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WONDERFIRE INSTRUCTIONS

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LEADER IN RESTORATION BUILDING SUPPLIES

NECTRE WONDERFIRE - Remote Control

Operating, Installation and Servicing Instructions

TO THE CUSTOMER...

Congratulations on your purchase of a WONDERFIRE! This attractive and authentic looking gas log/coal fire has been designed and built with care to give a realistic fire look.

Safety First !

- The appliance is designed to simulate a wood/coal fire and as such working surfaces can become quite hot. **Do not touch them.** Always take extra care with young children or the infirm.
- A separate fireguard can be used to protect young children or the infirm.
- **DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.**
- **DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE.**
- **DO NOT SPRAY AEROSOLS IN THE VICINITY OF YOUR FIRE WHILST IT IS IN USE.**
- **DO NOT OPERATE WITH PANEL COVERS, OR GUARDS REMOVED FROM THIS APPLIANCE. DO NOT MODIFY THIS APPLIANCE**
- Primarily a decorative appliance - not certified as a space heater.
- The unit must be installed and serviced by a qualified person.
- Wash hands after handling coals and/or logs and ensure children do not handle them as the colouring may contain toxic dyes.

Caring for Your WONDERFIRE

Your WONDERFIRE has been designed for ease of use and is very easy to maintain. The fire is a sealed unit and there is no user serviceable components inside, other than the batteries.

To clean:

- **Do not** attempt to clean the unit whilst it is operating (including Pilot Light) or whilst it is hot.
- Metal surfaces; simply wipe over with a damp cloth. Do not use harsh cleaning agents or solvents.
- Ceramic Logs/coals; Lightly vacuum with a soft brush attachment.
- Pilot Light; check for lint and dust, vacuum as necessary.
- For units with a fan, check the air intake at the front of the fire is free of lint and dust, vacuum and clean as necessary.

After a number of hours of use of the Fire, there may be a slight blackening of some parts the logs/coals. This is normal and helps enhance the realistic log fire look.

If Your Fire Needs Servicing

Your Fire is reliably designed and built to a fully tested design.

If the fire has been only recently installed and fails to operate, you should call the installer to solve any problems. Check with the installer that installation has been carried out correctly, that the gas lines have been bled and gas cocks are turned on.

If the problem is not related to the installation, please call your place of purchase and let them know what model you have installed and a description of the problem. If necessary they will refer back to the manufacturer.

If after some use the appliance fails to operate, you can telephone us direct:
Pecan Engineering P/L on 08 83498332.



OPERATING INSTRUCTIONS

The WONDERFIRE has fully automatic controls and must be connected to gas and have good batteries to operate. Before trying to turn on your fire for the first time check that it has been properly installed and tested by a qualified installer.

Operating Your WONDERFIRE

Turning The Fire ON

1. Check that the gas is turned on.
2. Using the remote control; Whilst pointing the remote at the fire, depress (and hold for 3 seconds min.) the large and small round buttons (above and below the star) on the control simultaneously until the controller responds with a beep.

Or

Using the control panel press (and hold for 3 seconds min.) the first button marked with a star and round dot.

The control unit will acknowledge your action with a "beep" and begin to light the pilot light. Once the pilot light is lit and established (10 second check) the control will light the fire on High.

The burner of the fire will light with a soft blue flame. Leave the fire on HIGH and after about ten minutes the top of the flames will become more orange and the log/coins will start to glow red like a real log/coal fire.

If no flame is detected the gas is automatically turned off. If this happens the fire is reset by simply repeating the lighting instruction. Please refer to the fault finding chart if the unit fails to light and run OK.

3. If the room becomes too hot the fire can be turned down simply by pressing the Fire Low switch on the remote control or front panel. Or, turn to Pilot light only by pressing the Pilot light switch (marked STAND-BY) on the remote control or front panel.

Turning The Fire ON (when the pilot is alight)

Using the remote control or control panel press either the high or low fire buttons until the control responds with a beep.

Turning The Fire OFF

To turn the Fire off:

Press the Pilot light switch (marked STAND-BY) on the remote control or front panel. This will leave the pilot light on. (Recommended if you are going to reuse the fire in the near future).

OR

Press the ON/OFF switch (marked with a DOT) on the remote control or front panel. This will extinguish the Main Burner and Pilot Light. (Recommended if the fire is not going to be reused for some time e.g. over Summer).



Batteries:

If you are unsure if the fire has batteries to operate it, you can check by looking behind the front control panel using the instruction below. Note: having a 240V powered fan underneath the fire does not necessarily mean that the fire is also powered by 240V and hence does not use batteries.

