portway

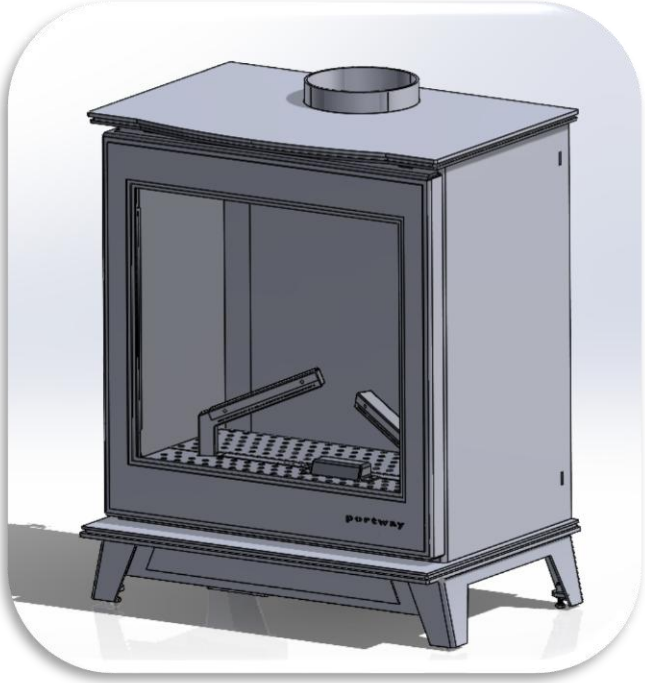
STOVES

Portway Liberty Gas Stove
Model No. PLGSFPRN

for use on Natural Gas (G20)
at a supply pressure of 20 mbar in G.B. / I.E.

Installation & User Book

These instructions should be read by the installer and then should be handed over to the end user when the installation Is complete. This is an official requirement and is the responsibility of the fitter of this appliance. The installer should take the necessary steps to ensure that the end user fully understands how to operate this appliance and is made aware of the basic cleaning and maintenance requirements.



For your convenience, this appliance is fitted with Skantag™
Please consult the flyer inside the stove.

Information Requirements for Commission Regulation (EU) 2015/1188

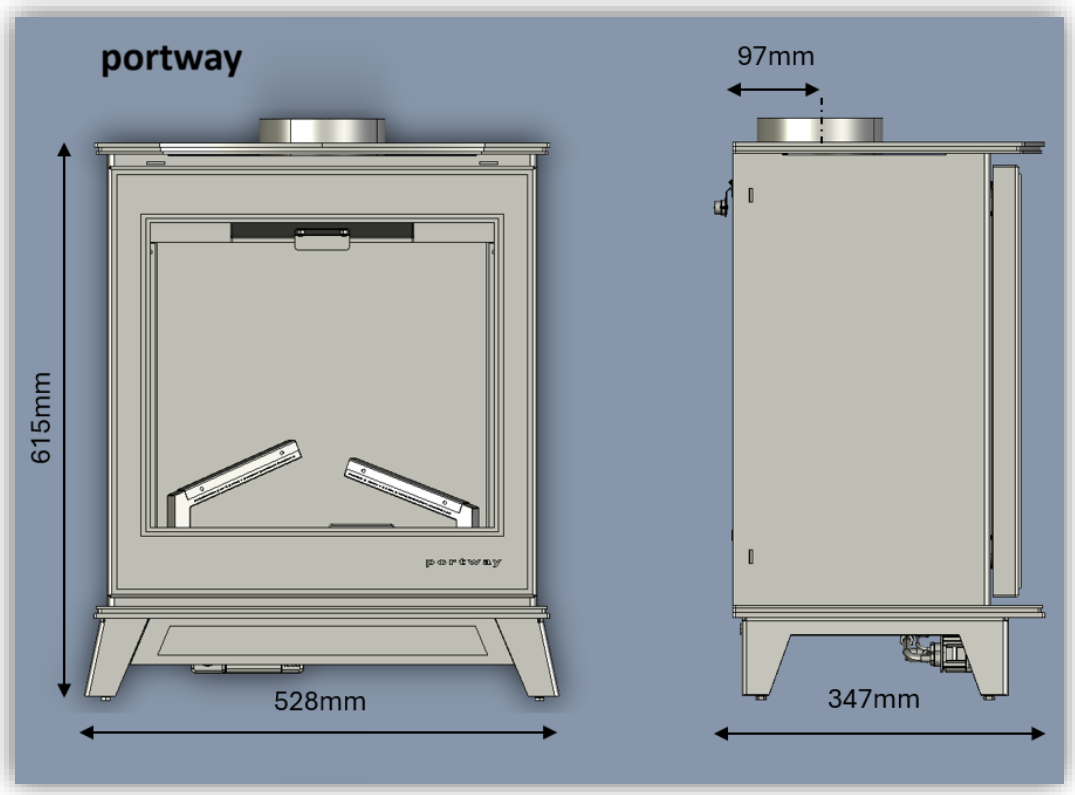
Model Identifier	PLGSFPRN
Indirect Heating Functionality	No
Direct Heat Output	4.6 kW
Indirect Heat Output	Not Applicable
Fuel	Natural Gas (G20)
NOx Emissions	130mg/kWh
Nominal Heat Output	4.6kW
Minimum Heat Output (Indicative, all models)	1.75kW
Useful Efficiency at Nominal Heat Output	77.2%
Useful Efficiency at Minimum Heat Output (Indicative)	50.0%
Auxiliary Power Consumption at Nominal Heat Output	0.0000010kW
Auxiliary Power Consumption at Minimum Output	0.0000010kW
Auxiliary Power Consumption at Standby Mode	0.0000005kW
Permanent Pilot Flame Requirement	Not Applicable
Type of Heat Output / Room Temperature Control	With electronic room temperature control.
Contact Details	BFM Europe Ltd. Gordon Banks Drive Trentham Lakes North Stoke-on-Trent ST4 4TJ Tel : 01782 339000

Contents:

Technical Data:

Gas Type	Natural Gas
Gas Category	I2h
Gas Type	G20
Inlet Pressure (mbar)	20
Countries of Destination	GB and IE
Gas Valve	TESC-01 RF868-15
Injector Size	Stereomatic 440 multi-hole ceramic
Oxypilot	ERTA 82-330A14
Gas Rate	Full / Reduced
Nominal Heat Input (Gross, kW)	6.6
Nominal Gas Flow Rate NG (m^3/h)	0.651
Efficiency (net)	77.2
NOx Class	4
Weight (Kg)	58.5Kg

Appliance Dimensions:



Installation Requirements:

Efficiency Declaration:

The efficiency of this appliance has been measured as specified in BS EN 613 : 2001 and the result is 69.52%. The gross calorific value of the fuel has been used for this efficiency calculation. The test data from which it has been calculated has been certified by KIWA Testing Services.

The efficiency value may be used in the UK Government's Standard Assessment Procedure (SAP) for energy rating of dwellings. By law, this appliance must be installed in accordance with the rules in force and used only in a sufficiently ventilated space. The appliance is manufactured for GB and NI exclusively and must only be installed in these locations. Before installation, ensure that the local distribution conditions (identification of the type of gas and pressure) and the adjustment of the appliance are compatible.

