

LCD Heater Control Panel

- The control panel offers two control modes plus a and it can monitor a variety of the heater functions.
- A custom LCD panel provides visualization of the status of the heater and five pushbuttons allow control parameters to be displayed and the three levels of settings to be adjusted.
- The unit is fully automatic initial setup can be as simple as powering-up and pressing the on-off key, marked as Φ.



Basic Operation

- There are two principal control modes **Temperature Control Mode** and **Heat** (Fuel) Pulse Control Mode.
- In the **Temperature Control Mode**, the device automatically generates the maximum heat until the set temperature is exceeded, after which the heat output will be reduced to maintain the temperature.
- In Heat Control Mode the user sets the frequency of fuel pump pulses the higher the number the more fuel is burned, the more heat is generated. The heater will adjust the fan speed automatically to maintain an acceptable outlet temperature
- To select between these modes, press the "settings" and "up" keys together.
- If you see P- and some numbers than you have selected Heat Control mode. Press the same two keys again to return to Temperature mode.
- In Heat Control mode, you will see a P and a number, which is the pump pulse frequency. (Hz – Herts, pulses per second). Each pulse delivers a fixed amount of fuel to the burner – more pulses give more fuel of course.
- Temperature setting OR Fuel Pulse frequency can be changed using the arrow keys (top and bottom right-hand side) depending on which mode is currently in use. Changes are actioned immediately.



Display Function

- The OK button cycles the display through:
 - Time
 - Ambient Temperature
 - Target Temperature
 - Supply Voltage
 - Fault History



Remote Keyfob Pairing (optional)

- A compatible remote keyfob may be matched to the controller using this simple procedure:
- Press ^ and then OK. Hold down for 3 seconds until the display shows HFA
- Press any button of the remote control and observe the blue communication symbol on the display
- On successful pairing the unit will restart
- The remote unit keys will activate ON and OFF





Settings

- The "settings" button gives access further levels of settings.
- The OK key scrolls through:
 - 1. Time of Day (clockface)
 - 2. Timer Operation (ON/OFF)
 - 3. Advanced Settings



1) Time of Day

- To set time of day, pause at the clockface and press the OK key (lower left).
- Note the first time-digit is flashing.
- Press arrow keys to select the correct number, then OK to move to the next digit.
- Repeat this until the display shows the correct
 24h time. 12h display is not supported.
- After the final setting, the selection will move on to the Timer Settings (alarm clock symbol).



2) Timer Operation

- This device supports two timer-settings, each of which has an on and off time.
- Enable the first timer by using the arrow keys to change "1 oF" to "1 on", press ok
- It will appear "08:00". Set the ON time using arrow keys and OK digit-by-digit
- Press "OK" once more to confirm the ON settings
- In the sequence, set the OFF time.
- If using two timers, repeat the above by changing "2 oF" to "2 on".
- Press the "setting" button twice to exit the timer mode.
- Examples below:
- Example 1) no timer:
- **1-OF** -> **2-OF** -> (next setting)
- Example 2) Using only timer 1:
- **1-ON** -> **HH-MM** (on-1) -> **HH-MM** (off-1) -> **2-OF** -> (next setting)
- Example 3) Using timer 1 and 2:
- 1-ON -> HH-MM (on-1) -> HH-MM (off-1) -> 2-ON -> HH-MM (on-2) -> HH-MM (off-2) -> (next setting)
- On exiting this setting, the alarm clock will be lit showing that a timer setting is active. Settings will reset after each operation. You can't, therefore, set a repeating on-time each day.



3) Advanced Settings

- The advanced settings control the operating parameters of the heater (as opposed to the user requirements)
- Access to the advanced settings are protected by a 4-digit PIN code
- Please do not attempt to change the advanced settings without knowledge

Error Codes

Error Code	Cause	LCD Warning Symbol	Solution
E-01	Power Supply Undervoltage	- +	Increase power supply voltage (i.e. charge your battery)
E-02	Power Supply Overvoltage	- +	Reduce power supply voltage (i.e. discharge your battery)
E-03	Ignition Plug Failure		Check if ignition plug is open or short-circuited
E-04	Fuel Pump Failure	÷	Check the fuel pump for any leaks or damages
E-05	Over-heat ()	₽	Check if the temperature sensor cables are loose or faulty
E-06	Over-heat ()	**	Check fan magnet polarity, position of Holzer sensor or loose terminal
E-07	Broken Line Fault	6x9	Check the LCD connectors harness, verify if the blue wiring is loose or short circuited
E-08	Flame Failure		Check if the fuel circuit is blocked, resulting in poor fuel supply
E-09	Sensor Failure		Check if sensor plug is loose, broken or short circuited
E-10	Ignition Failure		Check if the fuel circuit is blocked and fuel quality