Your Wonderfire requires 6 “AA” size batteries to operate. We recommend only good quality batteries to give reliable service. If the batteries are starting to go flat, the control unit will beep once every two seconds. If this beeping is heard whilst the unit is lighting the pilot light, the fire may still light, but the batteries must be replaced soon.

If the fire will not light, or goes out unexpectedly, replace the batteries.

To Replace the Batteries:

- **WARNING: DO NOT** attempt to replace batteries whilst the unit is hot. Allow it to cool down first if required.
- Undo the two thumb screws at each end of the front control panel and lay it down carefully so as not to strain control the wires.
- Remove the battery holder a little so as to unclip the battery clip (same as a 9v battery)
- Replace the batteries being careful to put them in the holder the right way round.
- Attach the battery clip (it will only attach one way) and place the battery holder back under the burner.
- Lift the front control panel back into position and replace the thumb screws. Note: Do not over-tighten screws and do not use a spanner or hex key.
- Note: Do not mix old and new batteries.

The Remote control hand piece requires a 9v battery, and is accessed via the hatch on the underside of the hand piece.

Battery Eliminator (240v Plug Pack):

- If you are using the Battery Eliminator (240v plug pack) instead of batteries, please ensure it is plugged in at the fire and power point and switched on.
- Warning: The Battery Eliminator plug pack **MUST NOT** be connected to the battery pack, or used to attempt to charge any batteries. Do not sort circuit output terminals.

Maintenance / Fault finding:

- It is recommended that new batteries be installed at the beginning of the heating season.
- Depending on the amount of use it is recommended that the unit be checked and serviced by a qualified gas fitter at the beginning of the heating season.
- Please refer to the fault finding table as a trouble shooting guide.
- Please refer to the section “Caring for Your Wonderfire” for user maintenance.



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Customer Fault finding:

If there is a problem that the control unit can detect it will give a repeated sequence of “beeps” that correspond to a certain problem. If you can hear “beeps” from the controller, please count them and refer to the table below for appropriate action:

Number of “beeps”	Problem	Action
2	Low battery	<p>If using batteries:</p> <ul style="list-style-type: none">• Check all batteries are in the holder the right way round.• Check that the battery clip is attached to the battery pack properly• Replace the batteries with new ones <p>If using the 240V Plug Pack:</p> <ul style="list-style-type: none">• Check that the battery clip is attached to the lead from the Plug Pack properly• Check that the cord from the Plug Pack is not damaged
3	Keyboard Failure	Check behind the control panel that the wire to the control panel is plugged in to it. (See instructions on replacing the batteries to access behind the control panel).
4	Motor Failure	There is no action a customer can take to fix this. Please contact Pecan Engineering for your nearest service technician.
5	Motor Drive Failure	There is no action a customer can take to fix this. Please contact Pecan Engineering for your nearest service technician.
6	Under voltage low battery	See “Action” for 2 “beeps”.

If no “beeps” can be heard please see refer to the table on the following page.



Customer Fault finding:

Problem	Cause	Action
Fan does not run (Where fan is fitted)	Electricity not on	Check electricity supply at power point or isolation switch is on.
No Spark at Pilot Light	Loss of power to the fire	<p>If using batteries:</p> <ul style="list-style-type: none"> • Check all batteries are in the holder the right way round. • Check that the battery clip is attached to the battery pack properly • Replace the batteries with new ones <p>If using the 240V Plug Pack:</p> <ul style="list-style-type: none"> • Check that the battery clip is attached to the lead from the Plug Pack properly • Check that the cord from the Plug Pack is not damaged
Spark at the pilot light but No ignition	No Gas to the fire.	Check that the gas to the unit has not been turned off.
	Air in line.	Attempt to start the unit a number of times to try and purge the air.
Gas ignites at pilot light but goes out after 5 to 10 seconds	Loss of power to the fire	See "No spark at Pilot Light"
	Pilot light air intake is blocked	This problem is characterized by a yellow pilot flame. When the pilot light is extinguished and cold, remove front "coal" and front control panel, then vacuum around pilot light, above and below the burner case.
Gas ignites at main burner but goes out.	Problem with the pilot light	See above problems to do with the pilot light.
	Loss of power to the fire	See "No spark at Pilot Light".
	Another gas appliance using up all the gas	See if this problem corresponds to the use of another gas appliance. Eg. Turning on the hot water which activates an instantaneous hot water system. Please contact Pecan Engineering for your nearest service technician to diagnose this.
	Front "coal" out of place	Ensure that the front "coals" are vertical. They must not lean backwards.
Flame abnormality	Dirt in jet or burner	When cold, carefully remove "coal" or "log" set and lightly vacuum the burner with a soft brush attachment.
	Logs/coals incorrectly positioned	Check set up is as per instructions.
No High / Low	Gas input pressure low because another gas appliance is using up all the gas	See: "Gas ignites at main burner but goes out".
	Front control panel or remote not working	Try another function and or the other control (front panel or remote)
Remote control not working	Remote control sensor not visible by line of sight	Check that sensor has been installed in a position that can be seen.
	Remote control sensor getting hot	Check that sensor (and its cord) has been installed in a position that is out of the way of radiant heat and is not attached to a surface that is getting hot.
	Flat battery in remote	Replace battery.