Conditions of Installation:

It is the law that all gas appliances are installed only by a GAS SAFE Registered Installer, in accordance with these installation instructions and the Gas Safety (Installation and Use) Regulations 1998 as amended. Failure to install appliances correctly could lead to prosecution. It is in your own interest and that of safety to comply with the law. The installation must also be in accordance with all relevant parts of the Local and National Building Regulations where appropriate, the Building Regulations (Scotland Consolidation) issued by the Scottish Development Department, and all applicable requirements of the following British Standard Code of Practice.

1. B.S. 5871 Part 1 Installation of Gas Fires
2. B.S. 6891 Installation of Gas Pipework
3. B.S. 5440 Parts 1 & 2 Installation of Flues and Ventilation
4. I.S 813 : 1996 Domestic Gas Installation, issued by the National Standards Authority of Ireland.

Flue & Chimney Suitability:

This appliance is designed for use with conventional brick built or lined chimneys and fabricated flues and metal flue boxes conforming to BS 715 / BS EN 1856-2.
All flues must conform to the following minimum dimensions.

Minimum diameter of circular flues 125 mm (5")
Minimum effective height of all flue types 3 metres
Clearance of products must always be checked by carrying out a smoke match test as described.

Ventilation:

This Portway stove has a nominal input not exceeding 7kw and therefore does not normally require additional purpose made ventilation when installed in G.B. If, however spillage is detected when commissioning the stove there may be insufficient natural ventilation in the property and additional ventilation may therefore be required. Any purpose made ventilation must be checked periodically to ensure that it is free from obstruction.

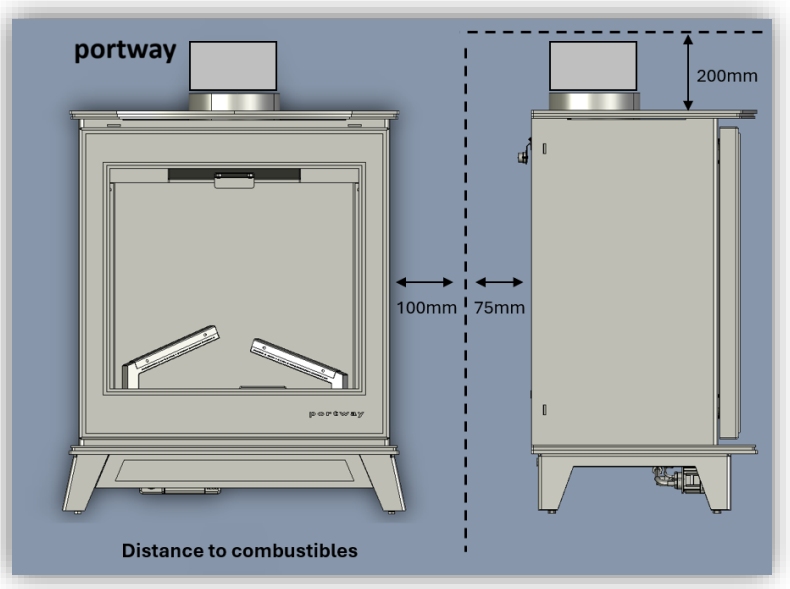
When Installing in I.E. please consult document I.S. 813 : 1996 Domestic Gas Installation, which is issued by the National Standards Authority of Ireland. If installing in Northern Ireland, please consult local building regulations. Any purpose made ventilation must be checked periodically to ensure that it is free from obstruction.

Distance to Combustible and Non-Combustible Surfaces:

The Stove may be fitted below a combustible shelf providing there is a minimum distance of 225mm above the top of the stove and that it does not extend in front of the stove.

A suitable proprietary fire surround with 100°C rating may be used with a minimum clearance from the top of the stove to the underside of shelf of 225mm, providing that the depth of shelf is 150mm or less.

There must be a minimum distance of 300mm to any combustible side or rear surface. The minimum clearance to non-combustible materials at the sides are 100mm and the rear 75mm, but please ensure sufficient access to the draft diverter on the rear of the stove can be achieved to complete the spillage test when commissioning the stove.



Flue / Chimney Inspection:

Before commencing installation, a flue or chimney should be inspected to ensure that all the following conditions are satisfied.

- Check that the chimney / flue only serves one fireplace and is clear of any obstruction. Any dampers or register plates must be removed or locked in the open position.
- Brick/stone built chimneys or any chimney or flue which has been used for an appliance burning fuel other than gas must be thoroughly swept. The base of the chimney / flue must also be thoroughly cleared of debris etc.
- Any under-floor air supply to the fireplace must be completely sealed off.
- Ensure that the inside of the chimney / flue is in good condition along its length and check that there is no leakage of smoke through the structure of the chimney during and after the smoke pellet test.
- **Using a smoke pellet, check that there is an up-draught in the chimney / flue and that the smoke can be seen issuing from the terminal / chimney pot outside. There must be no leakage of smoke through the structure of the chimney during or after the smoke pellet test and it is important to check inside upstairs rooms / loft spaces adjacent to the chimney / flue**. Check the chimney pot / terminal and general condition of the brickwork or masonry. If the chimney or flue is in poor condition or if there is no up-draught do not proceed with the installation. If there is a history of down-draught conditions with the chimney / flue, a tested and certificated flue terminal or cowl suitable for the relevant flue type should be considered.
- **A spillage test must always be carried out during commissioning of the appliance.**

Hearths:

This stove must only be installed on to a concrete or non-combustible hearth. The hearth material must be a minimum thickness of 12mm with the top surface at least 50mm above the floor. The hearth must be fitted symmetrically about the fire opening and project at least 50mm from the base of the stove in all directions.

All parts of the appliance become hot while running and should therefore be considered as working surfaces.

It is recommended that a guard be used for the protection of young children, the elderly or infirm for normal use conforming to BS8423:2002, such that access to the hot appliance is minimised for vulnerable people.

Spillage Monitoring System:

This appliance is fitted with a spillage sensing Thermal Trip Breaker (TTB) switch. This is designed to shut the Stove off in the event of a partial or complete blockage of the flue causing a build-up of combustion products in the room in which the Stove is operated. **The following are important warnings relating to this spillage monitoring system**:-

- The spillage monitoring system must not be adjusted by the installer.
- The spillage monitoring system must not be put out of operation.
- When the TTB switch is replaced only an original manufacturer's part may be fitted. It is not possible to replace individual parts on the Oxypilot system on this appliance, only a complete Oxypilot assembly (including the connecting wires) may be fitted.

Installation:

Due to the weight of the Portway Liberty Gas Stove it does not require fastening either to the floor or the wall.

