atlantic
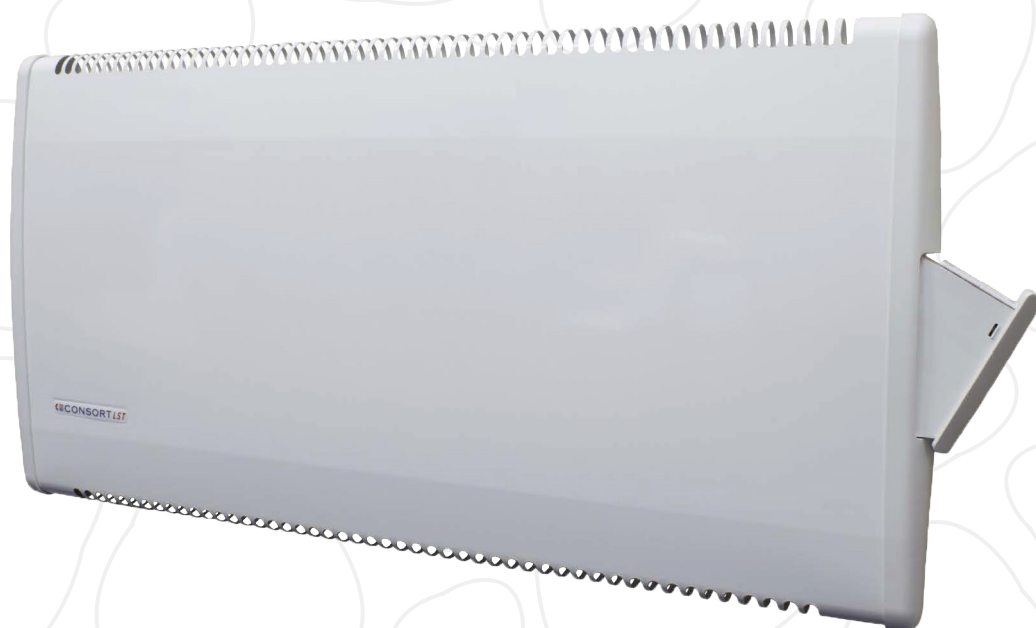## ELECTRIC HEATING

Installation & control guide for low surface temperature convector panel heaters with electronic 7 day timer

LST 500W, LST 800W

Overview

Please read this guide carefully and retain for future use and maintenance.

This appliance has been designed and manufactured to the highest international standards, however, care must be taken for optimal results and safety. This appliance also meets the requirements of EU Directive 2014/30/EU for EMC and 2014/35/EU Directive.

Safety & Care

Our Low Surface Temperature heaters have been designed and built to the NHS requirement for safe surface temperatures which is that no surface which can be touched by the user will be more than 43 degrees C (at a room temperature of 21 degrees C.) This means that our Low Surface Temperature heaters out-perform the European Standard by a significant margin.

The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental apabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Warning

• Do NOT site the appliance into a corner.

• Do NOT handle the appliance with wet hands.

• Do NOT use the appliance in workshops or rooms where excessive dust is generated or present.

• Ensure that nothing is pushed into the air outlet of this appliance.

• Do NOT touch outlet grille when the appliance is in use.

• Do NOT cover or restrict the appliance when in use.

• Do NOT use the appliance if damaged.

• Do NOT leave the appliance unattended where young children are present.

Connection to the Main Supply

Electrical installation should be carried out by a competent installer, preferably registered with NICEIC (National Inspection Council for Electrical Installation Contracting) in accordance with the 17 edition of the IEE Wiring Regulations, (BS.7671), and any relevant Local Authority Bye-Laws. This heater is fitted with a 3-core mains supply cable and should be permanently connected to the electricity supply via a double pole switch having 3mm gap on each pole.

A switched Fused Connection unit to BS.1363. Part 4 is a recommended mains supply connection accessory to ensure compliance with safety requirements applicable to fixed-wiring installation.

Note: When switched on for the first time the appliance may emit a slight smell. This is purely the evaporation of a fluid used in the manufacturing process.

WARNING: This appliance must be earthed.

