ROUTINE MAINTENANCE BY A QUALIFIED TECHNICIAN, AT LEAST ONCE A YEAR.

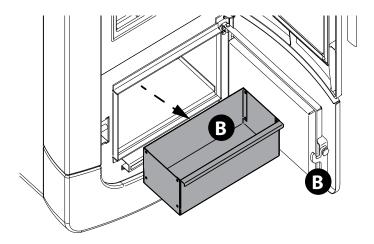


## **ROUTINE MAINTENANCE**









		Fumes motor (disassembly and cleaning and fumes pipe and "T"), new silicone in required points	<b>✓</b>
(	3	Inspections of gaskets, ash drawer and door (replace them and apply silicone where required)	<b>✓</b>
	3	Combustion chamber & heat exchanger (full cleaning) and ignition plug duct cleaning	<b>✓</b>
C		Tank (complete emptying and cleaning).	<b>✓</b>
	3	Air intake pipe inspection and of flow sensor cleaning	<b>✓</b>



DISPLAYS					
DISPLAY	REASON				
OFF	Stove off				
START	The start-up phase is in progress				
PELLET FEEDING	Continuous pellet feeding is in progress during the ignition phase				
IGNITION	The ignition phase is in progress				
START-UP	The start-up phase is in progress				
WORK	The normal work phase is in progress				
MODULATION	The stove is working at minimum				
BURN POT CLEANING Automatic burn pot cleaning is in progress					
FINAL CLEANING The final cleaning is in progress					
Stove off waiting for re-ignition due to an external thermostat The stove will only re-start when the external thermostat makes a request					
STAND-BY COOLING  A new ignition is attempted when the stove has just been switched off. When the stove switch must wait for the complete shutdown of the fumes motor, then clean the burn pot. The stove or re-ignited when these operations have been performed.					
HOFF	Stove off due to water temperature over set As soon as the water temperature drops below the pre-set parameters, the stove will switch back on				
T - OFF	Stove off waiting for re-ignition as all the requests have been satisfied				
STAND-BY BLACK OUT	The stove is cooling after a power cut. Once cooling is completed it will re-start automatically				
ANTI-FREEZE  The anti-freeze function is in progress as the H2O t° is below the factory set threshold the pump is active until the water reaches the pre-set factory parameter +2°C					
ANTILOCK  The pump antilock function is in progress (only if the stove has been in an OFF state for at I the pump is activated for the time pre-set by the manufacturer, in order to prevent it from					
AUTO BLOW	The automatic blow is active				



ALARMS				
DISPLAY	EXPLANATION	SOLUTION		
<u> </u>	Indicates the presence of an alarm.	On: indicates the presence of an alarm Flashing: indicates the deactivation of the depression sensor. The alarm can be reset by pressing key 1 for 3 seconds only if the fumes motor has stopped and if 15 minutes have elapsed from when the alarm was displayed.		
ASPIRATION FAULT	Fumes motor fault	Contact after-sales centre		
FUMES PROBE	Fumes probe failure.	Contact after-sales centre		
HOT FUMES	High flue gas temperature	Check pellet feed (see "Pellet feed adjustment"). If the problem cannot be solved, contact an authorised technician.		
CLEAN CHECK UP 1 - 2 (1 = IN START-UP STAGE) (2= IN OPERATING STAGE)	The door is not closed correctly. The ash drawer is not closed correctly. The combustion chamber is dirty. The flue exhaust pipe is blocked.	Check hermetic door closure. Check hermetic closure of the ash drawer. Check cleanliness of the fumes pipe, of the sensor in the primary air channel and the combustion chamber.		
NO IGNITION	The pellet feed-box is empty. Pellet feed calibration inadequate.	Check for the presence of pellets in the feed-box.  Adjust pellet flow (see "Pellet feed adjustment").  Check the procedures described in the "Ignition" chapter.		
NO IGNITION BLACK OUT	No current during the ignition phase.	Set the stove on OFF using key 1 and repeat the procedure described in the "Ignition" chapter.		
NO PELLETS	The pellet feed-box is empty. No pellet feed. The motor reducer does not feed pellets.	Check for the presence of pellets in the feed-box. Adjust the pellet flow (see "Pellet feed adjustment").		
DEPR ALARM	The door is not closed correctly. The ash drawer is not closed correctly. The combustion chamber is dirty. The flue exhaust pipe is blocked	Check hermetic door closure. Check hermetic closure of the ash drawer. Check cleanliness of the fumes pipe and the combustion chamber.		
DEBIMETER FAULT	Flow sensor faulty. Sensor disconnected	Contact after-sales centre		
H20 OVERTEMP	Air in the system Unsuitable circulation	Possible air in the system, vent the system. Lack of adequate circulation. Lack of or inadequate safety zone. The water in the stove has exceeded 95°C. Possible circulator anomaly. If the problem persists, the reset operations must be carried out by an authorised technician.		
TRAPDOOR FAULTY	Door not closed properly Burn pot dirty or clogged	Check closure of the door. Check that the burn pot is clear and clean. The automatic burn pot cleaning is blocked. If the problem persists contact the service centre		
ALARM MINIMUM PRESSURE	The system pressure read by the pressure switch is too low.	Possible air in the system, vent the system. Possible lack of water or leaks due to anomalies in some system component. If the problem persists contact the service centre		
ALARM H2O PROBE	H2O probe failure	Contact after-sales centre		
ALARM MAX H2O PRESSURE	The pressure of the water has exceeded the max threshold	Possible air in the system, vent the system. Check that the expansion vessels are not damaged or under-dimensioned Check that the cold system is loaded at the correct pressure If the problem persists contact the service centre		