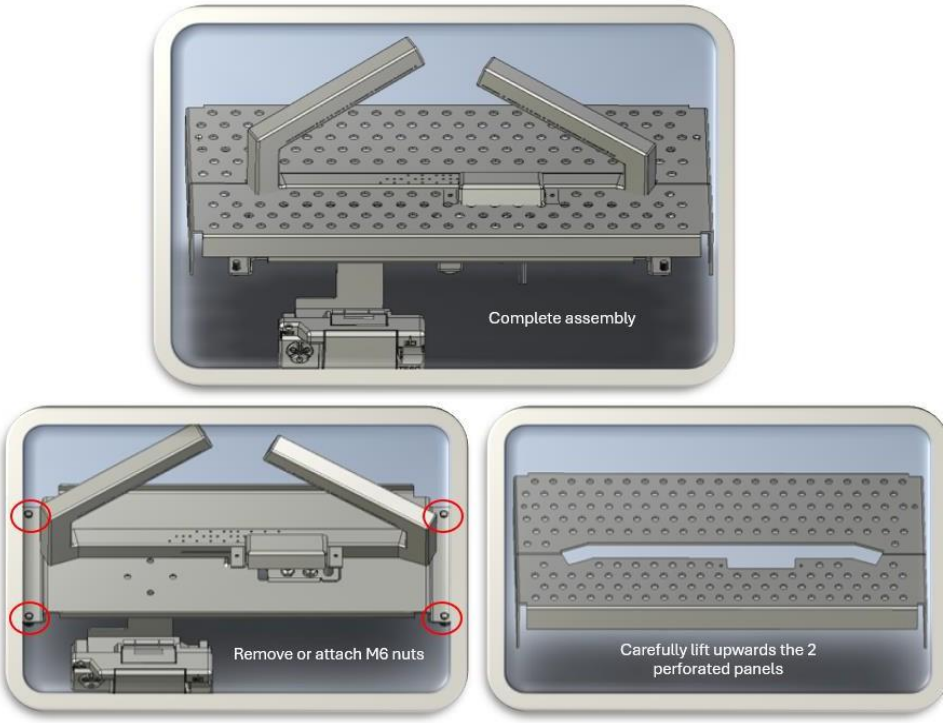
Flue Connection:

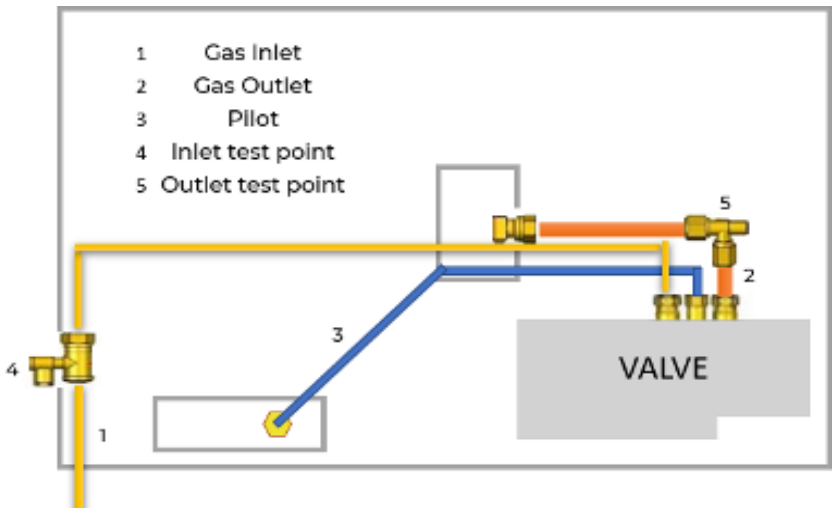
1. Place the appliance in the required position and level using the adjustable feet. The appliance spigot should only be connected to a suitable flue system.
2. If the Stove is fitted into chimney which does not have an integral chimney liner, then the flue must be lined with a flexible flue liner.
3. The flue pipe needs to be placed over the appliance spigot, ensuring a minimum of 50mm insertion depth.
4. The joint between the flue pipe and the appliance spigot needs sealing with a suitable high temperature sealant and in conjunction with a rope seal if necessary.
5. Secure the flue in position using suitable fixings.
6. The flue must be sealed to the appliance to ensure the products of combustion do not enter the room.

Burner Connection:

Note: Before breaking into the gas supply a pressure drop test should be carried out to establish that the existing pipework is sound.

1. Remove the Door Frame by pulling the bottom away from the Stove body slightly and then lifting to unhook from the top.
2. Remove the Glass Frame assembly by removing the 8 nuts from around the outside of the frame.
3. To gain access to the burner, lift out the 2 perforated panels from the Stove.
4. Remove the 4 M6 nuts as shown to allow the burner to be removed for installation.
5. The Controls Cover Plate located at the stove base can be removed from the magnets to access the TESC control valve.





6. The gas connection should be made to the appliance inlet elbow using 8mm rigid tubing
7. **NOTE - Before connecting the gas supply pipe thoroughly purge the gas supply pipework to remove all foreign matter, otherwise serious damage may be caused to the gas control valve on the Stove.**
8. Turn on the main gas supply and carry out a gas soundness test.
9. Thread the (Thermal Trip Breaker) TTB up from the bottom of the stove control tray. The TTB can then be attached to the rear of the Stove by using the 2 screws provided on the rear canopy as shown.

Do not fit or handle TTB with power (in any form, including batteries) when connected to the TESC. The TESC must be depowered. If the TESC is powered and the conductors of the cable, the terminals on the cable that fit to the TTB switch, or the TTB switch terminals touches any grounded metal parts, this will destroy internal parts of the TESC PCB. This is **not** covered by any warranty.

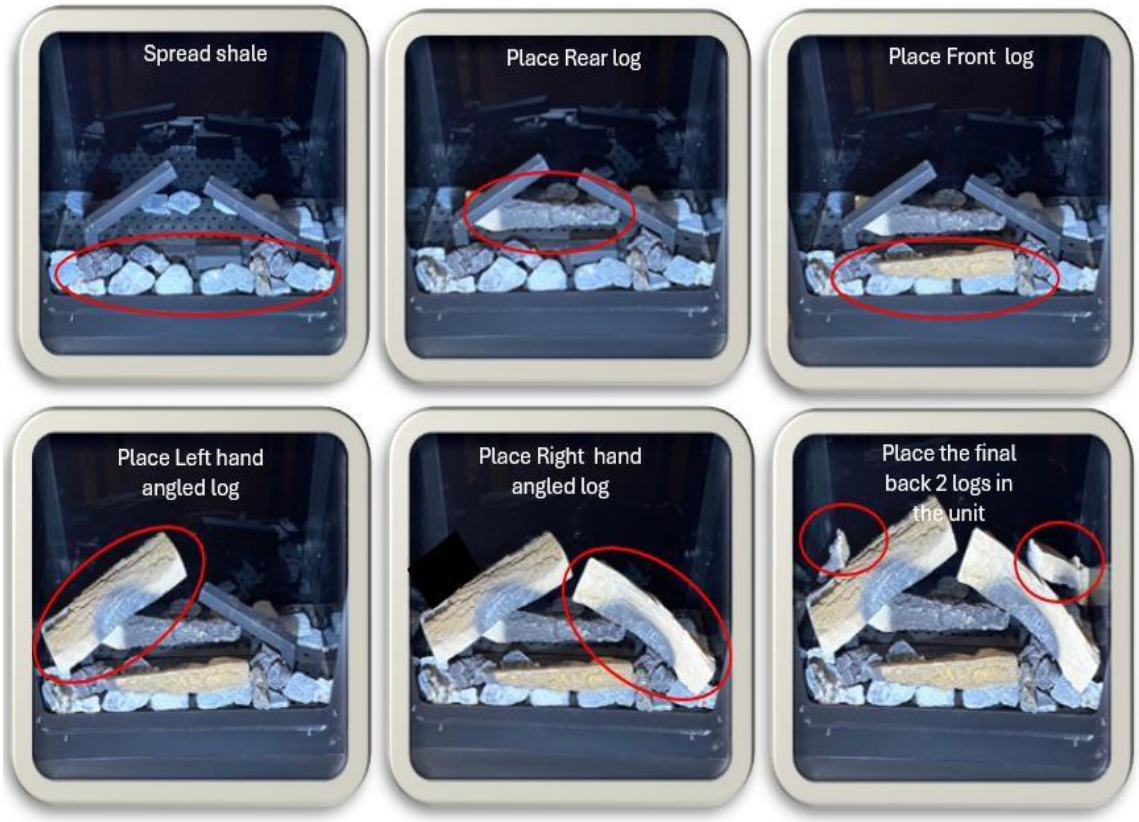
The bracket on the TTB is a floating one on the rear canopy. To ensure this does not contribute to the aforementioned damages, Secure the TTB before making any electrical connections and remove any power to the TESC (remove the batteries etc.) before fitting or removing the TTB switch.

