

CRYSTAL FIRES LTD

**VALENTINES BUILDINGS
BECHERS DRIVE
AINTREE RACECOURSE BUSINESS PARK
L95AY**

CHICAGO GAS STOVE

**THIS APPLIANCE IS CATEGORY I_{2H} FOR USE
WITH NATURAL GAS AT A SUPPLY PRESSURE
OF 20 mbar**

G.B. AND I.E.

INSTALLATION & SERVICING BOOK

**THIS MANUAL MUST BE LEFT WITH THE
USER**

ISSUE 2

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1. Appliance information

Model	FLAME VIEW
Gas type	G20 (natural gas)
Supply pressure (measured at test elbow), mbar	20
Injector (x1)	Stereomatic 500
Oxypilot type	ERTA-PG-82-330 A14
Nominal Heat Input (Qn), kW (Gross)-Maximum Rate	5.1
Gas consumption at max rate (m ³ /H)	0.526
Minimum heat input Kw (Gross)	2.9
Gas consumption at minimum rate (m ³ /H)	0.300
Gas connection	8mm compression
Remote gas valve	TESCO1 RF868-15
Countries of Destination	GB and IE
Efficiency class	C
NOX	130 mg/kWH

The stove is a very heavy appliance and care must be used when lifting and moving, we recommend 2 people lift following lifting guidelines
Preferably wear gloves when lifting

1. Conditions of installation

Before installation, check that the local distribution conditions, nature of the gas and pressure, and adjustment of the appliance compatible.

It is the law that only a competent person installs all gas appliances i.e. a gas registered installer in accordance with the current edition of the gas safety (installation and use) regulations or the rules in force . failure to do so could lead to prosecution

The installer must be gas safe registered

The installation must also be in accordance with all relevant parts of the local and national buildings regulations where appropriate, the building regulations (Scotland consolidation) issued by the Scottish development department, and all applicable requirements of the following standard codes of practice:

1. BS 5871 part 1
2. BS 6891 installation of gas pipework
3. BS 5440 parts 1 & 2 installation of flues and ventilation
4. BS 8303 installation of domestic heating appliances
5. Is 813 domestic gas installation (republic of Ireland)

No purpose made additional ventilation is normally required for this appliance when installed in G.B. when installing in I.E. please consult document IS 813 domestic gas installation, which is issued by the national standards authority of Ireland, if installing in Northern Ireland please consult local building regulations

In Scotland, please consult the current edition of the building standards regulations, issued by the Scottish executive. Any purpose made ventilation must be checked periodically to ensure that it is free from obstruction.

1.2 Flue & chimney suitability

This appliance is designed for use with conventional brick built or lined chimneys all flues must conform to the following minimum dimensions

Minimum dimension of flues 125 mm

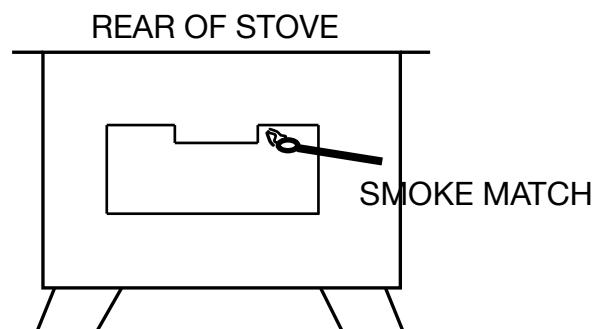
Minimum effective height of all flue types 3 metres

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

1. check that the chimney / flue only serves one fireplace and is clear of any obstruction, any dampers or register plates must be removed or securely locked in the open position
2. 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.
3. any under floor air supply to the fireplace must be completely sealed off
4. 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 / flue during and after the smoke pellet test
5. using a smoke pellet check there is an updraft in the chimney / flue and that the smoke can be seen coming from the terminal/ 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 the inside upstairs rooms adjacent to the chimney / flue

Check the chimney pot / terminal and general condition of the brickwork and masonry. if the chimney / 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

6.a spillage test must always be carried out during commissioning of this appliance



WARNING

This stove is fitted with a spillage monitoring system consisting of a thermal switch, which shuts the appliance off in the event of a blocked flue or inadequate flue pull occurring. The system shall not be adjusted by the installer or shall not be put out of action. When the spillage monitoring system is required to be replaced, only original manufacturers parts shall be used.

