

USER INSTRUCTIONS

Important Safety Notes

To obtain the best possible performance and trouble free operation from your Heater, it is important that you read these instructions carefully. Your Pool Heater has built-in safety features, which are detailed in the relevant sections of the Installation Instructions.

If it is known or suspected that a fault exists on the Heater, it **MUST NOT** be used until the fault has been corrected by a competent engineer (Trouble Shooting - Failure to Start)

It is essential that these instructions are strictly followed for safe and economic operation. Failure to observe these instructions may invalidate your right to free breakdown cover during the guarantee period.

We recommend that you keep these instructions in a place near your Heater for easy reference.

Connections

Your Heater should be connected to an electrical supply complying with the Electrical Wiring Regulations (BS7671): as well as a gas supply complying with BS6891; and an appropriate flue system.

ALWAYS SWITCH OFF THE ELECTRICAL SUPPLY before removing any of the covers for cleaning.

If any part of the Heater or its flue is modified then the guarantee will be invalidated.

Quick Start

Check the Electricity and Gas supplies to the Heater are on. If the Pool Pump is not controlled by the Heater, turn it on. Turn on the Heater by turning the Pool Temperature Control Knob clockwise to show the required Pool temperature, the Heater will fire.

If the Heater fails to light see Trouble Shooting - Failure to Start)

Summary of Controls (left to right)

Heater Pressure Gauge

Normal - **The needle should be in the area indicated as * ***

NORMAL * *, if low, re-pressurise

Flashing - The Pool Heating Demand is Met , the pool is up to temperature.

Pool Temperature Control Knob

16°C to 41°C (60°F to 106°F)

Off - There is no Pool Heating Demand , pool heating is off.

Pump - Runs Pool Pump only, if connected via heater. 'P' is indicated on Pool Temperature Display.

- **Pool +** - Setting for pool temperatures. Requested temperature is displayed when setting, actual Pool Temperature is displayed after 3 seconds.

- **Spa +** - Setting for Spa Temperatures. Required temperature is displayed when setting, actual Spa Temperature displayed after 3 seconds.

(NOTE: The Heater is delivered set to display in Fahrenheit. For a Centigrade display see the Commissioning Section Of the Instructions)

Pool Temperature Mechanical Stop

Stop – This can be used to obtain a repeatable setting and to limit maximum pool temperature. To set, loosen the screw, adjust as required and then re-tighten.

Pool Temperature Display

Display - Normally shows the actual Pool Temperature, but also displays the Setting Temperature and a Setting Dot lit whilst being adjusted. The display is also used for commissioning and diagnostic purposes.

Heating Demand LED - GREEN

(Only in use when heating system connected)

Off - There is no Heating Demand , heating is switched off.

On - There is a Heating Demand , heating is on but not yet up to temperature.

Flashing - The Heating Demand is met , heating is up to temperature.

Heating Temperature Control Knob

(Only used when heating system connected)

Off - There is no Heating Demand, heating is switched off.

Normal - Normal setting for heating, it can be adjusted lower if required.

(NOTE: Supplied set for Pool Priority. It will satisfy the Pool Temperature before supplying full Heating. To change the priority, Commissioning Section of the Installation Instructions)

Filter LED - YELLOW

On - Pool Filter Blocked - Insufficient pressure, possibly due to a blocked pool filter. The heater will not run.

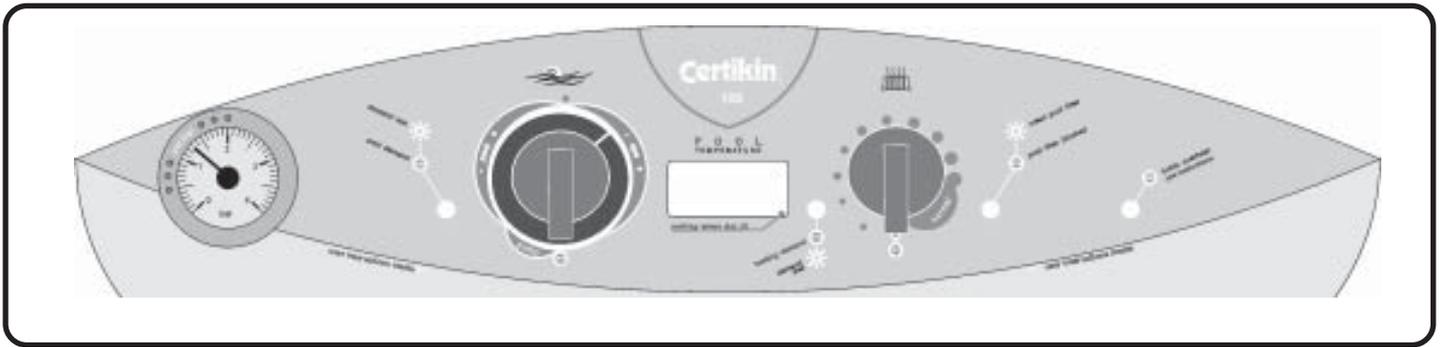
Flashing - Clean Pool Filter - The filter may require back washing. The heater will run. Can be reset by turning the Pool Temperature knob off and back on again.

