# FREESTANDING PELLET STOVE

**(PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE)**

## A LIFETIME OF WARMTH

***Please read this entire manual before installation and use of this pellet fuel burning room heater. Failure to follow these instructions could result in property damage, bodily injury, or even death.**

***Save these instructions!**

INSTALLER: THIS MANUAL MUST STAY WITH APPLIANCE!

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# 1. Fuel Requirement

Your pellet stove has been designed to burn **wood pellets** only. **Do not use any other type of fuel,** as this will void any warranties stated in this manual.

Pellet quality is important for many years of reliable performance of your pelletstove:

We recommend the use of pellets that meet or exceed these standards. Please use a recommended pellet type.

| | |
|---|---|
| Moisture content (as fired basis) CEN/TS 14774-1 and ISO 687 | ≤12% |
| Ash content (as fired basis) ISO1171 | ≤0.7% without bark<br><br>≤2.0% with bark |
| Volatile matter (dry, ash-free basis) ISO562 | 80% to 88% |
| Hydrogen content (as fired basis) ISO609 | 5.0%to 6.5% |
| Carbon content (as fired basis) ISO609 | 40% to 50% |
| Sulfur content (as fired basis) ISO 351 and ISO 334 | ≤0.1% |
| Net (lower) calorific value (as fired basis) ISO1928 | 16900KJ/KG to 19500KJ/KG |
| Diameter | 4mm to 10mm |
| Swelling index ISO 501 | - |
| Length | ≤50mm |

**CAUTION:**

It is important to select and use only pellets that are dry and free of dirt or any impurities such as high salt content. Dirty fuel will adversely affect the operation and performance of the unit and will void the warranty.

**ASH**: The ash content of the fuel and operation of your stove will directly determine the frequency of cleaning. The use of high ash fuels may result in the stove needing to be cleaned daily. A low ash fuel may allow longer intervals between cleaning.

**CLINKERING:** [clinkers are silica (sand) or other impurities in the fuel that will form a hard mass during the burning process]. This hard mass will block the air flow through the Burn Pot Liner and affect the performance of the stove. Any fuel, even approved types, may tend to clinker. Check the Burn-Pot Liner frequently to ensure that the holes are not blocked with clinkers.

If they become blocked, remove the liner (when the unit is cold) and clean/scrape the clinkers -out. Clean the holes with a small pointed object if required.

Refer to the section Routine Cleaning and Maintenance.

**PELLET FEED RATES:** Due to different fuel densities and sizes, pellet feed rates may vary. This may require an adjustment to combustion fan's speed or to the auger feed trim setting on low.

Take care of the pellet. Do not damp or crush it. Or, it will affect the efficiency and the dust will be collected on the door glass. Pellet fuel is made from sawdust and scrap wood from many different species of wood. Pellets made from hardwoods contain more ash than those made from softwoods. Minerals from ash and sand in the pellets clinker under the extreme temperatures in the burn pot. Try burning various brands of pellets until you find one that burns with minimum ash and clinkers. Once you find a pellet brand that burns well, continue using this brand. High ash fuel increases the frequency of stove cleaning. Fuel with excessive moisture content may jam the auger assembly.

**Store pellets at least 1m away from the pellet stove**

**This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety: Children should be supervised to ensure that they do not play with the appliance.**

# 2. STOVE FEATURES

This Pellet stove has modern technology built in such as an individual fresh air input and venting system. Controlled pressure burning technology causes high efficiency and low ash production during burning. The burner has several safety features and will shut off automatically when out of fuel or any malfunction.

Main performance

| | | |
|---|---|---|
| Model | | NP-P15 |
| Dimension (WxHxD) | MM | 529x1025x512 |
| Weight | KG | 115 |
| Air inlet Pipe | MM | 50 |
| Air outlet Pipe | MM | 80 |
| Heat Area | M2 | 120 |
| Automatic Burning Time (Min-Max.) | H | 16/40 |
| Fuel | | Wood Pellet |
| Consumption for Pellet (Min-Max) | KG/H | 0.8/1.7 |
| Efficiency | % | 86% |
| Hopper Capacity | KG | 30 |
| Electronic consumption | W/H | 100-400 |
| Rating Voltage and Frequency | V/HZ | 230/50-115/60 |
| Rating Power | KW | 11 |

| | | |
|---|---|---|
| Model | | NP-P01 |
| Dimension (WxHxD) | MM | 510x1029x527 |
| Weight | KG | 106 |
| Air inlet Pipe | MM | 50 |
| Air outlet Pipe | MM | 80 |
| Heat Area | M2 | 100 |
| Automatic Burning Time (Min-Max.) | H | 20/40 |
| Fuel | | Wood Pellet |
| Consumption for Pellet (Min-Max) | | 0.7/1.5 |
| Efficiency | % | 85% |
| Hopper Capacity | KG | 28 |
| Electronic consumption | W/H | 100-400 |
| Rating Voltage and Frequency | V/HZ | 230/50-115/60 |
| Rating Power | KW | 9 |

| Model | | NP-PS |
|---|---|---|
| Dimension (WxHxD) | MM | 439x900x487 |
| Weight | KG | 80 |
| Air inlet Pipe | MM | 50 |
| Air outlet Pipe | MM | 80 |
| Heat Area | M2 | 60 |
| Automatic Burning Time (Min-Max.) | H | 20/50 |
| Fuel | | Wood Pellet |
| Consumption for Pellet (Min-Max) | | 0.4/1.2 |
| Efficiency | % | 82% |
| Hopper Capacity | KG | 20 |
| Electronic consumption | W/H | 100-400 |
| Rating Voltage and Frequency | V/HZ | 230/50-115/60 |
| Rating Power | KW | 6 |