If the stove switches off for no apparent reason, the appliance should not be used until expert advice is obtained and the fault rectified

All surfaces, except the control valve, are working surfaces and become very hot in use. They must not be touched or any combustible materials put on them

It is recommended that a fireguard complying to BS 8423 should be fitted for protection of young children or elderly or infirm persons.

The door handle has to be removed to remove the glass allow to cool before removing this as it will become very hot and is a working surface in use

2.0 INSTALLATION

2.1 HEARTH

The stove must be installed on a non-combustible hearth with the hearth material being at least 12 mm thick the hearth must protrude at least 150 mm (6”) in front of the stove and be of a size sufficient to accommodate the stove

2.2 SITING

The stove must not be installed in a bathroom

Clearance from non-combustible material in the fireplace opening must be at least to dimensions in table below

Position	Non combustible material	Combustible material
	Distance mm	
Above	100mm	300mm
Back	50mm	300mm
Left	100mm	300mm
Right	100mm	300mm

Fitting the stove any closer to the back may cause Nuisance shutdown of the stove as the airflow may be compromised and the thermal cut off will operate

2.3 FLUE CONNECTION

The flue should be at least 3m high and at least 125 mm diameter (5”) at no point should there be any negative or horizontal gradients in the flue pipe

It is recommended that a minimum height of 600mm from the stove before any significant change of direction of the flue

2.4 VENTILATION

Ventilation should be in accordance with national regulations in the UK purpose provided ventilation is not normally required BS5871 part 1 and in IE IS813 (IE only)

2.5 GAS CONNECTION

The gas can be made by removing the glass by removing the nuts holding it in place once removed the 4 bolts holding the burner in place can be removed and access to the gas inlet elbow can be gained once the connection is made and soundness verified the burner can be replaced ensuring correct position and the bolts then replaced

2.6 Placement of the ceramic logs

The logs should be positioned as in the pictures below.

WARNING: do not change the fuel bed layout, the type or number of logs



Completely fill the burner with the mica supplied
Ensure if any spills into pilot it is removed

Do not use appliance without the mica in the burner



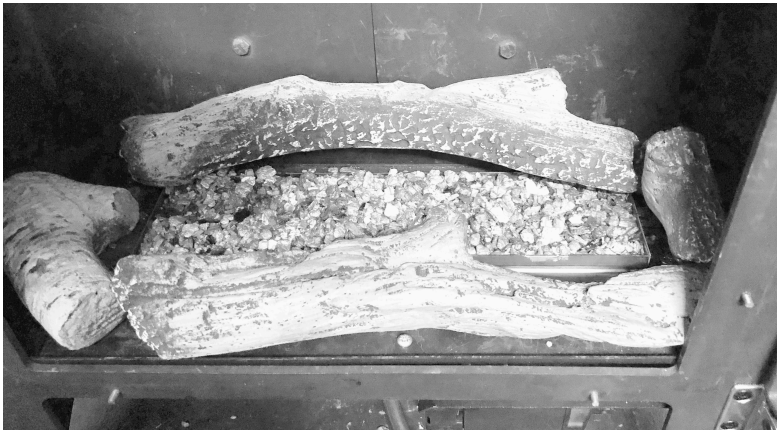
Rear log sits as shown to left fully back



Front log sits to the front as shown on left
Ensure the pilot light is visible



Left log sits as shown to left



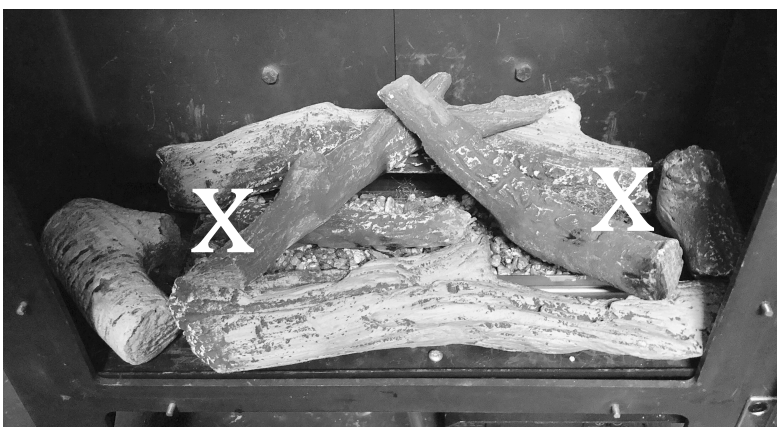
Right log sits to right as shown in picture on left



