



QUALITY SPACE HEATERS



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

Models

LST500E, LST800E

All electrical appliances produced by the Company are guaranteed for one year against faulty materials 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.

General safety

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 in 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 must be permanently connected to the electricity supply via a double pole switch having 3mm gap on each pole. **There are no exceptions.**

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.

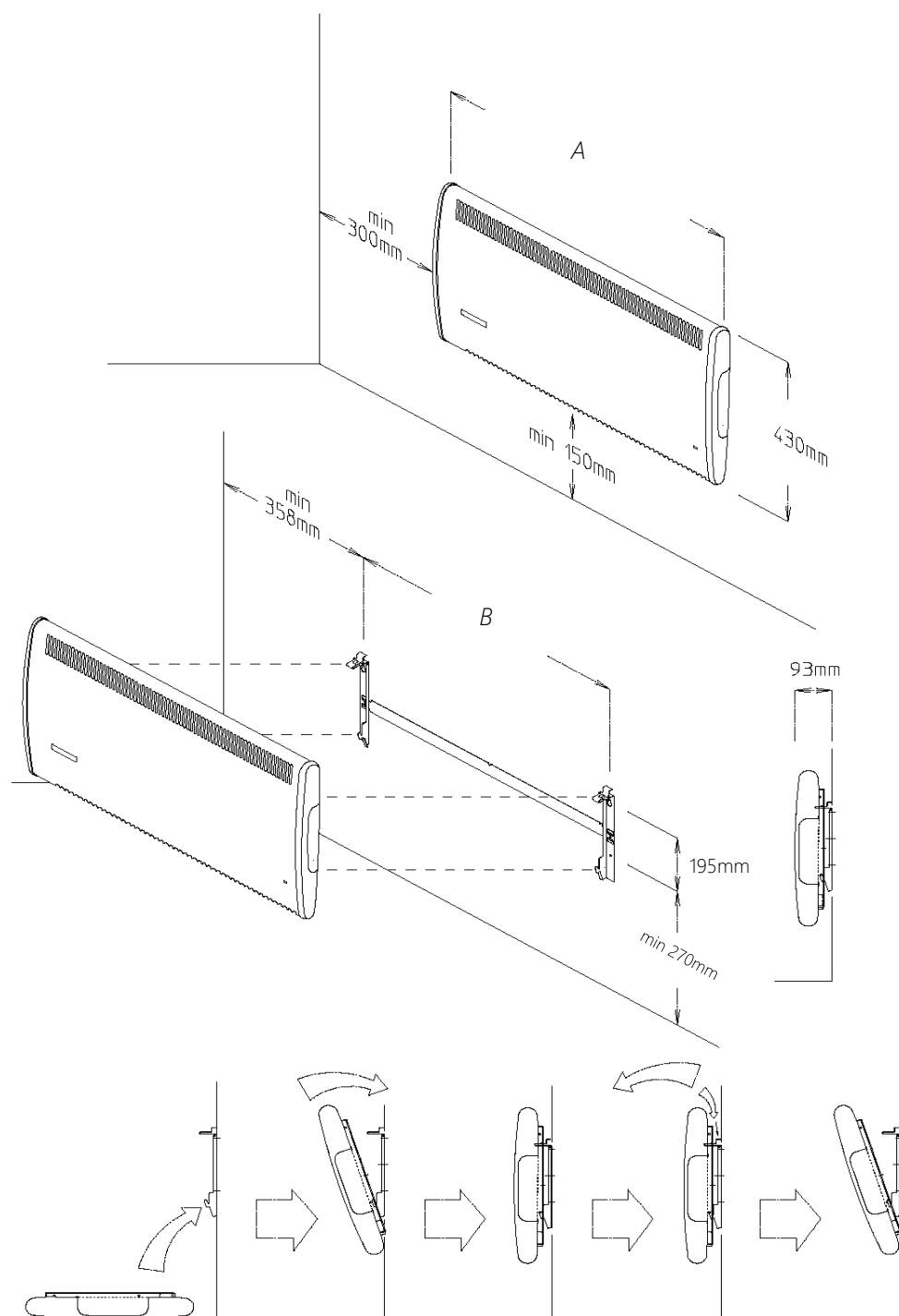
Fig 1: Present the heater to the bracket

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



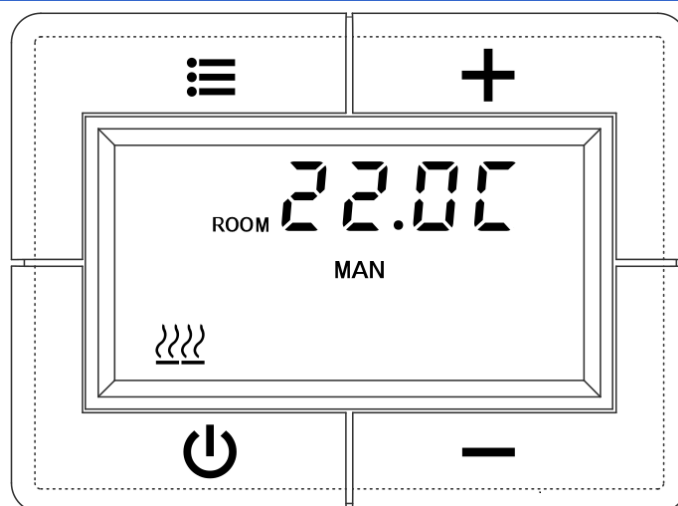
	MILLIMETRES				
	WATTS	A	B	C	D/E
LSTE500E	500	830	430	616	107
LSTE800E	800	1183	430	952	115

MODE/MENU

INCREASE VALUE

STANDBY

DECREASE VALUE



3. Basic Operation

The PLSTi has 4 standard operating modes:

BOOST, MANUAL, SETB and PROG.