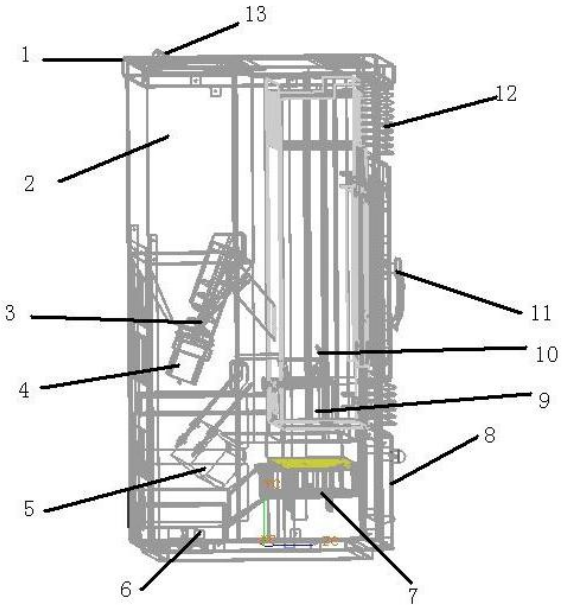
| Model | | NP-PI |
|---|---|---|
| Dimension (WxHxD) | MM | 471x993x470 |
| Weight | KG | 110 |
| Air inlet Pipe | MM | 50 |
| Air outlet Pipe | MM | 80 |
| Heat Area | M2 | 90 |
| Automatic Burning Time (Min-Max.) | H | 18/34 |
| Fuel | | Wood Pellet |
| Consumption for Pellet (Min-Max) | | 0.7/1.4 |
| Efficiency | % | 85% |
| Hopper Capacity | KG | 25 |
| Electronic consumption | W/H | 100-400 |
| Rating Voltage and Frequency | V/HZ | 230/50-115/60 |
| Rating Power | KW | 7.5 |

| Model | | NP-PA |
|---|---|---|
| Dimension (WxHxD) | MM | 665x787x610 |
| Weight | KG | 120 |
| Air inlet Pipe | MM | 76 |
| Air outlet Pipe | MM | 76 |
| Heat Area | M2 | 140 |
| Automatic Burning Time (Min-Max.) | H | 13/33 |
| Fuel | | Wood Pellet |
| Consumption for Pellet (Min-Max) | | 0.8/1.9 |
| Efficiency | % | 83% |
| Hopper Capacity | KG | 27 |
| Electronic consumption | W/H | 100-400 |
| Rating Voltage and Frequency | V/HZ | 230/50-115/60 |
| Rating Power | KW | 13 |

| Model | | NP-PA-01 |
|---|---|---|
| Dimension (WxHxD) | MM | 490x680x450 |
| Weight | KG | 80 |
| Air inlet Pipe | MM | 50 |
| Air outlet Pipe | MM | 60 |
| Heat Area | M2 | 50 |
| Automatic Burning Time (Min-Max.) | H | 15/24 |
| Fuel | | Wood Pellet |
| Consumption for Pellet (Min-Max) | KG/H | 0.5/1.1 |
| Efficiency | % | 80% |
| Hopper Capacity | KG | 12 |
| Electronic consumption | W/H | 100-400 |
| Rating Voltage and Frequency | V/HZ | 230/50-115/60-100/50 |
| Rating Power | KW | 6 |
| Thickness of steel, inside: | MM | 3 |
| Thickness of steel, outside: | MM | 1.5-2 |

# 3.Structure instruction

The stove essential components:




1. Hopper covers
2.hopper
3.auger
4. Auger motor
5. convection blower
6.venting pipe
7. Exhaust blower
8.front cover
9.ash drawer
10.fire shield board
11.stove door
12.heat exchanger
13. Control board

The following is a list of main components and their

functions

**IGNITER**

The STOVE comes equipped with an automatic igniter for lighting the fuel when the stove is in lighting mode. There are two ways to light the wood pellet for our models.

- One is the igniter heats wood pellets directly through the burn pot and then lighted by the combustion blower.
- The other one is that the igniter lights the pellet directly. The igniter remains energized for the first eight minutes of the lighting sequence.

**VACUUM SWITCH**

The STOVE has s vacuum switch located behind the left door, fastened to the base. If a low pressure is created in the firebox by a leak, opening the front door, a blocked flue, or unsealed ash drawer, the vacuum switch will sense it and cause the stove to go into a shutdown mode. Resetting?

**AUGER AND AUGER MOTOR**

The 5 RPM auger motor turns the auger, lifting pellets up the auger tube. The pellets are then dropped down a tube and into the firepot. The auger is controlled by the control board.

**OVERHEATING TEMPERATURE SWITCH**

This switch is installed on the bottom of hopper and shut off the stove if it senses excessive temperatures (70 °c). This snap switch can be reset by……..!

**CONVECTION BLOWER SWITCH**

This switch is installed on the vent pipe and turns the convection blower on when the stove gets up to temperature (30 °C). It switch off the blower when the temperature goes below 30°C.

# 4. Pellet Stove installation

**Please note that installation of the pallet stove must comply with your local regulations.**

## Where to place your Pelletstove; **CLEARANCES TO COMBUSTIBLES:**

When installing this unit on a combustible floor (for example linoleum, hardwood flooring) a noncombustible hearth pad (15mm thickness) must be under the unit. The pad must extend at least the width of the appliance (56cm) and at least the depth of the appliance plus 16 cm) in front of the appliance (76cm).

The clearance between the walls or to the top is no less than the size of 5cm.