Log sits on the fuel bed and rests on front log
As shown to left



Branch log sits on front log and rear log as shown on left



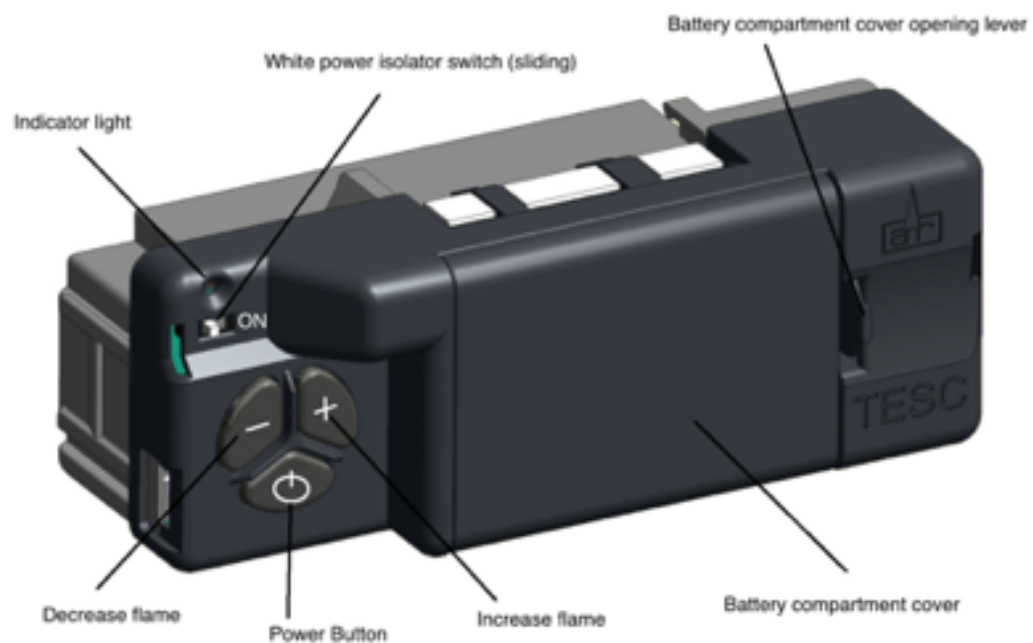
Final log sits on front log and rests on branch log as shown

Small amounts of glowing embers can be place where the flames come up show with X on picture left & small Chipping's can cover metal for decoration but **not** on the burner

2.7

OPERATING INSTRUCTIONS

Below – the gas controls, which are situated at the bottom, left of the appliance



Below – remote control handset





Replacement of batteries in TESCO1 gas control

The TESCO1 gas controls which operate the appliance are battery powered and require replacing periodically after removing the plastic front cover from the control, the batteries are fitted and positioned as shown below , always replace the plastic cover once batteries have been fitted



Replacement of batteries in handset

The handset also has batteries as shown below. It is important that the batteries are replaced at least every 12 months

The meaning (s) of the red indicator on valve and handset

Red indicator	Meaning
Permanently Lit	Valve tried to light but failed and in LOCKOUT E00
Flashing very fast	Valve is busy (will not accept any command)
Flashing once a second	Valve detects an error
Permanently off	valve in standby or in a stable operation
On momentarily after power up	valve doing a self test
Appears after pressing start	indicates time to release pressing the start button

Below information only the handset will already be paired

Pairing the handset with the gas valve

Ensure the handset and the gas fire control have good batteries inside and the batteries are facing the correct direction (as shown inside the battery compartments).

Ensure the battery contacts and compartments are clean and free from any contamination.

(The green light on the handset will flash fast when the handset is held (not steady green), which shows it is ready to accept a pairing from the gas fire control.

(NOTE: Ensure the small slide switch on the top left of the gas fire control is slid to the right (I) position).

Place the handset within a few feet of the fire (no need to hold it at the time).