Do not adjust or remove the TTB under any circumstances. If the TTB needs replacing, then only parts from the manufacturer are to be used as replacements

10. Refit the burner onto the 4 M6 bolts and fasten in place.
11. Place the 2 perforated panels back into the Stove.

12. See below how to arrange the ceramic logs and shale chippings to achieve the desired flame picture. Additional ceramic logs should not be added under any circumstances. The small bark chippings can be placed randomly around the logs, but not in any way covering up any of the flame ports that are in the burner lower cross member.

CAUTION: The logs are fragile and must be handled with care



13. Sparingly spread Embaglow fibres over the base burner ports. Ensure that no Embaglow gets in the pilot light area (refer to the instructions on the back of the Embaglow packet)

NOTE: Embaglow fibres that are placed too close to the pilot electrode can cause a short to earth and the control will go to fault code E04, E06 & E07 (may display random codes due to shortage)

14. Refit the Glass Frame assembly and tighten in place using the 8 nuts ensuring a good seal onto the Stove body.

15. Fit the Door Frame assembly to the front of the Stove body by hooking it onto the top location bracket and then allowing the bottom of the frame to be held in place with magnets.

16. Add the batteries if not present, the handset should not need to be paired as this has been preset.

Commissioning:

Check the gas supply and gas appliance for soundness. The appliance must be fully fitted with the glass frame assembly and door frame correctly fitted in place.

Pressure Check:

Always check the inlet pressure and burner pressure before running the appliance. The appliance has been adjusted to give the correct heat inputs and needs no further adjustment.

1. Turn off the stove.
2. Undo the inlet pressure test point screw from the inlet test point and connect a manometer.
3. Check that the gas pressure is **20.0 mbar (+/- 1.0mbar) 8.0 in w.g. (+/- 0.4 in w.g.) for natural gas (G20) models** when the stove is burning on full.
4. Turn off the stove, remove the manometer and refit the pressure test point screw. Check the pressure test point screw for gas tightness with the stove turned on using a suitable leak detection fluid or detector.

Flame Stability:

On starting the appliance, the ignition will light the pilot. If the pilot ignites successfully the main valve opens automatically to high rate to allow gas through to the main burner.

All the burners should light within 5 seconds. If the appliance fails to do so, if it fails to light allow the control to complete all (3) automatic ignition cycles then repeat the startup process. **DO NOT INTERRUPT THE START SEQUENCE, AS THIS WILL INDUCE AN ERROR**.

Should the main burner fail to light then turn off the unit and re-try after 5 minutes has elapsed. There should be no problems lighting the burner.

Check the stability of the flame turning from low rate to high rate. Repeat this a few times, observing the stability of the main burner and pilot flame.

Spillage Test:

The spillage test is intended to check the draw of the flue in the chimney to check for satisfactory clearance of products of combustion. Close all doors, windows, and any other openings in the room, and leave the fire burning on high setting for a minimum of 10 minutes. Insert a lit smoke match on a vertical plane 15mm down, 15mm inside the rear draft divertor canopy opening and observe if the flue is pulling the smoke. **All the smoke must be drawn into the flue**. If spillage occurs, allow a further 10 minutes and repeat the test.

Should any spillage occur, (BS 5440:1 states that "an odd wisp of smoke" can be ignored) this means the flue is underperforming or is blocked. Repeat the test with a slightly open window and where the spillage now passes tests then purpose provided permanent ventilation should be installed.

Where the appliance flue still fails with a window open then it should be classified as Immediately Dangerous. **Turn the appliance off, disconnecting gas supply and seek expert advice immediately.**

To continue the test: If an extractor fan is situated in the room the test should be repeated with the fan running. If there is a connecting room with an extractor fan the test should be repeated with all the doors to that room open and the extractor fan running.

First Time Light:

When lighting the appliance for the first time, the materials (i.e., paint, cement, etc.) will give off an odour and may smoke. This is normal as it is a new product, and the smell will disappear after a short period. Keep the room well- ventilated during the first time lighting process.

Check that all functions work correctly. Run the fire on maximum for approximately 30 minutes, allowing the logs to glow, before turning the appliance to low. Once the appliance is fully heated the blue flame will turn more orange.

Customer Handover:

Provide full instructions to the customer, clearly explaining the handset safety features:

- Warn of the smell and smoke off the product when new and the importance of ensuring the room is well ventilated during this period.
- Inform the customer not to disturb the ceramic logs.
- Inform the customer not to run stove with no glass fitted.
- Inform the customer that an annual service is required on the flue, as the flue may get blocked with no one knowing.
- Show the customer the removeable controls cover to access the TESC valve, to allow battery replacement and manual operation without a handset.
- Show and explain the function of the isolation valve.
- Explain to the customer the function of the flame sensing device. If the product continually turns off, tell them to isolate the appliance and call a Gas Safe Engineer.

Ensure the installer details are completed on the Warranty & Service Record card and hand over to the customer along with the Instruction Manual.

Customer Warnings:

- Do not block air intake or vents.
- Do not touch the stove when in use. A guard conforming to BS8423:2002 should be used when the appliance is being operated around children, elderly and infirm people.
- Do not place combustible materials in front of the unit.
- Do not stand directly in front of the unit, as loose clothing may combust.
- Do not use the stove if there is a crack in the glass or the glass seal has perished or leaking. Replace the damaged parts before using the appliance.