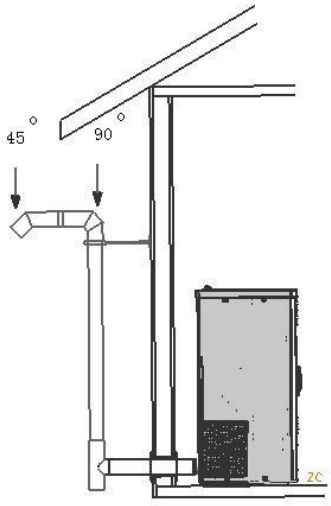
## 1. Electrical:

The unit must be grounded. The grounded electrical cord should be connected to a standard 230V, 50Hz (4.5 Amps) electrical outlet. Be careful that the electrical cord is not trapped under the appliance and that it is clear of any hot surfaces or sharp edges and also must be accessible. If this power cord should become damaged, an original replacement power cord must be purchased from the manufacturer or a qualified dealer.

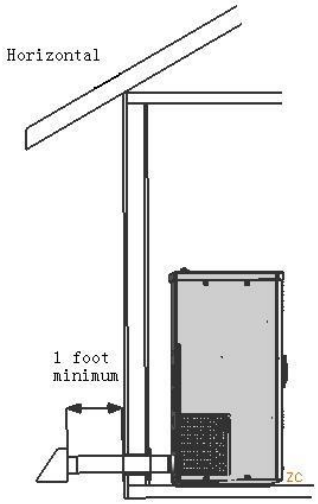
## 2. Air input and venting pipe Installation

Several examples

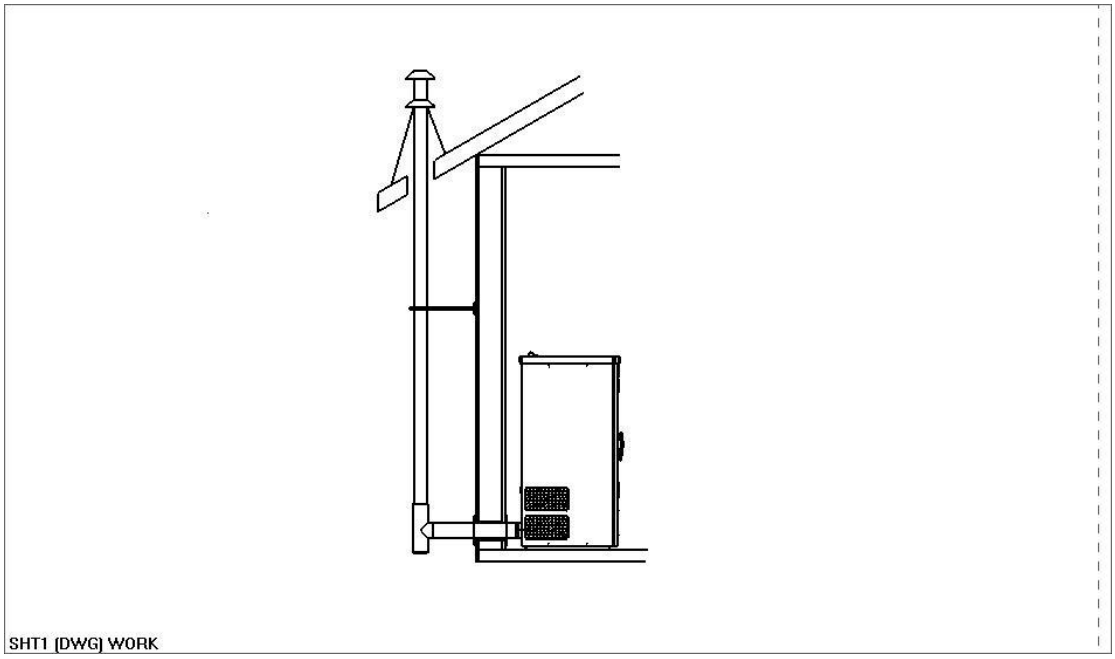
## Horizontal and Up,



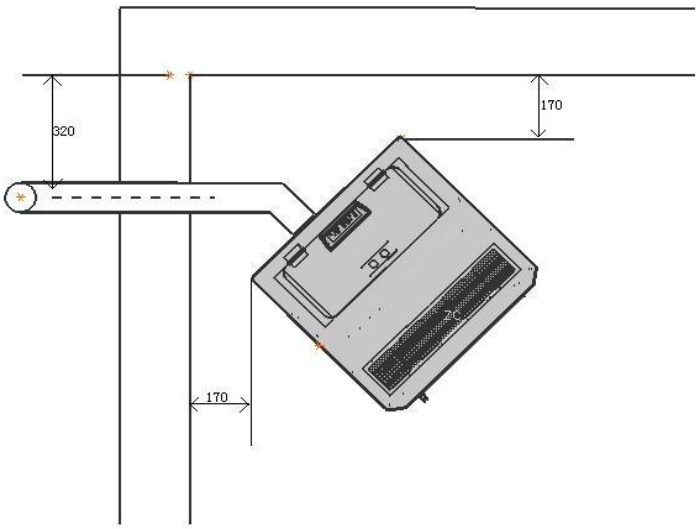

## Horizontal

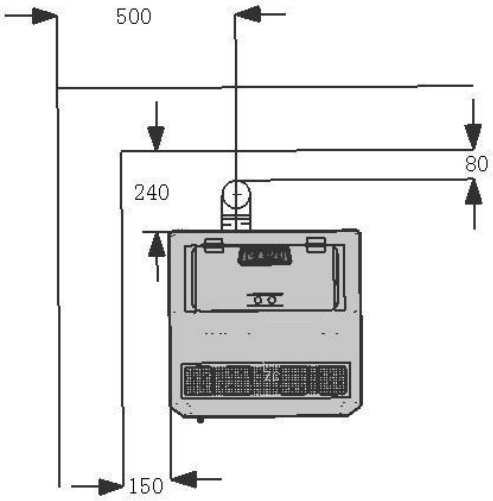



Horizontal and Up through the eave




The Distance between wall and stove when it is installed in the house (MM)