## WARRANTY CONDITIONS

EXTRAFLAME S.p.A., with offices in via dell'Artigianato 12 Montecchio Precalcino (VI), guarantees this product for 2 (two) YEARS from the date of purchase for manufacture and material faults. The warranty becomes void in the event the defect is not reported to the dealer within two months from the date it was detected.

The responsibility of EXTRAFLAME S.p.A. is limited to the supply of the appliance, which must be perfectly installed, following the indications contained in the appropriate manuals and booklets provided with the purchased product and in compliance with the laws in force. Installation must be performed by qualified staff, under the responsibility of the person entrusting him, who will assume complete responsibility for the definitive installation and consequent good functioning of the product installed. Extraflame S.p.A. cannot be held responsible for the failure to comply with such precautions.

#### **WARNING**

It is essential to carry out the functioning inspection of the product before its completion with the relative masonry finishings (counterhood, external coating, pilasters, wall painting, etc). EXTRAFLAME S.p.A. does not assume any responsibility for any damages and consequent restore expenses of the above finishings even if the same occur following the replacement of malfunctioning parts.

#### THE WARRANTY IS VALIDATED ON THE CONDITION THAT:

EXTRAFLAME S.p.A. assures that all its products are manufactured with top quality materials and with manufacturing techniques which guarantee total efficiency. If during normal use of the product, defective or badly working particulars should be detected, the replacement of such particulars will be free of charge, ex dealer who made the sale.

#### TERRITORIAL EXTENSION OF THE WARRANTY:

Italian territory

#### **VALIDITY**

#### THE WARRANTY IS CONSIDERED VALID ON THE CONDITION THAT:

- The purchaser sends the attached coupon within 8 days from the purchase date, filled-in in its every part. The purchase date must be validated by the possession of a valid fiscal document issued by the dealer.
- The appliance is installed in compliance with the Standards in force on this subject, the prescriptions contained in the provided manual and by professionally qualified staff.
- The appliance is used as prescribed in the instructions manual provided with all products.
- The warranty certificate has been filled-in and signed by the customer, validated by the dealer.
- The warranty document, filled-in and accompanied by the purchase fiscal document issued by the dealer, must be kept and shown to staff of the EXTRAFLAME S.p.A. Technical After-sales Service in the event of intervention.