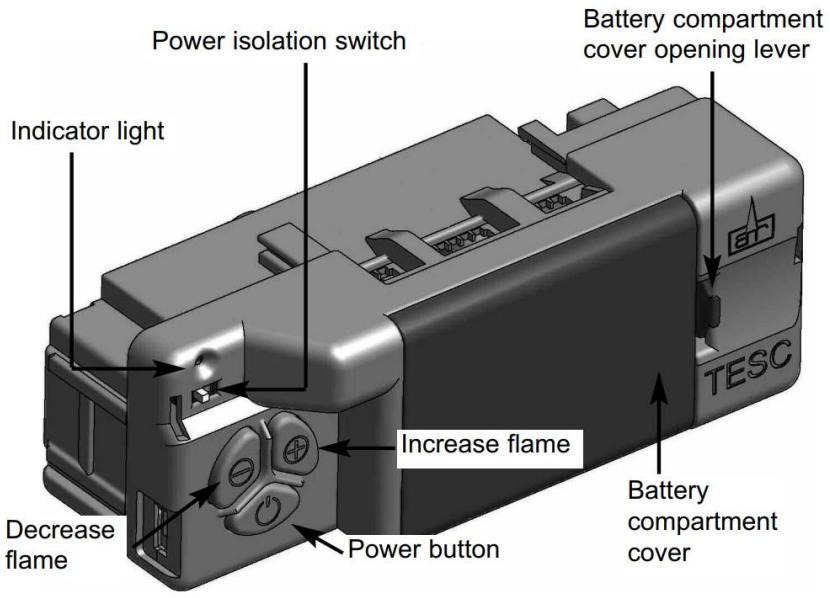
User Instructions:

The appliance is fitted with a Thermo Electric Safety Control (TESC) Valve which operates by radio frequency. This allows the appliance to be operated remotely by the handset or manually using the buttons on the TESC valve unit.

The system requires 5 AA size alkaline batteries, 2 for the handset and 3 for the main TESC Valve unit.

Lighting the Stove Manually via the Control Valve:

The TESC valve can be accessed by removing the Front Controls Cover Plate which is held in place with magnets at the base of the Stove.



- Ensure the power isolator toggle switch on the front of TESC Valve is in the on-position (I).
- To operate the fire press and hold the “power” button as shown above for two seconds, release as soon as the red indicator light illuminates. The burner will then start its ignition sequence and light to the maximum heat input level. **For most efficient performance leave the Stove on high when lighting from cold for ten minutes.**
- To reduce the heat input, press and release the (-) button to lower the heat input level one step at a time. Pressing the (-) button continuously will move the heat input level to the minimum.
- To increase the heat input level, press then release the (+) button to increase the heat input level one step at a time. Pressing the (+) button continuously will move the heat input level to the maximum.
- To turn the Stove off, press the power button and the burner will stop.

If you are not intending to use the Stove for a long period (i.e. over the summer months) the battery life can be extended by sliding the power isolator switch on the Control Valve to the left (to the “0” position away from the “1” position)

Handset:

The time & day settings will need to be applied when the handset is first powered on during installation (see page 14).

To operate activate the handset, it must be held in your hand so always ensure you have a good grip around the handset, grip it like a firm handshake to unlock its functions. The green unlock light will illuminate to show when the handset is unlocked and ready to accept commands. This operation must be performed each time you want to operate the handset.

For safety reasons a button must be pressed and released for the command to be recognised. Keeping hold of a button when pressing (unless otherwise instructed) will not be recognized as a command.

Lighting the Stove remotely via the Handset:

- Unlock the handset by holding it. The green unlock light will illuminate. Keep the handset held to keep the control unlocked, enabling operation of the buttons.
- With the other hand press the power button for about 3 seconds. A short acoustic beep will be heard and the unlock light on will flash, the word “PILOT” will appear at the bottom left-hand corner of the display screen. At this point release the power button.
- The Stove should be lit within a few seconds, if it fails to light allow to complete all (3) automatic ignition cycles then repeat the process. DO NOT INTERRUPT THE START SEQUENCE, AS THIS WILL INDUCE AN ERROR.
- If this appliance is extinguished, on purpose or other, no attempt to relight should be made within 3 minutes until OFF is solidly displayed (not flashing) on the handset.

Adjusting the Flame Height:

- Unlock the handset by holding it.
- Press the “+” button to increase the flame height, press the “–” button to decrease the flame height. Individual presses of either button will increase/decrease flame step-wise, holding the button will skip through the steps.

Turning off Appliance:

- Unlock the handset by holding it.
- Press and release the power button, this will turn off both the main burner and pilot burner.

Restarting the Appliance:

If the fire is extinguished or goes out in use, allow 5 minutes (ensure OFF is solidly displayed on the handset) before attempting to restart following the lighting sequence.

If the fire shuts itself off repeatedly, do not use the fire, and have the flue and fire checked by a suitably qualified person (Gas safe).

If the appliance is not lit after full (e.g. 4 tries of 3 automatic cycles = 12 spark sequences) ignition attempts, call the installer.

Switch off the TESC Valve or remove batteries in case of malfunctions and/or poor operation and warn the installer.

The appliance is designed to display a fault code on the handset in the event of a functional failure, this can be identified in the Error code section which assists the engineer in the direction of investigation and a starting point for attempted resolution. (see Page 19)

Additional Control Functions:

The remote control can also be used to set several additional functions:

- Time and day of the week
- Temperature display in degrees Celsius or Fahrenheit
- Snooze mode
- Thermostat function

Setting the Time:

Enter the SETUP menu. Hold the handset to unlock the keypad and keep held throughout the following steps.

Press and hold SET for several seconds PROG will appear in the top left corner of the display. The thermometer symbol in the top center will flash. Press and release the “mode” button several times until the word “SETUP” appears flashing in the top right corner of the display.
Press and release “set” again to enter the “SETUP” menu.

Here you can change the clock from 12 hour or 24-hour format, the day of the week, hour of the day, minute of the day and the display in Celsius or Fahrenheit.

To navigate through the menu “SET” moves to the next parameter and “Mode” move back to the previous parameter. “+” and “- “change the displayed parameter.

Setting the Display for 12- or 24-Hour Display:

The H indicates that it is time to set the timer to either 24-hour display or 12-Hour (AM or PM) display. Press the “+” or “–” button on the handset to toggle between the two settings. When you are ready to confirm the setting, press the “SET” button to progress to set the day of the week.

Setting the Day of the Week:

Press and release the handset “+” and “–” buttons until the correct day of the week is shown on the display.

(Mo = Monday, Tu =Tuesday, We = Wednesday, Th =Thursday, Fr = Friday, Sa = Saturday and Su = Sunday).

Press “SET” to accept the day of the week and progress to setting the Hour of the day.
Note: Whilst doing this setup pressing “SET” advances to the next display and pressing “MODE” will return you to the previous display setting.

Setting the Hour:

Press and release the handset “+” or “–” button to change the hour to the correct hour and press set to store and to move to setting the minute.
Repeat this to set the minutes.

Setting the Temperature Display to Celsius or Fahrenheit:

Press and release the "+" or "-" button to toggle between °C and °F. When the display shows the desired symbol, press, and release the "SET" button to store.
As the important settings above have now been done, press and hold for a few seconds the "SET" button for a few seconds and this will exit the setup menu.

Snooze Mode:

Snooze mode is a period you can set which will turn off the fire after a certain time period has elapsed. This function can be utilized during both the manual and thermostatic modes.

The snooze time period can be set before or during manual operation of the fire. Hold the handset to unlock as described previously and press the mode button as many times as necessary until the word MAN and the Zzz symbols are flashing at the top of the display. Press and release the set button and this will put the control into Manual snooze mode.