On the gas fire, simultaneously press the hold the - and + buttons on the gas fire control (i.e. not the handset) unit the red light on top left of gas fire control begins to flash rapidly,(this will take about 5-8 seconds), then immediately as the red light starts to flash release the - and + buttons and quickly and press the power button that is underneath them. (Note: This button press must be done with 1 second of the red light coming on. If not done quickly enough, then the above must be repeated until done correctly).

When done correctly, you will hear an audible sound from the handset. Immediately pick up and grasp the handset as normal to unlock the key pad and then press and hold the “ set “ button for around 3 to 5 seconds.

When you hear several beeps from the handset as the pairing has been confirmed.

You know the pairing has taken as now when holding the handset the green light will be a steady green (not flashing when held).

You can now scroll through the settings of the handset adjusting by pressing + or - to adjust each setting and move on when set by pressing the set button once all set keep pressing the set button until you leave the set up menu

More information can be found at www.crystalfires.co.uk

IMPORTANT USER INFORMATION – AFTER INSTALLATION BY THE ENGINEER , READ THIS BEFORE ATTEMPTING TO OPERATE THE FIRE

NOTE: The handset is supplied paired to the Gas Control. Do not alter the pairing. The handset is designed to be not too easily operated by accident for safety reasons. If for any reason the pairing has been altered, then the handset will not work. The handset needs to be reset and paired again.



Hold the handset as shown, wrapping your hand around the handset touching both sides. In a second or less the green unlock light will illuminate, allowing the buttons to work when pushed.

(NOTE: If the green light is not a constant green or not lit at all the buttons will not be operable).



Press and hold in the power symbol button and release immediately when the word pilot comes on to the display at the bottom left as shown (about 1-2 seconds). The stove will light.

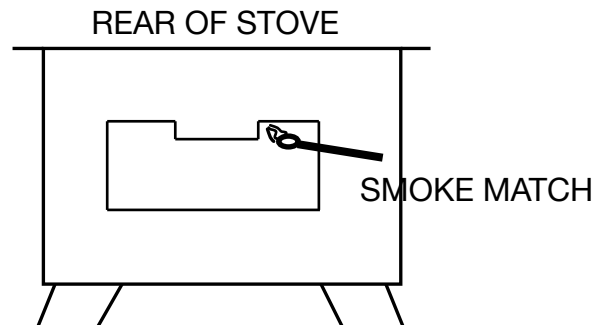
(NOTE: Releasing too soon or too long after the pilot illumination, results in the fire not lighting, this is for safety reasons).

To adjust high and low whilst holding the handset and green light on press + & - to adjust preferred setting

To Stop the stove, hold handset to unlock the buttons and then press the power button. The flame stops almost immediately.

2.8 SPILLAGE

CHECK FOR CLEARANCE OF COMBUSTION PRODUCTS
CLOSE ALL DOORS & WINDOWS IN ROOM CONTAINING APPLIANCE
TURN ON APPLIANCE AND TURN TO HIGH LEAVE RUNNING FOR 5 MINUTES AND
INSERT A LIGHTED TAPER OR SMOKE MATCH INTO THE FLUE DIVERTER AT THE REAR
OF THE APPLIANCE
ALL THE SMOKE MUST BE DRAWN INTO THE APPLIANCE
IF SPILLAGE OCCURS ALLOW A FURTHER 10 MINUTES AND RETEST
SHOULD SPILLAGE OCCUR SEEK EXPERT ADVICE
IF AN EXTRACTOR FAN IS SITUATED IN THE ROOM THE TEST SHOULD BE CARRIED
OUT WITH THE FAN RUNNING IF THERE IS A CONNECTED ROOM WITH AN
EXTRACTOR FAN THE TEST SHOULD BE REPEATED WITH THE FAN RUNNING AND ANY
INTERCONNECTING DOORS OPEN



2.9 CUSTOMER EDUCATION

Hand these instructions to the user
Advise the user until they are fully educated on the use of the stove and the controls
Explain regarding the thermal cut off feature
Advise if this system repeatedly shuts off specialist advice must be consulted
Advise that if the fire goes off for any reason do not re light for 3 minutes
Advise the stove may give off a slight smell due to the newness and any odors will go after a few hours of use
Advise that the stove must not be used with the glass panel damaged or broken or missing
Advise that no materials like washing, may not be draped over the stove
Recommend regular servicing at least annually
Recommend no extra fuel pieces are added and only authorised spares used