Thermally Operated Cut-Out

The appliance is fitted with a thermally operated cut-out (TOC). This is a safety device, which switches the heater off if, for any reason, the appliance overheats. The TOC can only be re-set after the appliance has cooled down. In order to re-set the

TOC, proceed as follows:

• Switch off appliance and leave for approximately 10 minutes.

• Switch appliance back on and the TOC will re-set.

• Ensure that the appliance is functioning correctly. If the TOC control operates again, the appliance should be checked by a competent electrician.

The heater carries a 'Do Not Cover' label to warn the user that if the appliance is covered, there is a risk of overheating.

Cleaning

Always disconnect the heater from the mains before cleaning. The heater should not require any maintenance, but it is strongly advised that it is kept clean. An occasional wipe over with a soft cloth is all that should be necessary.

• Do NOT use metal or furniture polish on any part of the heater.

• Do NOT touch the heater with wet hands or in any way bring water into contact with it.

If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
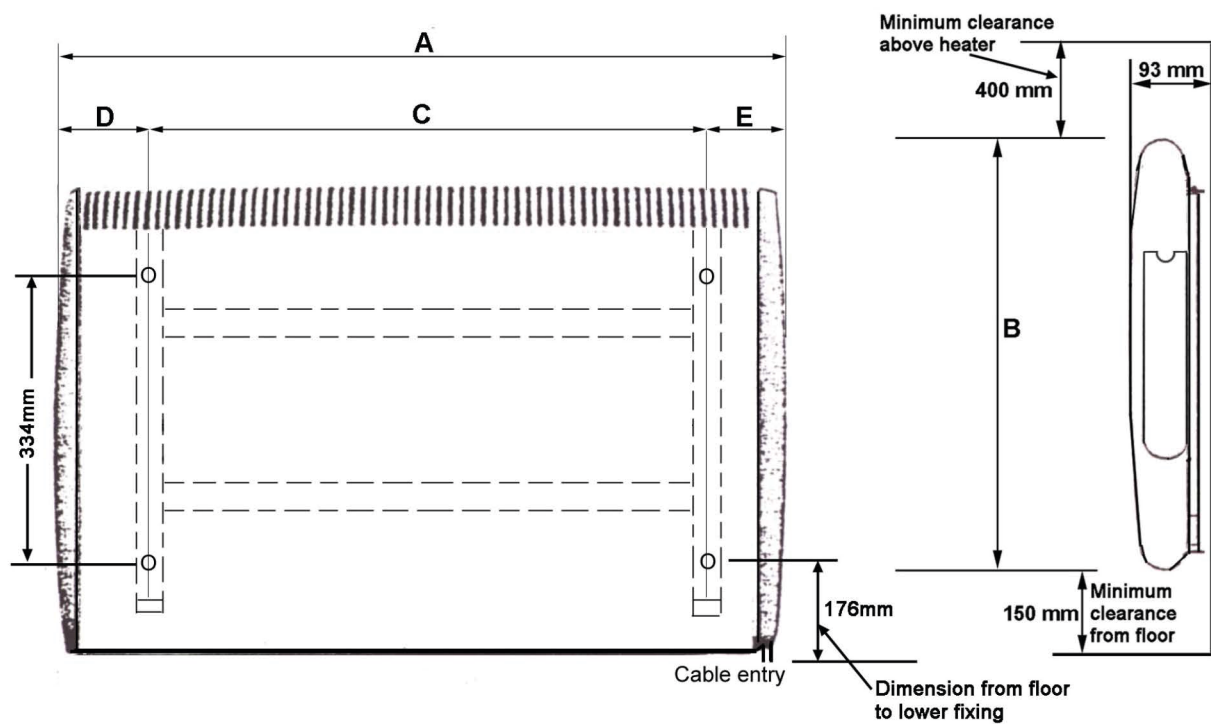
Mounting

To wall mount, the wall bracket supplied must be used. Remove the wall bracket from the heater, with the chains attached, by removing the 2 securing screws from the top of the rear panel.

Fix the wall bracket to the wall using 4 screws.

Fig 1: Present the heater to the bracket

Fig 2: Locate the heater onto the bottom lugs via the 2 slots in rear panel. Hinge the heater upwards and reattach the chain assembly, then move the heater to the upright position. The link plates should slide under the slotted bracket lip.