The default time period for the snooze time period is 1:00 hour. Pressing the set button again will show you the snooze time period remaining. This can be adjusted by pressing the "+" or "- "buttons. The timer period that can be set is from 1 minute to 24:00 hours.

After adjusting the time, press set again to enter the time setting required (or if left for a few seconds this time is now stored and used).
Once this countdown timer has reached zero the fire will turn off.

Thermostatic Mode:

The handset has within it a thermostat sensor, and this can be set so the fire will heat the room to match the temperature set in the handset.

There are 2 temperature types that can be set:

Day mode temperature that has a sun symbol on the display the default temperature is 24 °C.

Night temperature that has a half-moon symbol on the display, the default temperature setting is 18 °C.

Hold handset and press and release the mode button several times as necessary until the display has a thermometer symbol flashing at the top of the display. Press the set button to enter this mode.

Press the set button again to see the temperature setting that is set and the mode and on the left of the display is a sun symbol showing it's the day temperature.

If a different set temperature is required, while the display is showing this set temperature press the "+" and "–" buttons to alter the setting. When finished either press set or leave and after a few seconds the new setting will be accepted, and the display will return to the time-of-day screen.

The fire will automatically turn to high or low rate depending on the set temperature. When the set temperature is reached while the fire is in operation, the fire reduces the burner power level each minute until the burner is at its lowest setting. TESC does not have an unattended/ automatic start configuration.

The valve will never go to the PILOT only, the lowest level is BURNER MIN (factory set). Temperature regulation will NEVER start the burner, and NEVER automatically turn off the burner.
If BURNER MIN is still increasing the temperature, or maintained temperature remains too high, a manual STOP command is required.

NOTE: If at any time the power button is operated during Thermostat mode, the control will cancel any thermostat operation and return the control to manual mode.

How do you know when to replace the batteries?

- The display handset will show a low/empty battery symbol on the screen and produce an audible tone.
- The non-display handset will show a blinking red light (approx. every 10 seconds) and produce an audible tone.
- The red indicator light on the valve flashes (approx. every 10 seconds).
- The red indicator light on the panel switch control (if fitted) flashes (approx. every 10 seconds).

What happens if I do not replace the batteries?

- The Stove will stop working, or will only work intermittently.
- The handset (or valve) may give error codes, which may or may not be correct.
- The batteries may leak and cause permanent, irreversible damage to the electronics meaning a replacement item must be sought (not covered by warranty).

How to replace the batteries:

- The controls consist of a handset and a gas TESC valve, within the fire, which both run on batteries.
- The handset requires 2 x AA batteries.
- The TESC valve requires 3 x AA batteries. This can be accessed by removing the front controls cover plate which is held in place with magnets on the base of the Stove.
- The battery covers can be opened and removed without tools by pressing the tab down and pulling the cover towards you.
- Do not operate the Stove without the battery covers fully in place.
- If the handset is dropped and damaged, obtain a replacement (see spares section)

Note: Only use new, high quality, alkaline batteries (For best performance BFM Europe recommends the use of Energizer batteries with its products). Always replace the complete set of batteries and do not mix brands. Keep contacts clean and do not bend spring clips.

When removing and replacing batteries, ensure not to bend or displace battery contacts. The batteries should be held firmly in place by the metal contacts. It is important to ensure contacts are clean, dry, and free from any contaminants or surface damage. Pay close attention to the orientation markings on batteries and equipment to ensure correct fitment.

Frequently Asked Questions

What should I do if my fire does not light or stay lit?

- Check if gas supply is on.
- If the fire is hot, wait for the fire to cool down.
- If your fire has a remote handset, put the handset to one side and access the gas valve in the fire (check user instructions for details on how to do this).
- Remove battery cover from valve and check batteries are ok, with no leaks visible, or any other contamination present. If in doubt replace (refer to Page 17).
- When replacing batteries, ensure contacts are clean, dry, and free from any contaminants or surface damage. Be careful not to bend or displace contacts.
- Ensure batteries are fitted in the correct orientation.
- Replace the battery cover on the valve.
- Check ceramic logs, Embaglow etc. are in correct place and in good condition.
- Perform any general cleaning of the fire as recommended by manufacturer's user instructions, particularly around the pilot assembly.
- Correctly replace any part of the fire that was removed to allow access to the valve.
- If the red light on the valve is lit, reset by pressing on/off button briefly (light should go out).
- Start the fire using buttons on the Control Valve.
- If fire does not light normally, wait until red light on valve indicates error or lockout. **NOTE**: the valve may make several attempts to start the fire, this may take some minutes. **DO NOT** interrupt the valve while it completes this process.

What is the meaning of the red indicator on the Valve?

Red Indicator Status	**Meaning**
Permanently lit	Unsuccessful ignition sequence – valve in lockout (E00)
Flashing rapidly	valve busy (will not accept any command)
Flashing (approx once a second)	error detected
Flashing (approx once every 10 seconds)	low battery (valve)
Flashing (approx twice every 10 seconds) [handset only]	low battery (handset)
Flashing (approx three every 10 seconds) [handset only]	low battery (Handset & valve)
Permanently off	standby OR stable operation
On momentarily after power up	valve self-test
Appears after pressing start	release start button

If the fire still does not function correctly:

- Double check all the above, in particular that the batteries are good, mounted correctly, and all contacts are clean and sturdy.
- If the manufacturer's user instruction manual details cleaning of the pilot, follow these
- instructions carefully.
- Reset the valve as above.
- Attempt to restart the valve several times.

If the fire still does not function correctly, you may need assistance from a Gas Safe Service Engineer.

If **NO LIGHT** is present on handset:

- Check the batteries in the handset are good, mounted correctly and firmly, and there is no contamination or surface damage to the contacts.
- Clean and replace batteries as necessary.
- NOTE: If the battery contacts are contaminated (e.g. previous battery leakage) the handset may be permanently and irreversibly damaged, meaning a new handset may need to be purchased.

If the green indicator light is flashing like a heartbeat, the handset is not communicating with the valve (on the display handset the communication symbol will be missing)

Communication can be lost for various reasons including, but not limited to: -

- The slide switch on the valve is not in **ON** (I) position.
- The batteries in the valve being low on power, or out of power.
- The handset being too far from the fire.

If all of the above are all in order and the handset is still flashing, pairing with the valve may have been lost. The handset will need to be reset, and a new pairing with the valve established.

Restoring Communication (Pairing) with a Handset:

If the handset has lost communication with the control valve, when activated the handset will display a constant green light which pulses brighter periodically, and the symbol will be missing from the display.

For detailed instructions on how to reset and pair your handset please visit our Support website at

https://www.bfm-europe.com/Catalogue/Support/Remote-Control-System-Tesc

or Scan the QR code below

Cleaning and Maintenance:

It is recommended that this gas appliance is serviced every year by a registered Gas Safe Engineer. The chimney or flue should also be checked regularly to ensure that all products of combustion are entering the flue and there is no excessive build-up of soot. Excessive build-up can affect the operation of the appliance. It is the user's responsibility to ensure that the appliance is kept in a clean serviceable condition.

