



QUALITY SPACE HEATERS



Installation & Control Guide for  
Low Surface Temperature Convective Panel Heaters  
with Electronic 7-Day Timer

Models

LST500E, LST800E

All electrical appliances produced for the Company are guaranteed for one year against faulty material or workmanship. This applies only if the appliance has been used for purposes in accordance with the instructions provided and has not been connected to an unsuitable electricity supply, or subject to misuse, neglect, damage or modified or repaired by any person not authorised by us. This guarantee is offered to you as an extra benefit and does not affect your legal rights.

The correct electricity supply voltage is shown on the rating label attached to the appliance.

Reasonable care has been taken to ensure that this guide is accurate at the time of printing. In the interest of progress the Company reserve the right to vary specifications from time to time without notice.

## 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 2004/106/EC for EMC and 2009/125/EC 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 capabilities 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.

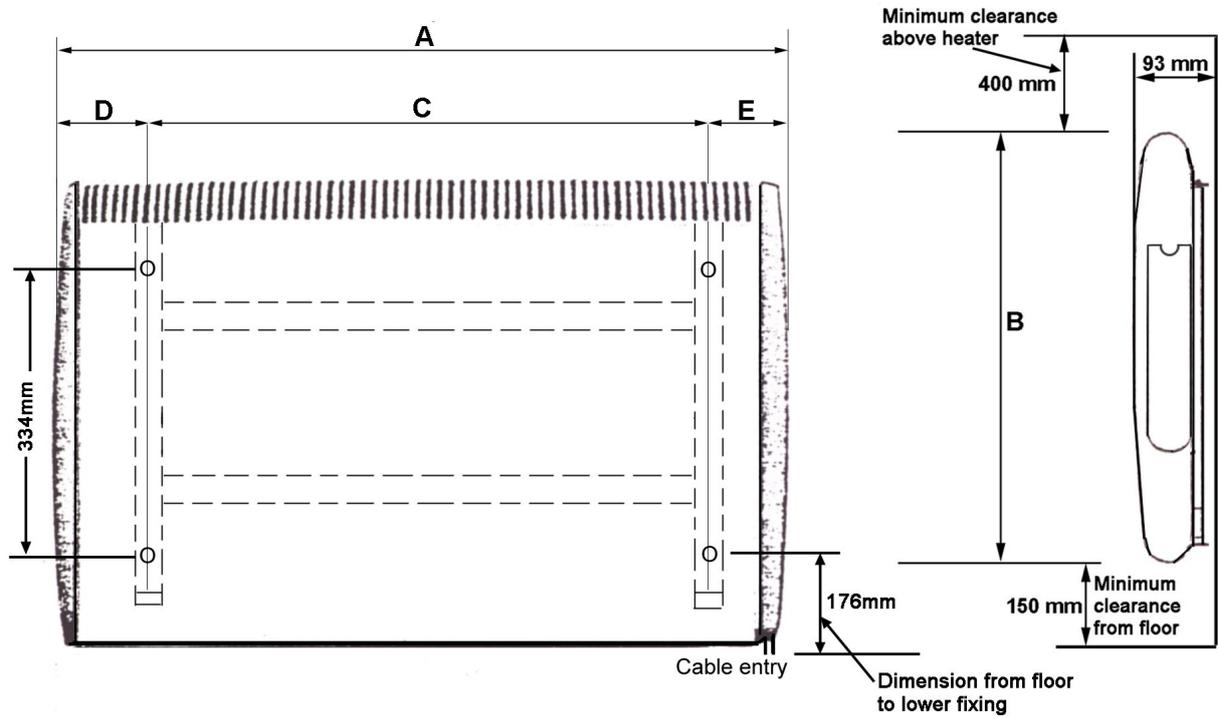
Fig 1: Present the heater to the bracket

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.

The heater must not be located immediately below a fixed socket outlet.

# Installation



Rear & Side View

	MILLIMETRES				
	WATTS	A	B	C	D/E
LSTE500E	500	830	430	616	107
LSTE800E	800	1183	430	952	115

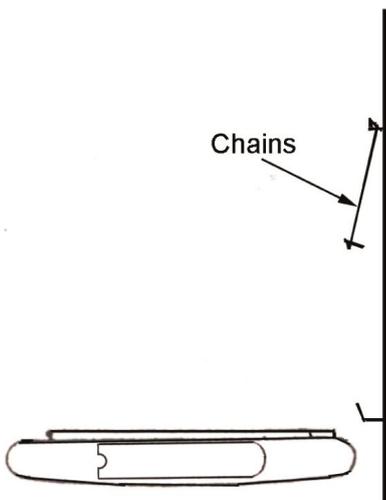


Fig 1

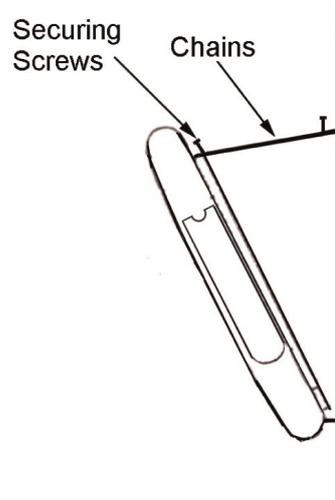


Fig 2



Fig 3



### 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 LSTE, 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

LSTE 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 LSTE 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, LSTE 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.