Fig 3: Tighten both retaining screws.

Rear & Side View

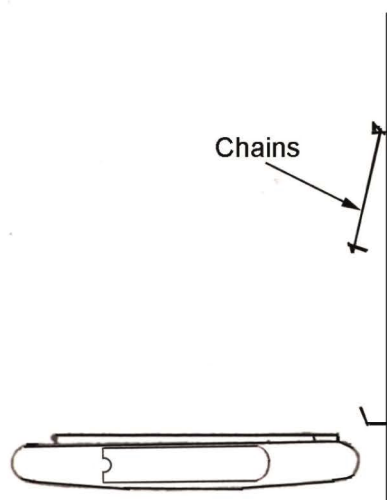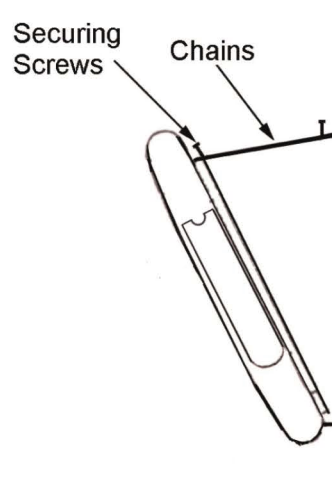|	MILLIMETRES				
	WATTS	A	B	C	D/E
LST 500W	500	830	430	616	107
LST 800W	800	1183	430	952	115

Fig 1

Fig 2

Fig 3

Set time

Press and hold for 5 secons

Temperature set

When display shows room temperature press to adjust

Set programme

Press and hold for 5 seconds

Mode selection

Boost, manual setback and program

1. Basic Operation

When the appliance is connected to the mains supply and the wall socket is switched 'ON', the LED indicator on the moulding will light up green, showing that the power is available to the unit. Before you can use the LST, it has to be activated by pressing any control button. The LCD backlight will turn on. To operate any control button, press within 2 seconds of activation.

2. Time and day setting

• Press and hold the TIME button for 5 seconds. Minutes are flashing - use TEMP and MODE buttons to set minutes.

• Press TIME button Hours are flashing - use TEMP and MODE buttons to set hours.

• Press TIME button Day is flashing - use TEMP and MODE buttons to set Day.

Once you are happy with the settings, press 'Time' to return to main screen.

3. Selecting operating mode

LST has 4 operating modes: BOOST, MANUAL, SET BACK, PROGRAM. Each mode can be selected by pressing the MODE button to cycle through the options. The cycle sequence will always start with BOOST mode followed by MANUAL, SET BACK and PROGRAM.

4. BOOST - 15 minutes

The boost feature increases the room temperature for 15 minutes.

1. Use TEMP and MODE to set the temperature.

To amend the set temperature when in Boost mode, simply activate the display by pressing any button. Press TEMP, then use TEMP and MODE to change the temperature. Once the temperature is set, you can leave the display to return to the main screen and the settings will be saved. After 15 minutes, the LST will return to previous operating mode.

5. MAN - Manual Mode

In manual mode, the heater maintains the set temperature.

1. Use TEMP and MODE to set the temperature.

To amend the set temperature when in Manual mode, simply activate the display by pressing any button. Press TEMP, then use TEMP and MODE to change the temperature. Once the temperature is set, leave the display to return to the main screen and the settings will be saved.

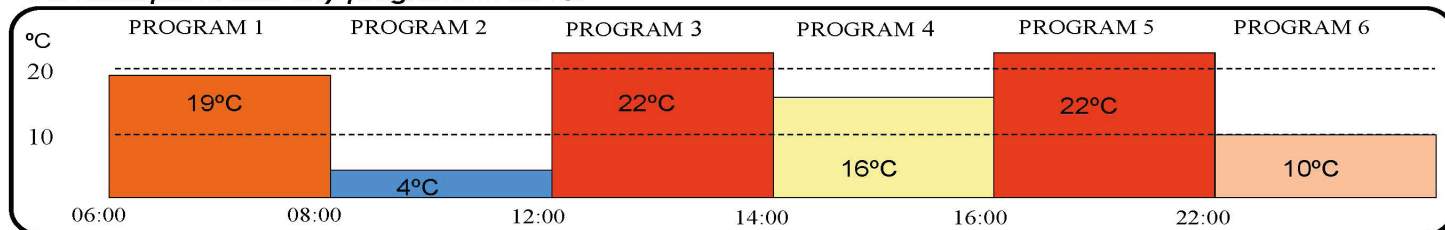## 6. SETB - Reduction in programmed temperature