The stoves' air input pipe diameter is 50 mm, venting pipe diameter is ¢ 80 mm. The total length of pipes is no longer than 3m and elbows are not foreseen. Indoor venting pipe joint should be sealed by silicone sealant to prevent exhaust leaking into the room. Venting pipe and termination should be waterproof and avoid being blocked. Or, the stove can not work properly.

When the installation requires piping longer than 3m and/or elbows, the diameters of the air input pipe and venting pipe must be increased properly for smooth convection. If not, it will influence the burning and the stove can not work properly.

An professional and authorized installer will be able to advise you on the right installation.

When the pellet stove is in operation, the temperature on venting pipe surface can reach up to

200˚C, so the combustible materials ,particularly clothes and furniture should be away from the venting pipe. To prevent scald, don't touch the heating surface!

**Vent Output Requirements**

PLEASE NOTETHAT LOCAL REGULATIONS ALWAYS OVERRIDE ANY GUIDANCE GIVEN IN THIS MANUAL.

(1)Please observe that it is not allowed to end the vent in any enclosed or semi enclosed area such as a carport, garage, attic, crawlspace, narrow walkway, closely fenced area, under a sundeck or porch, or any location that can build up a concentration of fumes such as stairwells, covered breezeway,etc.

(2)Vent surfaces can become hot to cause burns if touched. Noncombustible shielding or guards may be required.

(3)The vent must be placed above the air inlet elevation.

Pellet pipe type PL or L must be used to vent the STOVE. Single wall pipe cannot be used with this pellet stove. The stove's flue collar is 3"in diameter. An approved wall thimble or approved ceiling firestop must be used when the pellet pipe passes through a combustible wall ceiling.

The stove's combustion blower pressurizes and pushes flue gases out the pellet pipe .As a result, all pipe joints should be locked together, or screwed with three screws if the pipe does not have a locking system, and sealed with high temperature silicone.

The pipe should be siliconed and fastened with three screws to the stove's flue collar.

The longer the run of pipe and the more elbows used, the greater the resistance to the flow of flue gases. Four inch diameter pellet pipe is recommended for pipe runs greater than 3m or when a number of elbows are used.

**DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYS TEM OF THIS UNIT. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**

# Here are some examples of installation in different situation

**Horizontal installations** that terminate without any vertical sections of pipe are approved; However, wind may direct flue gases towed the house causing discoloring problems. For this reason, horizontal and up 5 feet or horizontal and through the eave installations are recommended. To aid in cleaning, wherever possible, the venting system should include a tee with clean out attached to the flue collar on the stove.

**Masonry Chimney**

When venting into a masonry chimney, the pellet pipe can terminate just inside the chimney. However, it is recommended to run the pellet pipe to the top of the chimney.

**Fireplace**

When venting into a fireplace chimney, the pellet pipe can terminate just above the damper. However, it is recommended to run the pellet pipe to the top of the chimney.

**Vertical**

If the length of pipe exceeds 3m, 4 inch pipe rather than 3 inch vent pipe should be used.

**WARNING:**

DO NOT INSTALL THIS STOVE IN A BEDROOM.

**SURGE PROTECTORS**

A surge protector is recommended to ensure the stove's electrical components are not damaged due to a surge in the electrical supply. Only high quality protector should be used—cheap ones do not provide the protection needed.

**THERMOSTAT INSTALLATION**

The stove comes from the factory wired to operate manually see control board operation on the following page. A low voltage thermostat has been installed on the stove.

CAUTION: Please put the sensor （T3） at the rear away from the venting pipe. This sensor is detecting the temperature in the room; it should not be influenced by any other hot or cold object. Select a place that you think is appropriate for the desired temperature in the room.

**CAUTIONS INSTALLATION AND REPAIR SHOULD ONLY BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN. DO NOT ATTEMPT TO SERVICE THE APPLIANCE YOURSELF.**

Avoid over firing the stove do not hand feed pellets to the appliance.
Never use gasoline, gasoline type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or flesh up a fire in this heater. Keep all such liquids well away from the heater while it is in use.
For your safety, do not install or operate your stove without first reading and understanding this manual.
Any installation or operation of the appliance deviating from that which is stated in this instruction manual WILL void the warranty and may be hazardous.
Due to high temperature, the stove should be located out of traffic areas and away from furniture and draperies. Children and adults should be alert to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the STOVE. Clothing or any other flammable material should not be placed on or near the stove. Any grille, panel, or glass removed for service MUST be replaced prior to operating the stove.
Do not operate appliance with the glass front removed, cracked, or broken. Replacement of the glass should be done by a qualified service technician. Country Stoves, its employees, or any of its representatives assume no responsibility for any damages caused by an inoperable, inadequate, or unsafe condition as a result of any improper operation, service, or installation procedures. Whether direct or indirect. The appliance when installed must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code. ANSI\NFPA 70

# 5. Operation

**ALL NATIONAL AND LOCAL REGULATIONS SHALL BE OBSERVED.**

## 1. First operation.

Please put a handful of wood pellets in the firepot beforehand.
Put wood pellet fuel into the hopper, connect the power. The On/Off Light is burning. This means that power is on. Operate as per the instruction on section 2"start and operation"
At the first operation, some unpleasant smell might come out. This is harmless, but unpleasant. Please open a window to vent the smell.