Before performing any cleaning or maintenance, always ensure the appliance is cold

Cleaning the Stove Body:

The metal painted parts should only be cleaned using a clean, damp cloth. Abrasive cleaners, chemical cleaning agents or any type of polish must never be used as damage to the finish may result.

Cleaning the Fuel-Bed:

We do not recommend cleaning of logs or fuelbed components as these are fragile and damage may result. None of these parts must be washed or exposed to any cleaning agents or water. Any damaged parts must be replaced by contacting your dealer or telephoning BFM Europe on the number stated on the rear cover of this book. Logs must only be replaced with a complete and genuine replacement set and the fire must never be run with the wrong number or damaged logs. The fuelbed must be carefully re-assembled as stated in the following section. Ensure the pilot is clear of any restriction or debris.

NOTE: It is common to find surface cracks in the ceramic components due to the expansion and contraction of the ceramic fibres caused by the intense heat that the burner generates. This will not affect the safe operation of this appliance, but extra care should be taken as they will break if handled incorrectly. Do not use a vacuum cleaner to clean the ceramics.

Cleaning the Glass Panel:

To clean the glass panel the rear of the glass, please remove it from the product. Use a clean damp cloth and ceramic glass cleaner to remove any stains or deposits from the glass panel. Do not using scouring pads as this may scratch the surface finish of the glass panel.

PLEASE NOTE :- The glass will require cleaning periodically. Condensation produced by the products of combustion will create marks on the inside face of the glass panel.

Gas Engineer Servicing Information

Important information for installers:

THE INFORMATION CONTAINED IN THIS SECTION IS FOR EXCLUSIVE USE OF QUALIFIED AND APPROVED SERVICE PERSONNEL.

- The handset is supplied already paired to the valve by the fire manufacturer. DO NOT alter pairing.
- The handset is consciously designed to minimise the risk of accidental operation and can therefore take a little time to learn to use comfortably.
- Please read 'The handset' section (Page 12) and explain to the customer to ensure understanding of the use of the handset.
- There are companion videos available on YouTube (search: TESC Gas Control)
- If pairing has been inadvertently altered the handset will not work, it will need a factory reset – follow the link to our support website on Page 19.

Most Common Causes for Faults:

- Batteries need replacing; For best performance BFM Europe recommends the use of Energizer Alkaline batteries with its products.
- Batteries mounted incorrectly.
- Contamination of battery contacts (clean where possible, replace valve/handset if necessary).
- Contamination of pilot.
- Contamination of valve internals from gas pipe particles.
- Faulty gas supply.
- Faulty thermocouple or connections.
- Contamination of gas supply.

System Operation Explanation:

The gas control valve is one component, containing the gas valve, control electronics, ignition unit, and battery box. It is a full sequential ignition system (with no standing pilot).

It utilizes both conventional thermoelectric thermocouple, and electronic flame sensing for its operation.

The ignition phase (first 15 seconds) operates with the thermocouple excluded from the circuit, subsequently the thermocouple holds the valve magnet open, as per a conventional system. (If the burner stays lit only for this duration, it is a sign of no thermocouple current, or insufficient thermocouple current reaching the valve).

The electronic flame sensing device is in constant operation whilst the valve is in operation.

It is important that the pilot flame is always in good order, both the thermocouple tip and electrode tip are immersed within the pilot flame, and the ignition cable is undamaged & well connected to the valve.

The handset is not essential for operation, it is a wireless interface, it is not the control.

When problem solving it is important to check operation using the buttons on the control valve itself, this should be done in the first case, **DO NOT** rely on the handset.

ASSESSMENT:

Ensure the fire is cool before commencing any work.

Ensure batteries are new, mounted correctly, and connections are good.

Start with the valve in standby position – slide switch in **ON** (I) position, red light on valve off, and fire burner also off.

Press the power button, marked ⏻, and hold for approx. 1 second, or until the red LED lights up, then release. This should start the ignition sequence, and within a few seconds a repetitive spark should be produced at the electrode.

The fire may make up to 3 automatic attempts to ignite. Each ignition cycle takes 15-30 seconds, with a pause of approx. 10 seconds between each cycle. Multiple attempts **DOES NOT** signify that there is a fault, each fire and installation is unique and may account for this.

If the fire fails to ignite after 3 automatic cycles, the red light on the valve will stay permanently lit, indicating valve lockout. A connected display handset will also return the error code E00. To reset the lockout, press the power button to return the valve to standby, and try the normal start-up process again.

If the problem persists, and valve repeatedly goes to lockout, refer to the cleaning and maintenance section. It is possible that the oxypliot has become contaminated with debris and requires cleaning to restore normal operation.

If the fire does not light and/or…

- There is an error code EXX (where XX is a two-digit number) displayed on the handset.
- The red LED on the valve is flashing like a heartbeat.
- The display handset shows a low battery.

…check the error codes section on Page 22 for further information.

Error codes:

Error codes are produced to assist diagnosis of why the fire cannot/will not start. They appear if the control detects abnormal conditions with the fire, environment, installation, components, or internal electronics.

Even if a display handset is not connected, checking for the below faults is still valid. The illuminated red LED on the valve body shows the valve is in error state.

NOTE: To reset any error, press the power button, marked ⏻ on the valve. False errors can be reported if the batteries are faulty or low on power.

E00
This is the only code where the red indicator LED remains permanently lit without flashing. (n.b. the LED may dim to conserve battery power but remains illuminated).
E00 occurs when fire fails to light after all automatic ignition cycles are complete. It is a sign that the electromagnet within the valve has not received enough power from the thermocouple at the end of the ignition cycle. The main burner may light for 15-30 seconds but then extinguish.
Possible reasons: - • Thermocouple is not heated or being heated too slowly.
• No gas to pilot or main burner. • No gas supply, or supply blocked through contamination. • Pilot pipe blocked between valve and pilot. • Pilot injector blocked. • Pilot head damaged or contaminated. • Fire ceramic misplaced causing carbon deposits to contaminate pilots. • Pilot air inlet hole blocked by lint. • No spark at electrode – tracking out somewhere – check for damaged insulation, distance of spark gap, electrode damage, ceramic damage, dirt or soot on electrode. • Flame not touching spark electrode (electrode needs to be in the flame so that valve can sense flame through electrode as well as thermocouple). • Flame signal shorted out (this can occur if any liquids e.g. leak detection spray has contaminated pilot terminals connection). • Spark cable is open circuit (spark may still be present due to ability to jump gaps, but if there is a break in cable, or terminal connection is not good, valve will not receive sensing current – pilot may also light but then continue to spark). • Thermocouple aged or damaged and not producing enough output. • Thermocouple insulation wire is damaged, electrical current shorting (e.g. to body).
NOTE: If stop is pressed during ignition cycle, E00 may also be generated. This is normal, and not a failure condition.
THE VALVE CAN ATTEMPT TO SELF FIX ISSUES – When an E00 code has been displayed an internal recalibration is initiated to attempt to compensate for possible deviations due to contamination, ageing, etc. If the fire does not light on the first ignition cycle, allow the valve to complete the automatic recycling to enable the valve to progress to E00 to recalibrate. Reset error and try again.

E01

Indicates that there is a possibility that the level of CO in ambient atmosphere is too high.