3.0 SERVICING INSTRUCTIONS

The stove is fitted with a spillage monitoring system consisting of a thermal switch this system is not adjustable and must not be bypassed or put out of action if any parts are replaced it must be with the original manufacturers parts used

1. Servicing must be carried out regularly and only by a qualified person, ensure the fire is turned off and cold (minimum service must be carried out annually)
2. Open the stove door by unscrewing the handle on the left fully and remove the door can now be opened or even lifted off its hinges then the nuts holding the glass can be removed and the glass panel removed
3. Remove the ceramics carefully
4. Remove any debris from the burner if necessary vacuum also clean the pilot or vacuum
5. If necessary replace pilot (for extended warranty) by removing burner and disconnect gas supply 4 screws can be removed and burner tray removed the thermal cut off switch will have to be disconnected at the rear of the fire to allow the tray to be removed it has to be lifted up on the right hand side and carefully twisted out
6. Replace burner tray and reconnect thermal switch the appliance will not work if this is not done and then replace in reverse order replace glass and stove door
7. Check the supply pressure and test for spillage
8. The flue will need sweeping periodically for safe use of the appliance

3.1 REPLACEMENT PARTS

PILOT ASSEMBLY	ERTA-PG-82-330 A14
THERMAL SWITCH	TSC-30112010AFV
THERMAL SWITCH WIRES	TTB WIRES
FUEL	LOGS
INJECTOR	STEREOMATIC 500
HANDSET	TESC DISPLAYHANDSET
VALVE	TESCO1 RF868-15

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WITH NATURAL GAS AT A SUPPLY PRESSURE
OF 20 mbar**

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USERS INSTRUCTIONS

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USER**

ISSUE 1

This stove should not be used for any other purpose than as a room heater and decorative stove, due to its newness of materials the stove may give off a slight smell for a period of time after commissioning this is quite normal and should clear within a few hours of use

The installation must be in accordance with the national regulations and must be carried by a qualified installer EG: gas safe

Under no circumstances should the stove be operated with the glass panel damaged broken or missing, all surfaces except controls are considered to be working surfaces and will get very hot during and after use ,if young children, the elderly or infirm are likely to be near the stove a suitable fireguard to BS8423 is recommended

A combustible shelf may be fitted above the stove providing the shelf protrudes less than 150 mm in front of the stove and there is 300mm clearance above the top of the stove

Curtains are not recommended above the stove

Do not drape clothes or any materials over the stove

The stove must stand on a non-combustible hearth and be at least 12mm thick and sufficient size to accommodate the stove

No purpose provided ventilation is normally required but must be in accordance with national regulations in force

The fuel should be arranged only as shown in these instructions

Should the stove extinguish for any reason do not relight for a minimum of 3 minutes

All surfaces, except the control valve are working surfaces and become very hot in use, they must not be touched or any combustible materials be put on them

It is recommended that a fireguard complying to BS 8423 should be fitted for the protection of young children or elderly or infirm persons

The door handle has to be removed to open the door and get to the glass this is also a working surface allow to cool before removing

This stove should be serviced regularly at least annually

Only replace ceramic parts or any parts of the fuel bed with parts supplied by the manufacturer for this stove do not change the fuel bed layout from the instructions supplied

The flue will need sweeping periodically

If the stove fails and the appliance goes to reset the start button will have to be held for 10 seconds to clear the remote fault

THE STOVE IS FITTED WITH A SPILLAGE MONITORING SYSTEM CONSISTING OF A THERMAL SWITCH. THIS SYSTEM IS NOT ADJUSTABLE AND MUST NOT BE PUT OUT OF ACTION & IF REQUIRED TO BE REPLACED ONLY ORIGINAL MANUFACTURERS PARTS MUST BE USED (IF THE STOVE SWITCHES OFF FOR NO APPARENT REASON THE APPLIANCE SHOULD NOT BE USED UNTIL EXPERT ADVICE IS TAKEN)

Placement of ceramic logs

The logs should be positioned as in picture below

WARNING: do not change the fuel bed layout. The type or number of logs



Completely fill the burner with the mica supplied
Ensure if any spills into pilot it is removed