## 2. Start and operation

Please operate the stove as following (refer to stove structure figure and electrical control figure):

Check the box, pellet grate bar，air mate board and ash pan then adjust to proper position.

Push On/Off button UP to 3secs?, the light is off and the combustion fan starts to work for 20 seconds to clean the fire pot, then feeding Light is On, meanwhile Convection Blower Lights and Feel Intake Quantity Lights will be automatically selected to some level, ignitor is working as well. After less than one Min's Feeding, it stops for a while, some smoke will come out, meanwhile, the combustion fan starts. After Less than one min., it forms a stable flame.
**Note: If the new stove, when its first time using, it is necessary to put a handful of pellet to the fire pot before hand.**
Depending on the heating desire, fuel intake quantity can be adjusted from few to large by the fuel intake Button. At the same time adjust the convection Button to blow the heat to the room to reach the best combustion. (According to the various quality of wood pellet, please select right feeding speed, in order to burn properly)
Note: if the ignition is failure, the thermal control will shut off the stove automatically. If want to restart it again, Please Switch off the power for a while and then switch on the power (In order to shut down the previous process of program), follow the above process to ignite and start again.

## 3. Turning Pellet Stove Off

Please turn off the stove as the following:
Press On/Off button up to 2 seconds; the auger motor will be stopped, the other motors continue to operate as long as there is heat, meanwhile the ON/OFF light flashes, until the temperature decreases to approx (30°C), then it will stop completely. This is controlled by the sensor is on the venting pipe.

# 4. Safety

This stove has a threefold safety system:

(1) The stove will power off and the fire will be put out since the stove decreases to the safety temperature， （T1）

(2) The stove will be shut down, when the thermodisc (for the hopper) T2 ≥ 70˚C. Wait and let the stove cool down and restart. If problem occurs again contact your installer.

(3) When vent pipe is blocked, the vent pipe indicator light will be on and the stove will shut down. Then please check it or call your dealer!

**SAFETY WARNINGS AND RECOMMENDATIONS:**

**Caution**. It is important to select and use only pellets that are dry and free of dirt or any impurities such as high salt content. Dirty fuel will adversely affect the operation and performance of the unit and will void the warranty. We have listed a standard for wood pellet (please check FUEL REQUIREMENT page 3). We recommend the use of pellets that meet or exceed these standards. Ask your dealer for a recommended pellet type.

**Caution: Do not connect to any air distribution duct or system. Do not burn garbage or flammable fluids such as gasoline, naphtha or engine oil. When unit in operation, Keep children, clothing and furniture away. Contact may cause skin burns.**

**SOOT:** Operation of the stove with insufficient combustion air will result in the formation of soot which will collect on the glass, the heat exchanger, the exhaust vent system, and may stain the outside of the house. This is an inefficient and potentially dangerous situation. Frequently check your stove and remove the dust inside of stove ensure proper combustion**.** If it is necessary, call your dealer to adjust the speed of fan or feeding speed.

**CLEANING:** There will be some of fly ash and small amounts of creosote built up in the exhaust. This will vary due to the ash content of the fuel used and the operation of the stove. It is advisable to inspect and clean the exhaust vent semi-annually or every 2000kg of pellets.

**Caution:**. Please keep the door closing and sealing during burning for good efficiency and preventing hot ash flying out. **(The fire box shall always be closed when the appliance is in operation)**

The burning features ---bright yellow flame, the pellet burning with a little jumping in the grate bar. No pile pellet and no smoke venting. If it becomes a little dark glow and lazy flame, smoke appears from the venting terminal, speed up the combustion blower to add the air input.

Venting pipe and air input pipe should keep unblocked.

Do not modify the appliance. Broken parts should be replaced only with original parts.

# ***USER MANUAL***

## Switching on

The heater is switched on by pressing the ON/OFF key 

At the switching on the display will show Cleaning


Cleaning' is displayed for 20 second, in order to clean the fire pot.

The heater is switched off by pressing the ON/OFF key 

Switching off is displayed


After the temperature in the stove is lower than 30 °C , the phrase Goodbye is displayed.

*!! ATTENTION !!*

During the switching off proces and exchanger cooling, it is not possible to restart the heater until the switching off process is completed. This is an important step for safe operations. The Switching Off process is completed when the display shows Goodbye .

*At switching ON the flame isn't started immediately, depending on the programmed setting. Two settings are available: AUTOMATIC or MANUAL, for further details see the appropriate section.*

The switching on Stage, which has the duration of about 15-20 minutes, are necessary to the resistence to carry the pellets at the switching on temperature, (depends from the heater). The steps in the switching on procedure are shown in the display. Before starting the lighting phase, the heater performs the brazier cleaning and displays Cleaning

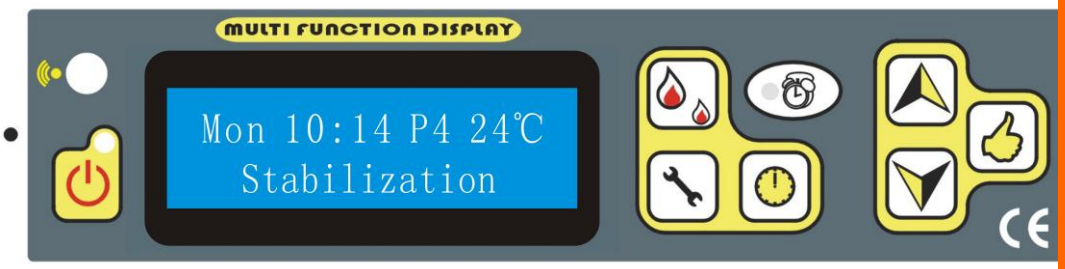

The next step is displayed as Feeding. In this phase the proper working of the chimney is checked and the pellets will be loaded in the burning pot.