In the setback (ECONOMY) mode, LST lowers all temperatures in the 7-day programme by a set value. You can set how much to lower the programme temperatures in SETB mode by simply activating the display, pressing TEMP and using TEMP and MODE to set the new value.

The display will first show the temperature difference and after 2 seconds the new set temperature.
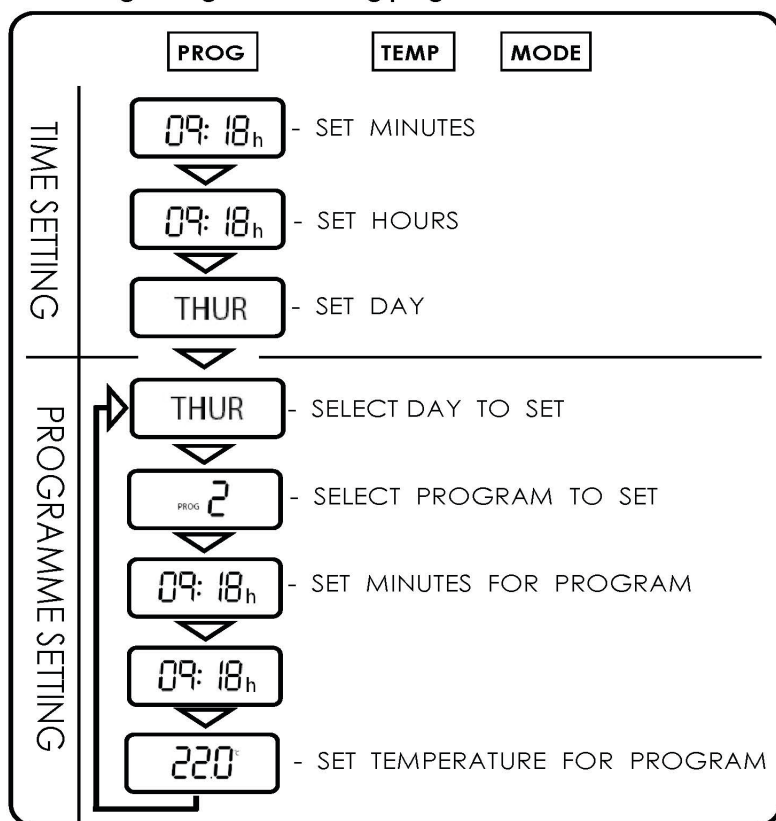
7. PROG - Automatic time mode

In this mode, the LST will follow the week's time / temperature programme. You can temporarily override the temperature in PROG mode by simply activating the display and using the TEMP and MODE buttons to set the new temperature. The new set temperature will be then maintained until the next program step.

An example of one day programme on LST

	PROGRAM 1	PROGRAM 2	PROGRAM 3	PROGRAM 4	PROGRAM 5	PROGRAM 6

°C
20
10

19°C — 4°C — 22°C — 16°C — 22°C — 10°C

06:00   08:00   12:00   14:00   16:00   22:00

Logic diagram for setting programme on LST

PROG	TEMP	MODE

TIME SETTING

09:18h — SET MINUTES

09:18h — SET HOURS

THUR — SET DAY

PROGRAMME SETTING

THUR — SELECT DAY TO SET

PROG 2 — SELECT PROGRAM TO SET

09:18h — SET MINUTES FOR PROGRAM

09:18h

22.0° — SET TEMPERATURE FOR PROGRAM

1. Press and hold PROG for 5 seconds to enter the time setting.

2. The day will be flashing.

3. Use TEMP and MODE to navigate day, press PROG to select day.

4. PROG 1 will be flashing. Use TEMP and MODE to navigate programme, use PROG to select programme.

5. The minutes will be flashing.

6. To set minutes, use TEMP and MODE to change minutes, press PROG to set the minutes.

7. The hour will be flashing

8. To set hour, use TEMP and MODE to change hour, press PROG to set the hour.

9. The temperature will be flashing.

10. To set temperature, use TEMP and MODE to change temperature, press PROG to set temperature.

To add another programme repeat steps 2-10.