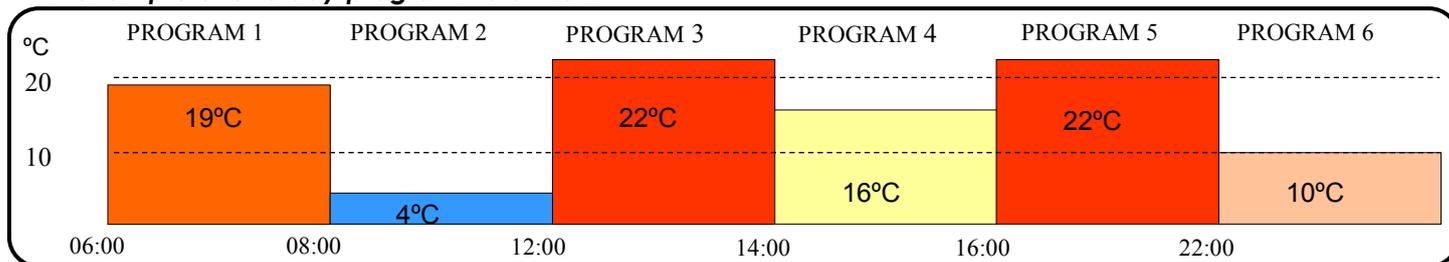
### 7. PROG - Automatic time mode

In this mode, the LSTE will follow the week's time / temperature programme.

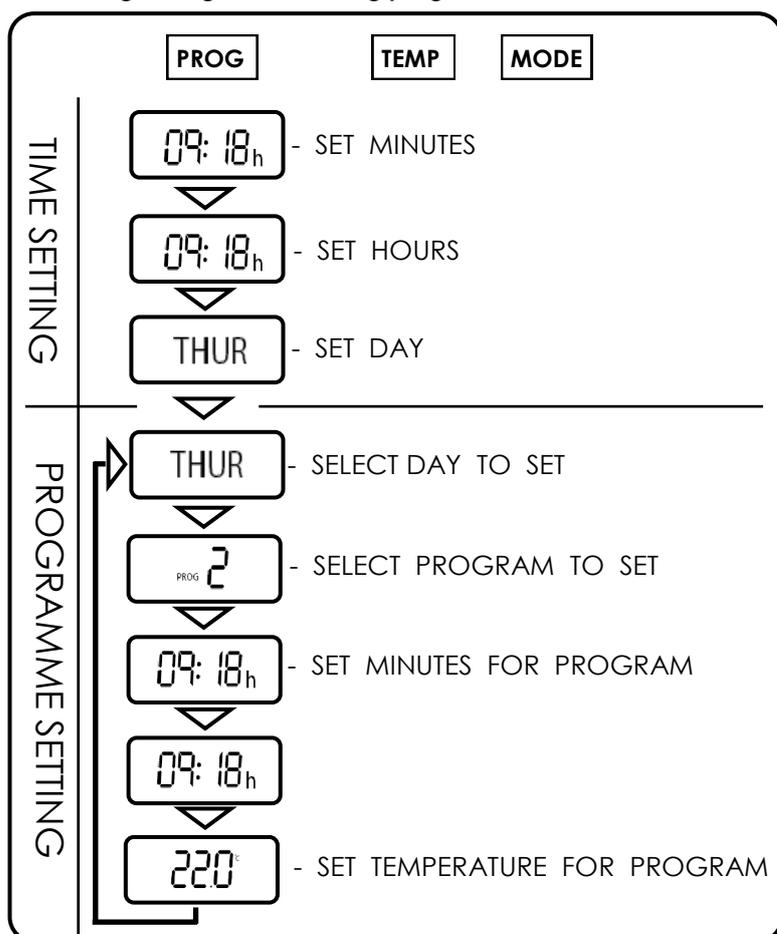
You can temporarily override the temperature in **PROG** mode by simply activating the display and using the TEMP and MODE buttons to set the new temperature. The new set temperature will be then maintained until the next program step.

## 8. Set 7-day programme

### An example of one day programme on LSTE



### Logic diagram for setting programme on LSTE



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 LSTE 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
	STAND-BY No heat output
	Reduced heat output
	Full power heat output

### 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°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°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 2°C in the detection time

08 - 30 - closed window detection time of 30 seconds

09 - 2 - temperature rise of 2°C in the detection time

## 15. Optional PLK1 Locking Device

The PLK1 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 Consort product please contact our Helpline:

### Consort Equipment Products Limited

Thornton Industrial Estate, Milford Haven, Pembrokeshire, SA73 2RT

Tel: 01646 692172 Fax: 01646 695195

Email: [technical@consortepl.com](mailto:technical@consortepl.com) Web: [www.consortepl.com](http://www.consortepl.com)

Operation hours: Mon to Thu 8.30am to 4.30pm | Fri 8.30am to 3.30pm

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