Do not use appliance without the mica in the



Rear log sits as shown to left fully back



Front log sits to the front as shown on left
Ensure the pilot light is visible



Left log sits as shown to left



Right log sits to right as shown in picture on left



Log sits on the fuel bed and rests on front log
As shown to left



Branch log sits on front log and rear log as shown on left

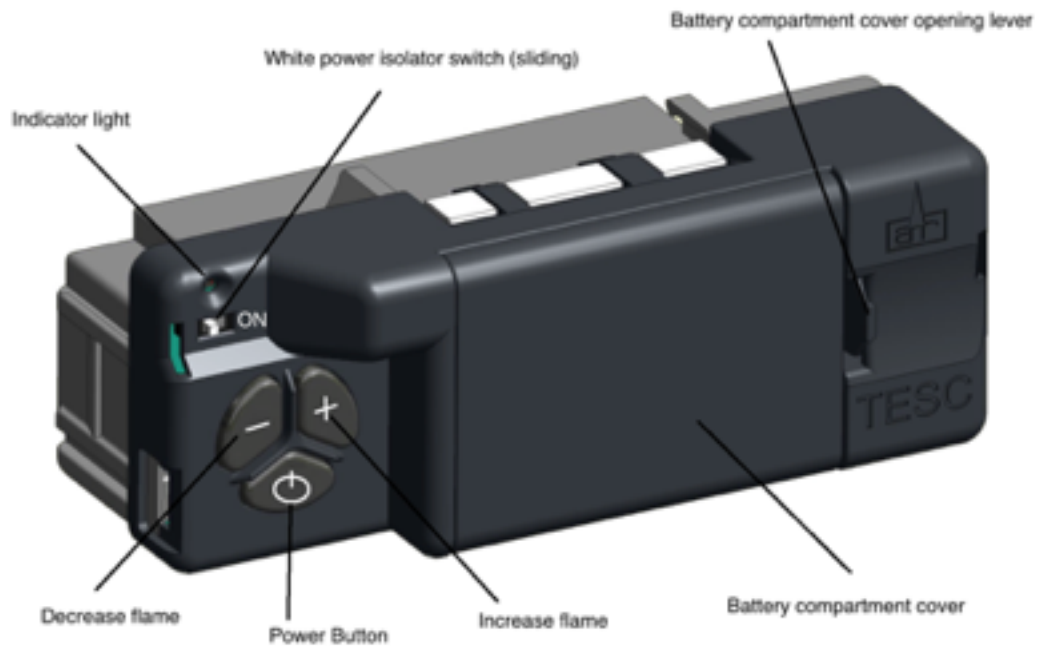


Final log sits on front log and rests on branch log as shown

Small amounts of glowing embers can be place where the flames come up show with X on picture left & small Chipping's can cover metal for decoration but not on the burner¹⁷

OPERATING INSTRUCTIONS

Below – the gas controls, which are situated at the bottom, left of the appliance



Below – remote control handset

Display handset may be supplied to assist seasonal efficiency



Replacement of batteries in TESCO1 gas control

The TESCO1 gas controls, which operate the appliance, are battery powered and require replacing periodically. After removing plastic front cover from the controls the batteries are fitted and positioned as shown below. Always replace the plastic cover once batteries have been fitted



Replacement of batteries in handset

The handset also has batteries as shown below .it is important the batteries are replaced every 12 months



What the meaning of the red indicator on valve and handset

Red indicator	Meaning
Permanently Lit	Valve tried to light but failed and in LOCKOUT E00
Flashing very fast	Valve is busy (will not accept any command)
Flashing once a second	Valve detects an error
Permanently off	valve in standby or in a stable operation
On momentarily after power up	valve doing a self test
Appears after pressing start	indicates time to release pressing the start button

Other Modes than Manual mode

Depending upon the model of Fire your handset maybe enabled to have some automatic features, namely, Thermostat mode, timed thermostat mode and snooze mode. Snooze mode can be selected to work with in conjunction with either manual or thermostatic modes.

You can switch between modes at any time with the handset unlocked by pressing and releasing mode button to toggle between modes.

Note: If at any time the power button is pressed during operation, this will stop the fire and exit any automatic mode and return the handset to manual (MAN) operation mode.

Snooze mode in manual operation

Snooze mode is a time period you can set which will turn off the fire after a certain time period has elapsed.

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 (as if you had pressed off manually, it does not recycle).

Snooze mode in Thermostatic mode

The same thing as above can be done before or during a thermostatic mode operation (see below).