The next step will be shown as *Lighting* In this phase there will be the appearance of the first breeding grounds. This state remains up to when the smokes temperature doesn't exceed the planned threshold.

*!! ATTENTION !!*

From the appearance of the first breeding grounds, some minutes can spend before the end of the switching on phase .

When the switching on phase is finished, some minutes will spend necessary for the flame stabilization. This phase is showed from the message *"STABILIZATION"* which finishes after some minutes going up at the work phase




When the switching on phases are finished the heater will show the own state on the display..

It is possible to switch off the heater in every functioning phase, except that during the programming. The switching off performs pressing the key ON/OFF for two seconds, as previously described.

*!! ATTENTION !!*

If the heater is switched off, the flame will continue to be present up to the fuel exhaustion contained in the melting pot, this phase will manage in automatic way both fans and it will have the duration up to 5 minutes.

The switching off phase is displayed from the message *'SWITCHING OFF"* present up to the end of the operation.

Whether the heater is switched or not, on the display will display the hour, the power, and the planned set temperature.

Flame variation

## FLAME POWER VARIATION

Pressing the key  the feed quantity can be changed, the display shows the selected power.


***MINIMUM POWER P4***


***LOW POWER P3***


***MEDIUM POWER P2***


***MAXIMUM POWER P1***

ECO Stage

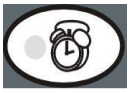
## ECO STAGE

If the room temperature exceeds the set out temperature, automatically the stove is paused The display shows Eco


After the room temperature drops below the set temperature, it will automatically switch on again.

Manual/Automatic

## Automatic and manual SELECTING

Pressing the keys  , The light shown on the following,  will be on/off.

If the light is on, it shows that automatic programme is selected. Otherwise it is manual.

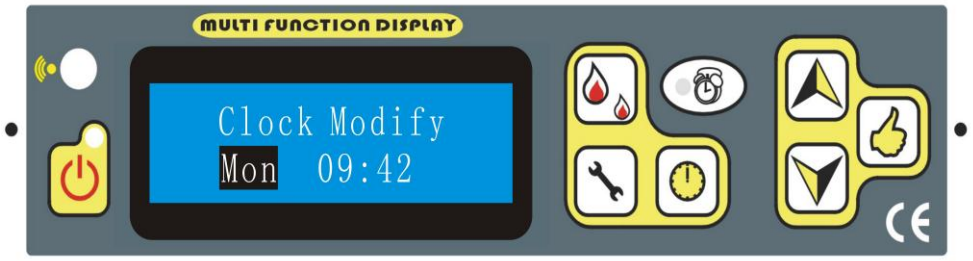
Desired temperatures Setting

## DESIRED TEMPERATURES SETTING

Pressing the keys  , on the display The temperature is selected.

## *CLOCK SETTING*

Pressing the keys  up to 2 sconds, on the display Clock is selecting:




You can choose week by keys  , keeping press the key 

The time can by select, Also using  , to select the right one.

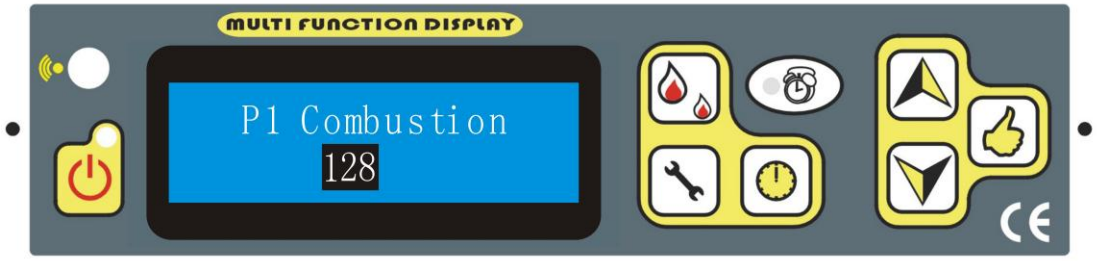
## *CLEANING SETTING*

After keeping pressing the key,  you can adjust every X mins, last Y seconds to cleaning the burning pot by the key 

## *COMBUSTION FAN SETTING*

Again by keeping pressing the key,  you can change the speed of combustion fan

from P1 to P4, BY PRESSING 
For example P1:




It should be noted, P5 is the speed of combustion fan when it is cleaning.
P6 is the speed of combustion fan during the lighting stage.

## ***TIMER*** ***SETTING***

On the display the following wording will appear


With this function you can program the heater for a weekly programming, associating the switching on and the switching off at the pre fixed timetables. You can program daily switching on and switching off for the whole week.

By keeping pressing the key  , you will found the attached instruction above,

Then you can press  to choose week days

By pressing  , to select hours, then press  to decide the hour on or Off.

On the superior line it is showed the day which is programming, the hour with the functioning state.

On the below line the programmed hour are displayed.

- Lower one means off, taller on means on, which also shows on superior line

Pressing the key  the programming will finish.

**********

If the display shows errormessage Pressure Erro


It means that there is a some problem with the vacuum switch, such as

- door has not been closed properly
- Combustion fan's speed should be up.
- There is some leakage about the stove and so on.