This error will usually be generated when there has been a good electronic flame signal, and the temperature of the thermocouple was hot enough, but has since become cooler.

Possible reasons: -

- Problems with chimney, or room, air inlets (insufficient air circulation).
- Unstable pilot flame (e.g. wind, unsuitable thermocouple position).
- Contaminated pilot (poor flame to thermocouple).
- Poor position of ceramic parts (e.g. coal, logs, or matrix).
- Intermittent failure in thermocouple when hot (inner wire in head perhaps making contact when cold, but not when hot).

E02

It indicates that the ambient temperature around the gas control valve within the fire has exceeded 72°C.

NOTE: This error protects the fireplace and valve from excessive temperatures.

Possible reasons: -

- Faulty installation of the fire (not sealed correctly in fire opening).
- Problems with the chimney (insufficient air circulation).
- Poor position of ceramic parts (e.g. coals, logs, or matrix)

NOTE: Batteries do not tolerate high ambient temperatures, eventually this may cause leaking which could damage the valve, meaning a new valve required (not covered under any warranty). Typically, the maximum ambient temperature for alkaline batteries is 50°C.

E03

Indicates there is an issue with the thermocouple connection to the valve, or that there is an incorrect reading from the thermocouple.

Possible reasons: -

- No thermocouple connected.
- Thermocouple connection reversed/incorrect.
- Insulated thermocouple wire shorting to chassis earth (damaged insulation).
- Damaged, defective, or worn-out thermocouple.

E04

Indicates a flame is detected on pilot **after** valve has shutdown.

Possible reasons: -

- Carbon or other conductive contamination on spark electrode.
- Combustible material burning on pilot near electrode (carbon deposits etc.).
- If EASYTEST box used – simulate flame mode not operated correctly.

E05

Indicates a flame is detected on pilot **before** valve has started.

Possible reasons: -

- Carbon or other conductive contamination on spark electrode.
- Combustible material burning on pilot near electrode (carbon deposits etc.).
- If EASYTEST box used – simulate flame mode not operated correctly.

E06 & E07

Indicates supply voltage is too low to operate valve.

Possible reasons: -

- Batteries are completely flat (random error codes may also be displayed in this case).
- Damaged battery contacts (dirty, corroded, bent – not making strong stable connections).
- Short circuit in external wiring or connected accessories.
- Defective mains power supply (if used) or damaged wiring.
- Problem with internal contacts of slide switch (sliding on/off multiple times may clear this issue).
- Batteries mounted incorrectly.

E08, E09, E10, E51

Indicates a device connected to TESC extension socket does not work correctly.

Possible reasons: -

- If nothing connected – are links missing, in wrong position, or connected badly?
- Failure in extension module connected to extension port.

NOTE: A short circuit within the TTB is not detectable by TESC. Short Circuit to ground will damage TESC irreversibly and is not covered by warranty.

E14, E15, E16, E17

Indicates buttons on valve (or wired control panel) do not work or are incorrectly wired.

Possible reasons: -

- Buttons are sticking or blocked.
- Buttons are damaged.
- Cable damaged, or short circuit to ground (wired control panel).

NOTE: Disconnect wired panel (if applicable) and re-test to determine root cause.

E19, E20, E27, E50, E54, E57, E58, E59, E60, E61

Indicates internal CPU diagnostic self-test has returned invalid results.

Possible reasons: -

- EMC issue (try twisting ignition cable around thermocouple wire several times to quench radiated EMC emissions).
- Spark tracking out somewhere other than at electrode causing unusual interference.

E24

Indicates the thermocouple has not reached nominal final temperature within 1 minute of startup.

Possible reasons: -

- Aged thermocouple.
- Thermocouple wire insulation is damaged and shorting to metal chassis.
- Problems with chimney, room, air inlets (insufficient air circulation).
- Unstable pilot flame (e.g. wind, unsuitable thermocouple position).
- Contaminated pilot (poor flame to thermocouple).
- Poor position of ceramic parts (e.g. coals, logs, or matrix).

E33, E34, E35, E36, E37, E38, E39, E40, E41, E42

Indicates internal piston is not moving freely.

Possible reasons: -

- Contamination of valve inlet/outlet with debris from supply pipe or other.
- Mechanical damage of valve.

NOTE: After cleaning and before resetting error codes, ensure the fire has been allowed to fully cool. Upon starting the valve will reinitialize and perform a re-calibration. The valve **MUST** be cold to perform this task.

NOTE: If the valve needs to be replaced, ensure to check pipework for contamination prior to fitting new valve to help avoid repeated problems.

E32, E43, E46, E47, E52, E53, E55, E56, E62

Indicates self-test procedure of valve electronics has failed.

Possible reasons: -

- Completely flat batteries.
- Liquid ingress affecting electronics (e.g. following leak test with soapy water).

E48

Indicates that the control has detected a short circuit of the thermocouple.

Possible reasons: -

- Thermocouple connection reversed/incorrect.
- Insulated thermocouple wire shorting to chassis earth (damaged insulation).
- Damaged, defective, or worn-out thermocouple.
- Weak connection from thermocouple to valve.

E49
Indicates valve has detected a false flame signal on electrode.
Possible reasons: - • Contamination of the electrode with carbon deposits, conductive liquids (leak detection spray), or similar. • Contamination of thermocouple/valve connection with conductive liquids (leak detection spray), or similar.
NOTE: It is critical to avoid leak detection fluid making contact with any part of the valve other than the threaded pipe connections. Leak detection fluids are highly corrosive and will damage any electronics with which they make contact. Other forms of leak detection should be used where possible

Replacement Spare Parts:

All spare parts are available to purchase online from our website www.bfm-europe.com

Spare Parts List		
No.	**Description**	**Part Number**
1 & 2	Side panel (Common)	1212-1045122EC
3	Rear black glass	B-1046323
4	Gas injector	B-1046328
5	Gas TESC control valve	1212-1046406
6	Remote handset	B-168970
7	Clear front door glass	B-1046322
8	EmberGlow wire	B-120070
9	Thermal Trip Breaker (TTB)	B-1046329
10	Complete Log set	B-1044105
11	TTB connection cable	B-1046330
12	Gas oxypilot	B-1046404
13	Tube Burner (not illustrated)	B-1040454
14	3mm Rope Seal (not illustrated)	B-1046325

Warranty Information:

The warranty must be registered within **30 days of installation**. For full details and conditions of your warranty see the included Portway Gas Stove Warranty leaflet.

Additionally, your Stove is also fitted with Skantag™. This is a new leading platform connecting manufacturers, installers, service engineers, governing bodies, and the homeowner. Just by scanning your QR code you can access the digital passport, storing all important information in one secure place. It means no hassle with paperwork, and no need to download apps, just simply scan the QR code or tap. Our easily accessible digital platform is used by manufacturers, installers, and homeowners. Stay connected with Skantag™

It is important that this appliance is serviced at least once a year by a GAS SAFE Registered engineer. During the annual service, replacement of the pilot must be carried out. **This is a condition of the manufacturers guarantee**.

Due to our policy of continual improvement and development the exact accuracy of illustrations and descriptions contained in this book cannot be guaranteed

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