Heater Overheat LED - ORANGE

On - Heater Overheat - This indicates that the Heater has overheated and shut down. See Overheat Reset instructions below.

Overheat Reset 100 Only

In the unlikely event of an Overheat it will necessary to obtain the assistance of a competent person to reset the thermostat. Turn the Mains supply off. Remove the single fixing screw holding the Electrical Chassis and pull it out, hanging it on the back support. Remove the Controls Cover and locate the Reset Switch on the side of the Control Chassis.



Turn it off then back on again.
 Replace all the panels in reverse order.
 If the Heater repeated overheats a Service Engineer should be called to inspect the Heater.

Overheat Reset - 100 Plus Model Only

In the unlikely event of an Overheat it will necessary to obtain the assistance of a competent person to reset the thermostat. The procedure is detailed in the Service Instructions
 If the Heater repeated overheats a Service Engineer should be called to inspect the Heater.

Automatic Frost Protection

The Heater will automatically run a Frost Protection routine if the temperature falls below 3°C (37°F). The Pool Temperature Display will show 0°C. This will include the use of the Pool Pump if it is connected to the Heater.

Re-Pressurising

Connect a Mains Water supply then connect the free end of the braided flexible hose (the Filling Loop) to the incoming mains connector.

Open the Valve to the supply, then, slowly open the Valve on the Side Panel until the Pressure Gauge shows 1 Bar.
 Close both valves then disconnect the Filling Loop.

Running the Pool Pump

If this option has been installed the Heater can run the Pool Pump on its own. Turn the Pool Temperature Control Knob to 'Pump', just next to Off.

Switching the Heater Off - temporarily

The Heater may be stopped by turning the Pool Temperature Control Knob and/or the Heating Temperature Control Knob to OFF on Control Panel.

Switching off for the Winter

Turn both Temperature Control Knobs to Off.
 If the built in Frost Protection is required do not isolate the Heater from its electrical supply.
 If the Heater is to be shut off for the Winter, it is advisable to have it thoroughly serviced when first shut down.
 Thorough cleaning will minimise corrosion during the idle period.

Maintenance

For normal cleaning of the outside casing, simply wipe with a

dry cloth. To remove stubborn marks and stains, wipe with a damp cloth and finish off with a dry cloth. DO NOT use abrasive cleaning materials. A spray of WD40 or similar will also help to protect it.

The Heater must be serviced every year by a qualified service engineer.

Trouble Shooting - Failure to Start

If the Heater fails to start, adopt the following procedure:-

1. Check that the Pool pump is operating and that the Filter lamp is not illuminated.
2. Check that the Heater Control Thermostat is set high enough to be "ON" and that the Pool Demand lamp is on.
3. Check whether the Heater Overheat light on the control fascia is glowing, if so it indicates an overheat situation. If the Heater repeatedly overheats a Service Engineer should be called to inspect the Heater.

Service

To ensure efficient and reliable operation of the Heater it is essential that the Heater is serviced every year.
 The Manufacturer recommends this is prior to starting the Heater each season.

Water Quality

Chemical imbalance can cause severe damage to your Heater and associated equipment.
 Maintain the pool water pH between 7.4 and 7.6 and ensure that the free chlorine levels are within the range recommended by the chemicals manufacturer for your size of pool.
 Check the Filter regularly and keep the pool free of debris such as leaves and grass cuttings.