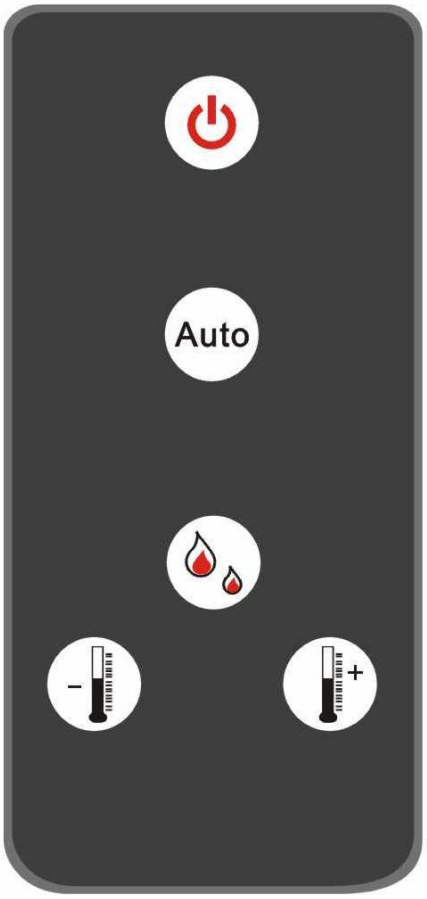
If the display shows errormessage Fire Erro


It means that the high temperature sensor has identified a problem,
Such as: the temperature is too high or the switch is broken.

*!! ATTENTION !!*

**You can press**  to exit the program state. Otherwise, keep pressing 

## ***REMOTE CONTROL ( Optional)***




Min remote control

# 6. Maintenance

Unplug and let the STOVE cool before performing any maintenance or cleaning. Some brands of pellets produce more ash and clinkers than others. Therefore the frequency of performing the following cleaning procedures depends to a great degree on the quality of the pellets burned. **Not cleaning this unit will cause it to burn poorly and will avoid your stove's warranty.**

**BURN POT CLEANING**

Automatic cleaning: The combustion fan automatically accelerates to high speed once an hour to blow away the byproducts of combustion out of the burn pot.
Periodic cleaning: The burn pot should be cleaned more thoroughly after burning about 150kg of pellets. The burn pot has a number of gaps in the bottom and sides that provide combustion air to the pellets. The extreme temperatures in the burn pot can cause impurities in the pellets to form ash and clinkers.
When the stove is cool, open the front door and lift out the iron burn pot. Scrape the inner bottom and sides of the pot with a screwdriver to remove all ash and clinkers from these surfaces.
Also clear the bars of the igniter carefully, although it is made of ceramic, it can be easily broken by smash them with some hard stuffs. Make sure all the gaps in the bottom of pot are open. Place the burn pot in the hole from which it was removed. Make sure the high side of the pot is rotated toward the front of the stove. Push the burn pot down so surface A is tight against the steel supporting the pot. Do not substitute any other grate or pot for use in this stove.

**CLEANING GLASS**

Caution: Do not open the front door when the stove is hot. To open the door, follow the first two steps listed in Front Door Removal. Clean the glass using a soft cloth or paper towel and special wood stove window cleaner. A damp cloth with small amount of ash from the firebox can also be used to clean the glass.

**ASH DRAWER REMOVAL AND CLEANING**

**Caution:** Do not remove the ash drawer when the stove is hot. Pull the ash drawer forward and away from the stove.
**Caution:**
Ashes should be disposed of in a metal container with a tight fitting lid. The closed container should be placed on a noncombustible floor or the ground well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.
Reinstall the ash drawer by inserting the drawer in the stove and refastening the left and right latches securely. Note that if the ash drawer does not seal tightly to the stove, the control board may detect a leak and shut the stove down. This is an important safety feature.

**CLEANING THE COMBUSTION BLOWER**

To clean the combustion blower, remove the four nuts labeled A in the drawing to the right with an 11/32''wrench. After removing these nuts, the motor with fan attached can be pulled from the fan housing. The fan blades and the fan housing can be vacuumed once the motor is removed. When reinstalling the motor, a new gasket may need to be installed between the motor and the fan housing. To complete the reinstallation, place the motor back on the fan housing and reinstall the six nuts. Make sure the motor's green ground wire is secured under one of the nuts.

**CLEANING THE FLUE GAS PASSAGE WAYS**

Cleaning the flue passageways should be done at least once a year. Burning high ash pellets may require this cleaning to be done more often. Clean these passageways only when the stove and ash are cold. Do not start a fire in the vacuum cleaner by vacuuming up hot ash! On each side of the stove there are two access covers (see B and C on the drawing to the right) that can be removed by unscrewing the two 5/32'' allen head screws. Insert a cleaning brush in the openings to loosen any ash buildup and use a vacuum cleaner to remove the loose ash. Reinstall the covers when cleaning is complete. There are also two more access holes located behind the ash drawer.

Remove the ash drawer (see the previous page) and loosen the two 5/32'' allen head screws shown as D in the drawing below. Rotate the covers over the access holes and use a brush and vacuum to clean the ash. Rotate the covers back over the holes and tighten the screws. Front View Looking into the Ash Drawer Cavity with the Ash Drawer Removed.

**CLEANING THE CONVECTION BLOWER**

To clean the convection blower, remove the right side door (see the following page). Disconnect the stove power cord from the electrical outlet. Remove the two screws (A in the drawing to the right) securing the blower to the blower duct. Slide the blower to the rear disengaging it from the blower duct. A vacuum can be used to remove any dust accumulation on the blower's blades or inside the blower duct. Caution should be used not to damage the blower's blades during cleaning. To reinstall the blower, slide the blower back into the retaining lip B and reinstall screws A.