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TO THE INSTALLER...

This appliance must only be installed by an authorized person in accordance with these instructions and with the gas installation code AS5601.

If you have any questions please call us: PECAN Engineering P/L on 08 83498332

INSTALLATION INSTRUCTIONS

Preliminary

- This appliance must be installed by an Authorised person.
- This appliance must be installed in accordance with the Gas Installation Code AS5601 Clauses 5.12.13.2 to 5.12.13.5.
- This appliance must be installed in accordance with; the manufactures installation instructions, municipal Building codes, and any other relevant statutory regulations
- The Nectre Wonderfire Gas Log Fire is only to be used with the gas type specified for the unit. Please refer to the "Servicing Details" section of these instructions.
- It is recommended that a secondary guard complying with AS 2286 be installed.
- As always, ensure that loose fabrics such as curtains and furniture cannot touch the appliance. It is recommended that a fire guard be used with the appliance.
- There must be a minimum of 50mm gap between the gather and any combustible materials.
- The overall dimensions of the fire is 465mm wide (front), 325mm wide (rear) x 250mm Deep x 320mm high. (See below for minimum fire place dimensions).
- The appliance may be installed in an existing open fireplace (as a Type 1 appliance), in an existing fireplace with the Nectre fan assisted convector box (as a Type 1 appliance) or in a purpose built enclosure with the Nectre fan assisted convector (zero clearance) box (as Type 2 appliance).
- If fitting the Wonderfire with the FFB firebox, please also refer to the Instructions for the "Wonderfire FFB"

FITTING TO AN EXISTING OPEN FIREPLACE

Before installing in an existing open fireplace:

- The Wonder fire (type 1) must be installed in a fire resistive fire place with a proved draught.
- The chimney must be swept and inspected to see if it is in sound condition.
- The chimney must be a minimum area of 22 000mm² (e.g. 150x150mm if masonry or 150mm diameter if round metal flue).
- An AGA approved 150mm diameter Gas Cowl must be fitted.
- The flue or chimney of an open gas fire must be kept clear at all times. Devices which close or temporally close the flue or chimney are not permitted. (e.g. a damper must be removed or securely disabled in the fully open position.)
- If these conditions are met the chimney should usually provide satisfactory draw. In any event, the chimney and final installation must be tested for spillage into the room. This can be done by lighting a paper fire in the fireplace (before the appliance is installed) and holding a smoking twist of paper or a smoking match by the front of the fireplace. Air conditioning vents near the fireplace may also cause spillage.
- The fireplace must be at least 470mm wide (front), 325mm wide (rear) x 240mm Deep x 400mm high to suit the Type 1 burner.
- The room must have total fixed ventilation equal to the chimney / flue area.
- Refer also to "Wonderfire FFB Convector Box" instructions if fitting a Convector Box.

Fitting the unit

- The unit should be fixed to the base of the fireplace with a screw to each front corner of the burner.

Gas

- Gas connection is to a ½" BSP fitting connected to the gas regulator. This is located at the RHS of the unit. 20mm up from the base and 55mm from the front.
- Thoroughly blow out the supply pipe to clear any dust and debris.
- Ensure all connections are gas tight.
- Note: Do not bring the gas supply down the active chimney.



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Remote control sensor (if required)

The remote control sensor is located with the battery lead behind the control panel. The sensor must be moved to a suitable location to achieve a direct line of sight to the user using the remote control hand piece.

- Locate the sensor so that a direct line of sight to the remote control is available. Note: This location should not get hot or make the sensor vulnerable to damage.
- The receiving part of the sensor is the domed side.
- Fix the sensor in place appropriately with the double sided tape provided and in such a manner it can be removed with the fire for servicing if required.

Logs/coins

The WONDERFIRE has ceramic logs/coins and a burner designed to appear like a wood/coal fire.

- The unit is supplied with the ceramics assembled ready for operation.
- When the unit is unpacked check that no damage has occurred in transport.
- Carefully place the ceramic log/coal assembly on top of the burner making sure that it sits in place correctly.
- No other logs or coins should be added as this will adversely affect the performance of the fire.