#### THE WARRANTY IS NOT CONSIDERED VALID IN THE FOLLOWING CASES

- The warranty conditions described above have not been respected.
- Installation has not been performed with respect to the Standards in force regarding the provisions described in the manual/book provided with the appliance.
- Negligence of the customer due to lack of or incorrect maintenance of the product.
- Presence of electric and/or hydraulic plants that do not comply with the standards in force.
- Damages deriving from atmospheric, chemical, electro-chemical agents, improper use of the product, modifications and tampering with the product, inefficacy and/or unsuitability of the flue and/or other causes not deriving from the manufacture of the product.
- Combustion of materials not compliant with the types and quantities indicated in the manual/book supplied
- All damages caused by transport. It is therefore recommended to carefully check the goods on receipt, immediately informing the dealer of any damage, making a note on the transport document and on the carrier's copy.
- EXTRAFLAME S.p.A. is not liable for any damage that can, directly or indirectly, affect persons, objects and pets as a consequence of failure to comply with the prescriptions indicated in this manual/book.

#### ALL PARTICULARS SUBJECT TO NORMAL WEAR ARE NOT COVERED BY WARRANTY:

This category includes:

• The gaskets, all ceramic or toughened glass, coverings and cast iron or Ironker grids, the painted, chrome or gold-plated details, the majolica, the handles and the electric cables.



- Colour variations, crackles and slight size differences of the majolica parts are not a reason for claims, as they are natural features of the materials themselves.
- Parts in refractory material
- Masonry work
- The system particulars for the production of domestic hot water not supplied by EXTRAFLAME S.p.A. (water products only).
- The heat exchanger is excluded from the warranty unless an adequate anti-condensate circuit which guarantees a minimum return temperature of the appliance of at least 55°C (only water products).

#### **FURTHER CLAUSES:**

The warranty also excludes any calibration or regulation interventions of the product in relation to the type of fuel or the type of installation.

The warranty is not extended if particulars are replaced.

No compensation will be paid for the time the product is inefficient.

This warranty is valid only for the purchaser and cannot be transferred.

#### **RECOMMENDED INSPECTION (WITH PAYMENT):**

EXTRAFLAME S.p.A. recommends that the functional inspection of the product is performed by a Technical After-Sales Centre, which will supply all information for correct use.

#### WARRANTY INTERVENTIONS

The request for intervention must be sent to the dealer or after sales assistance Centre.

The warranty intervention envisions the repair of the appliance without any charge, as provided by the law in force.

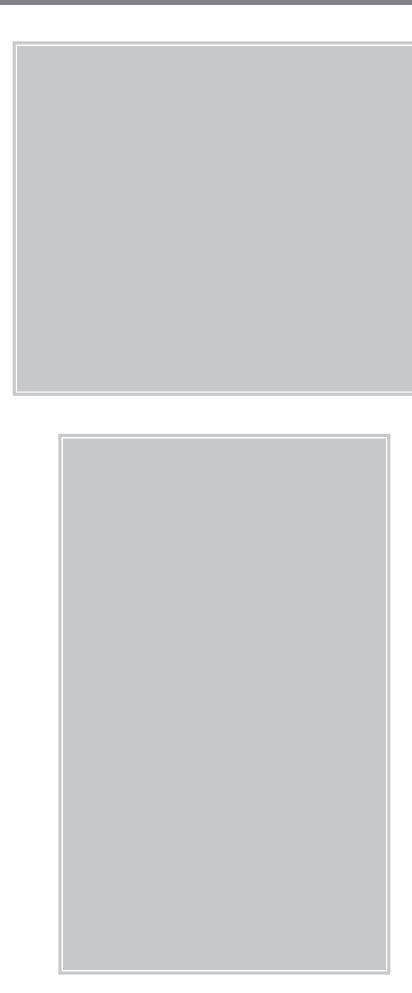
#### **LIABILITY**

EXTRAFLAME S.p.A. does not grant any compensation for direct or indirect damage caused or depending on the product.

#### **LAW COURT**

The Vicenza Law Court is elected as the competent court for any disputes.







# Riscaldamento a Pellet

**EXTRAFLAME S.p.A.** Via Dell'Artigianato, 12 36030 - MONTECCHIO PRECALCINO (VI) - ITALY #\(\text{23}\) +39.0445.865911 - \$\frac{1}{2}\) +39.0445.865912 - \$\sum \text{info@extraflame.it} - \$\sum \text{www.lanordica-extraflame.com}\$

Extraflame reserves the right to vary the features and data shown in this booklet at any time and without prior notice, in order to improve its products.

This manual cannot be considered as a contract for third parties.

This document is available at www.extraflame.it/support