Thermostatic mode for closed fires

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 3 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 the handset as shown, wrapping your hand around the handset touching both sides. In a second or less the green unlock light will illuminate, allowing the buttons to work when pushed.
(NOTE: If the green light is not a constant green or not lit at all the buttons will not be operable).**



-frost protection that has a snowflake symbol on the display – the default temperature setting is 5 C

**Press and hold in the power symbol button and release immediately when the word pilot comes on to the display at the bottom left as shown (about 1-2 seconds). The stove will light.
(NOTE: Releasing too soon or too long after the pilot illumination, results in the fire not lighting, this is for safety reasons).**

To adjust high and low whilst holding the handset and green light on press + & - to adjust preferred setting

To Stop the stove, hold handset to unlock the buttons and then press the power button. The flame stops almost immediately.

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 (the default is 24 C) 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.

On the anniversary of the set minute of the clock, the set temperature will be compared to the actual temperature displayed on the handset(i.e. the room ambient temperature around the handset). If the room temperature is higher than the set temperature the fire will not light until the room has cooled to below the set temperature. The fire would then automatically turn itself on when the room is cooler than the set temperature and down and off if necessary when it is hotter than the set temperature.

(Note- 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 off. The pilot (if fitted) will remain on for a further 30 minutes and if the set temperature is still too high , the pilot will then also extinguish. When the set temperature is higher than the actual temperature , the fire will automatically light and go to the full burner rate to reheat the room back to the set temperature.

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.

For ease of setting there are two other modes that can be selected as stated above. Night mode (moon symbol) and frost protection setting (a snow flake). These can be selected (and adjusted if necessary) by pressing set then mode while in thermostat mode. Pressing mode button toggles through from day to frost modes. The purpose of these settings is to help your fire to automatically protect you home against becoming too cold if there is a sudden change in the weather. The control must be left in the appropriate mode for this to function.

Note: As stated in an earlier section, snooze function can also be operated in conjunction with thermostat mode. The thermostat symbol and the Zzz symbol will be on together when in this mode.

Thermostat mode for open fires

This is the same as for closed fires except that :-

The fire will not ignite automatically and it will only regulate between minimum and maximum burner setting. The fire is lit manually by the remote control and then you enter thermostat mode as described above and set the temperature. When no longer requiring thermostat mode. Turn off the burner as described above and the handset returns to manual mode.

Timed thermostat mode(Closed fires Only)

This mode enables the various day, night and frost thermostat modes to be set on a program timer. The control will work as a thermostat switching between the day, night and frost temperature settings in line with the program set.

The set up of the timer will be shown by a demonstration.

To set up the timed thermostat to be at 24 C from 06:00 to 09:00 then drop to 18 C from 09:00 to 15:30 and then 24 C again from 15:30 until 23:30 and then to protect from frost a 5 C setting between 23:30 to 06:30 the next day from Monday to Friday this is what you would do:-

Hold handset to unlock – press set and hold until a beep and release. Press MODE button until the timer symbol is flashing on the top of the display – press set to enter the time mode – Mo is flashing so it is already set for Monday- press SET and release now press the + and – buttons to make the time of day read 06:00(note the steps are in 15 minutes steps) – press SET and release- press + and – to make the next symbol show a flashing sun symbol- press and release SET- as Mo is flashing press and release SET again enter the next time of 09:00- press and release SET- change the flashing sun symbol to a flashing moon symbol by pressing and releasing the + and – buttons then press and release SET again to store the moon setting (18 c)- continue this until you have entered each time and temperature change required for each day.

To put the fire into thermostat timer mode press and release the mod button until the thermostat and timer symbols are displayed on the display at the top. Press and release the “SET” button and the control will now run the timed program set up in the memory.

To adjust any time setting in the memory re enter the timer program setup mode (by pressing SET and then MODE as described above). Then press set to make the time flash. Now holding the + button advances the display to the next setting and so on throughout the program. Amend the appropriate setting and when finished do a long press of the SET button to exit the program mode.

To rest the whole timer program in the memory:-

Hold handset- press set- press mode until SETUP is flashing- press SET to enter SETUP- press SET about 8 times until CP0 is flashing on the display- use the + and – buttons to change the display to CP1 – press SET – press SET again and the display will return to standby Manual mode and the timer setting have been completely removed for the timer memory.