**CLEANING THE VENT PIPE**

**Soot and Fly ash: Formation and Need for Removal**

The products of combustion will contain small particles of fly ash that will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, normally occurring during start up and shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary. Sweep the pipe as needed. A tee and the cleanout in the vent system attached to the stove's flue collar will facilitate this cleaning.

**Required Cleaning Schedule after Number of Bags Burned**

| | |
|---|---|
| **Burn Pot=10 bags** | **Flue Fan=100 bags** |
| **Ash Drawer=50 bags** | **Blower=100 bags** |

NOTE: **Cleaning schedule will strongly vary with the quality of pellets used. High ash pellets**

**used. Burning high ash pellets will require more frequent cleaning.**

**CHANGE THE HEAT RESISTOR EVERY TWO OR THREE MONTHS**

**Normally, we have a spare set off heat resistor with a new stove!**

# 7. Troubleshooting

The control panel of the stove has several malfunction sensors. When the sensor detect the abnormal work temperature (below 30˚C), or the other sensor's temperature is above 70˚C the auto-control temperature switches will react accordingly. When temperature is below 30˚C, the safety control system will stop the stove automatically; when the other sensor, fixed into the hopper, detect the temperature is above 70˚C, the stove will be shut down.
The general troubles, the possible reasons and the solutions are as following, after solving problems, start the stove again:

| problems | reason | solution |
|---|---|---|
| 1. The start light does not light when power is on | No power in stove or in the control panel. | Check the power and wires. |
| 2. The blower doesn't work after pressing the start bottom. | It is normal.<br>It will start automatically when the temperature is above 30 degrees on the venting pipe. | Please wait |
| If after 15 mins, it doest work, there must be wrong | No power in stove or in the control panel.<br>Or Unplugged on the mother board<br>The low temperature sensor is broken | Check the power and wires.<br>Plug it<br>Replace it |
| 3. No feeding after 20 seconds of starting.<br>There are three stages for the feeding process.<br>One is during the several minutes, feeding is constantly. "Feeding" is showing on the LCD display<br>Two is the following couple minutes, the feeding light is off.:"Light" showing on the Display<br>The last stage is that feeding Every several seconds all the time after previous stages. | | |
| A. For the first stage (during first several minutes) | Feed unit is blocked. | Check the auger is blocked or not. |
| | There is the problem about the connection between motor and auger | Check the fasten screw between auger and motor loose or not.<br>Or the auger might jump out |
| | No fuel in the hopper. | Fill the fuel into the hopper. |
| B. For the second stage | It is normal | Please be patient |
| C. Regarding to the last stage | Feed unit is blocked. | Check the auger is blocked or not. |
| | There is the problem about the connection between motor and auger | Check the fasten screw between auger and motor loose or not.<br>Or the auger might jump out |
| | No fuel in the hopper. | Fill the fuel into the hopper. |

| | | |
|---|---|---|
| 4. Feeding not properly<br>A. too much wood pellet and cannot burned in time | The level of feeding speed is too high | Adjust the combustion fan's speed up |
| B. The fire is off due to little wood pellet can be burned | The level of feeding speed is too low | Adjust the combustion fan's speed Down |
| 5 After ignition the power is off 15min later. | Pellet feeder unit is off or pellet is too little.<br>30˚C temperature switch breaks or the connection wires of switch loose.<br>Not enough pressure in the stove | Check the pellet feeder unit and restart.<br>Check the connection wires or change the 30˚C temperature switch.<br><br>Adjust the combustion fan's speed up |
| 6 orange and lazy fire, piled pellet, carbon on the glass | Lack of air intake for burning. | Clean the block in gate bar.<br>Check the door and window glass gasket sealed or not.<br>Check the air intake pipe and venting pipe blocked or not, and clean it. Change to the big diameter pipes if pipes are too long to affect combustion. Adjust the combustion fan's speed upwards.<br>Call the dealer to reset the program |
| 7 The fire put out and power is off automatically. | The hopper is empty.<br>No fuel feed.<br>The fuel feed is too little.<br>low temperature switch (30˚C) is wrong.<br>Set temperature is reached | Put fuel into the hopper. refer to (2)<br><br>Lower the speed of combustion fan<br>Cool the stove at least 1 hour then operate again or change the low temperature switch (30˚C).<br>"ECO" its normal, waiting, after the temperature is blow set on, it will automatically switch on again |
| 8 The blower still works after the stove is cool and fuel feed stops. | The low temperature switch (30˚C) is broken. | Change this switch. |
| 9 no enough heat wind | Unqualified fuel<br>Blower speed is too high.<br>Heat exchange tubes are dirty. | Use the standard specially pellet.<br>Use higher power<br>Clean the heat exchange tubes. |
| 10. Showing "Pressure Erro" on the display | Vent pipe is blocked<br><br>The door is not closed<br><br>The are some leakages | Shut down the stove, check the venting pipe<br>Close the door and unplug, then restart<br>Check it and repair it. |

| | | |
|---|---|---|
| | | Adjust the combustion fan's speed up to offer more pressure in the stove |

**ELECTRICAL GENERATOR OPERATION( Optional)**

**Your stove can be powered with a gas driven electrical generator.**
**However, the generator's electrical regulator may not be compatible with the stove's electronics. The higher the quality of the generator, the greater the chance that it is compatible with the stove.**

# 8. Warranty

1. If the owner follows the operation of this manual, stoves properfunctioning has a limited warranty forupto12months after purchase. Within the warranty period it will be repaired or changed parts with free charge.

2. Warranty becomes nil and void by non-compliance to these instructions.

# 9.Electronic Plan