Commissioning

- Once the fire is fitted and connected to the gas, test the unit's operation.
- After 10 minutes operation from cold, test for fireplace spillage, i.e. all products of combustion are entering the flue, by traversing the perimeter of the opening or canopy, using a smoke generator (E.g. a smoking twist of paper or smoke match).

SERVICING DETAILS

- The following notes are to assist a serviceman in the event of a malfunction.
- **Servicing must only be carried out by authorised personnel.**
- Spare parts and advice are available from PECAN Engineering Ph 08 8349 8332.
- See also the Fault Finding chart.

To Check Burner Pressure

- Gas consumption is 35 MJ/hr - Natural Gas ONLY.
- Test point pressures:
 - High: Natural Gas 0.50 kPa
 - Low: Natural Gas 0.35 kPa
- The burner pressure test point is next to the valve to the left at the front.
- Remove test point plug and connect manometer. Switch the gas and appliance on. Take pressure reading once unit is running and it should be within tolerance. Check both high and low settings. Turn unit and gas off, disconnect manometer and tighten test point plug.

To Make Pressure Adjustments

- The regulator adjusts the burner pressure for 'high' setting. The screw set in on the valve body adjusts the burner pressure for 'low' setting.

GAS CONTROL

- The SIT electronic gas control and valve is situated under the burner tray. To access; remove the logs/coins and disconnect the gas supply. Remove the burner and place upside down on a flat surface covered with old newspaper.
- See Installation Section for gas pressures, test points and adjustments.
- A wiring diagram is printed on to the electronic control box.

BURNER

- To access the burner remove the log/coins. The burner is glued in to the burner tray. Examine it for any damage and check the venturi at the rear for lint and dust. Carefully clean as required.
- Ensure that the main injector is located centrally with respect to the venturi.

PILOT

- The pilot is located at the front of the burner.
- The spark gap should be 2 to 3mm.
- The white wire from the pilot goes to the controller, then to the front of the valve.
- When servicing the fire, be sure to clean the air intake hole of the pilot light.

FAN (if fitted)

- To remove the fan, ensure that the fan has been unplugged from the power supply, unscrew the 4 screws holding the fan to the front of the fire box. Carefully lift the fan assembly forward.
- The fan's wiring diagram is located next to the terminal block. The fuse is a 1 amp fuse.



FAULT FINDING CHART WONDERFIRE

Fault	Cause	Remedy
Fan does not run. (Where fan is fitted)	Electricity not on. Fuse blown. Fault in wiring.	Check electricity supply. Replace fuse (check why fuse blew). Check wiring (broken wire) .
Igniter does not spark.	Spark rod at pilot light shorting. Faulty spark cable. Spark cable disconnected. Low batteries	Clean Insulator or replace If damaged. Replace (with genuine part only). Reconnect. Replace batteries with new good quality ones.
Igniter sparks but No ignition at pilot light.	No Gas. Air in line. Pilot light injector blocked.	Check supply. Purge gas line. Note: reset Igniter by pressing the on/off switch. Clear blockage or replace pilot light.
Gas ignites at Pilot light but goes out after 5 to 10 seconds.	Faulty thermocouple. Pilot light air intake blocked (yellow pilot flame) Thermocouple connection at valve loose Thermocouple connection at valve too tight Thermocouple wires shorted	Replace pilot light assembly. Clear Pilot Light air intake hole(s) Tighten with fingers, then ¼ of a turn only with a spanner. Remove connection and inspect insulator for damage. If OK, re-fit connection: Tighten with fingers, then ¼ of a turn only with a spanner. If damaged, replace Pilot light assembly Inspect wires and re-insulate wires.
Gas ignites at main burner but goes out.	Problem with the pilot light Low batteries Gas supply line too long and / or too small. Gas supply line partly blocked.	See above. Replace batteries with new good quality ones. Check gas pipe size against AGA code for the MJoule rating of appliance Clear blockage.
Flame abnormality	Incorrect Pressure Dirt in jet or burner Logs/coals positioned incorrectly.	Check gas pressures High and low. Clean jet and venturi. Check set up are as per instructions.
No High / Low	Wiring fault Gas valve High / Low not adjusted. Gas input pressure low Gas valve solenoid U/S	Check wiring for broken wires. Adjust as per instructions. Check supply pressure with the unit off and running. (see also "main burner goes out") Replace valve.

PECAN Engineering: 13 Acorn Road Dry Creek SA 5094. Ph (08) 8349 8332, F (08) 8260 6643