The LST has a 7-day timer with up to 6 programming steps available for each day. In the programming you can set a start time and a temperature for each programme. Each programme has to be used.

9. Advance mode

Press PROG from PROG mode to bring forward the next programme. To clear advance mode, press PROG.

10. Heat symbol on the display

Every time there is a demand for heat, the display will show the heat icon.

〜 - Reduced heat output when the room temperature is close to the set temperature.

〜〜 - Full heat output

11. Keys locking

Press and hold TIME and TEMP together for 5 seconds. The display will show 🔒 symbol. Repeat the step to unlock.

12. Status light on the heater

Light colour Heater status

Light colour	Heater status
🟢	STAND-BY No heat output
🔴	Reduced heat output
🔴	Full power heat output

5

13. Open Window Detection

Ensuring you don't waste energy on heating the outside world, the heater is equipped with optional open / aclosed window detection. The heater recognises sudden drops in temperature when a window or a door is opened and turns the heating off to save energy. When the window is closed, the heater will automatically detect a temperature rise, and switch itself back on. Once enabled in the setup menu, the open window detection is fully automatic and does not require any human intervention to be activated.

Setting-up Open Window Detection

The system has been factory set to default time and temperature values. If necessary, all values can be adjusted. When the heating is on, open window detection sensor will automatically switch the heater off when it detects a fall in temperature of $2^{o}C$ in less than 10 minutes (this temperature can be changed in menu 7 and time in menu 6). If a temperature rise of $2^{o}C$ in less than 30 seconds is detected, the heater will switch itself back on (this temperature can be changed in menu 9 and time in menu 8).

14. Setup Menu

1. Press and hold TEMP and MODE together for 5 seconds.

2. The display will enter the setup menu.

3. Use TEMP and MODE to change a value.

4. Use TIME to scroll between the settings.

01 – Temperature calibration

The temperature reading has been factory calibrated but if for any reason it needs adjusting (better accuracy required, to suit different position in the room etc.), the reading can be recalibrated in 0.5 degrees steps.

02 – Change between degrees Celsius or Fahrenheit

03 – Set minimum temperature

(3.5 deg = frost protection) When this is set, the heater will operate in any mode should the room temperature fall below the set temperature.

04 – set maximum temperature

When this is set, the maximum temperature in any mode cannot exceed the limit.

05 – open window detection 0 = off, 1 = on

06 – 600 – open window detection time 600 seconds

07 – 2 – temperature drop of 2ºC in the detection time

08 – 30 – closed window detection time of 30 seconds

09 – 2 –º temperature rise of 2ºC in the detection time

15. Optional LST Locking Device

The LST locking device can be used to mechanically lock the controls to prevent tampering with settings. As it is not supplied with the heater, kindly contact our Sales team if required.

\- Locking tab

\- Locking screw

Locking tab   **Locking screw**

16. If Your Heater Does Not Work

• Check that power is available to the heater. The neon in the control switch should be illuminated.

• Check that the thermal cut-out has not operated. Follow the reset instructions given under the section headed 'Thermal Operated Cut-out'.

• Check that the fuse in the spur unit has not blown. This can be done by replacing the fuse with another suitable fuse.

Should none of the above remedies work, then telephone the helpline number shown in these instructions (UK ONLY). Do not attempt to repair the heater.

CUSTOMER HELPLINE

Should you need any advice on the use of your new Atlantic Heat product please contact our Helpline:

Atlantic Heat

National Avenue, Kingston Upon Hull, England, HU5 4JN

Tel: 0844 3350 549 Fax: 0844 5436 180 Email: enquiries@atlanticheat.co.uk Web: www.atlanticheat.co.uk

Operation hours: Mon to Fri 8.00am to 6.00pm | Sat 8.00am to 4.00pm | Sun 8.00am to 12.00pm