Each mode can be selected by pressing the MENU button to cycle through the options. The cycle sequence will always start with **BOOST** mode followed by **MANUAL**, **SETB** and **PROG**.

The PLSTi also has a **STANDBY MODE**. To enter/exit this mode, press the standby button. In **STANDBY MODE**, the heating will not be activated.

To adjust the operating mode/settings of the PLSTi, the display must first be activated.

If the controller is in **STANDBY MODE**, press the power button. The heater will exit standby mode and the display will be activated for 5 seconds. If the controller is not in **STANDBY MODE**, press either of the + or - or menu buttons once. The display will be activated for 5 seconds.

4. BOOST - 15 minutes

The boost feature increases the room temperature for 15 minutes. To amend the set temperature when in **BOOST** mode, activate the display and use the + and - buttons 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 PLSTi will return to the previous operating mode.

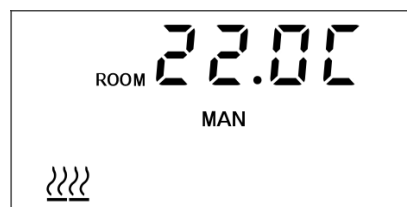


5. MAN - Manual Mode

In **MANUAL** mode, the heater maintains a chosen set temperature between 15°C and 35°C. To amend the set temperature when in **MANUAL** mode, activate the display and use the + and - buttons to change the temperature.

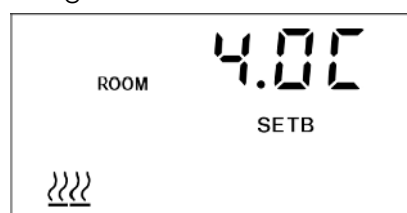
Once the temperature is set, you can leave the display to return to the main screen and the settings will be saved.

When the room temperature reaches the set temperature, the heating is disabled.



6. SETB - Setback Mode

In **SETB** mode, the heater maintains a chosen set temperature between 4°C and 15°C. To amend the set temperature when in **SETB** mode, activate the display and use the + and - buttons 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.



7. PROG - Automatic time mode

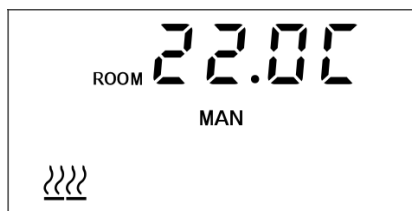
In this mode, the heater will follow the week's time / temperature program.

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



8. Heat symbol

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



9. Keys Locking

Press and hold + and - together for 5 seconds. The display will show the  symbol. Repeat the step to unlock.



10. Setting the time and day

The heater will come set with the correct time and day. It has an internal battery back up that can remember the settings. It will automatically change the clock to adjust to British summer time.

Should you need to alter the time, see section 21 "set-up menu".

11. Open window detection

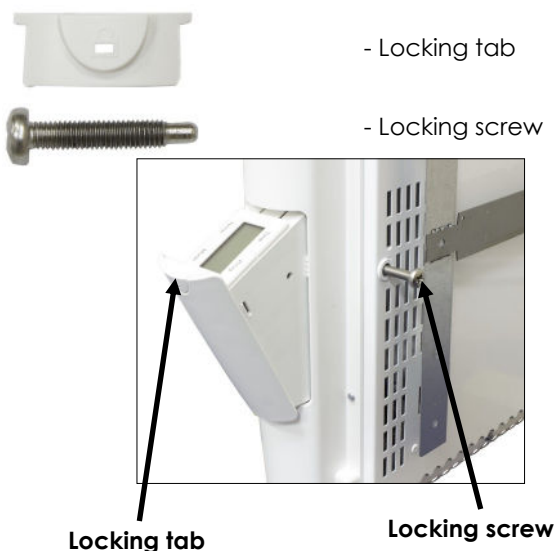
Ensuring you do not waste energy on heating the outside world, the heater is equipped with optional open / closed window detection. The heater recognises sudden drops in temperature when a window or a door is opened and turns the heating off to save energy. When the window is closed, the heater will 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. When the open window detection has been triggered, the heat symbol will flash on/off as shown below.



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 8 and time in menu 7). 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 A and time in menu 9).

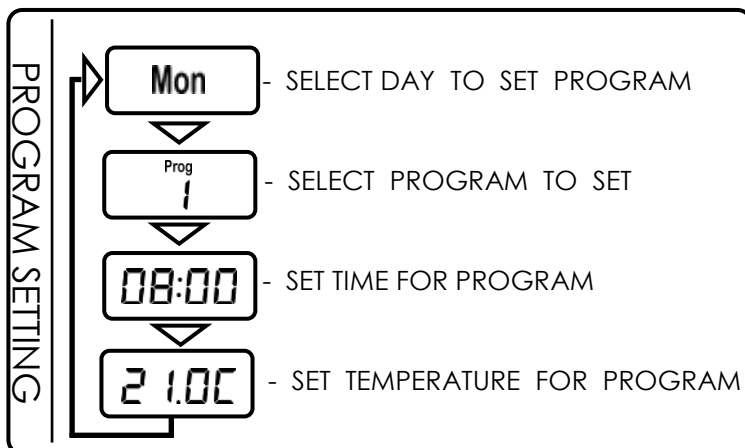
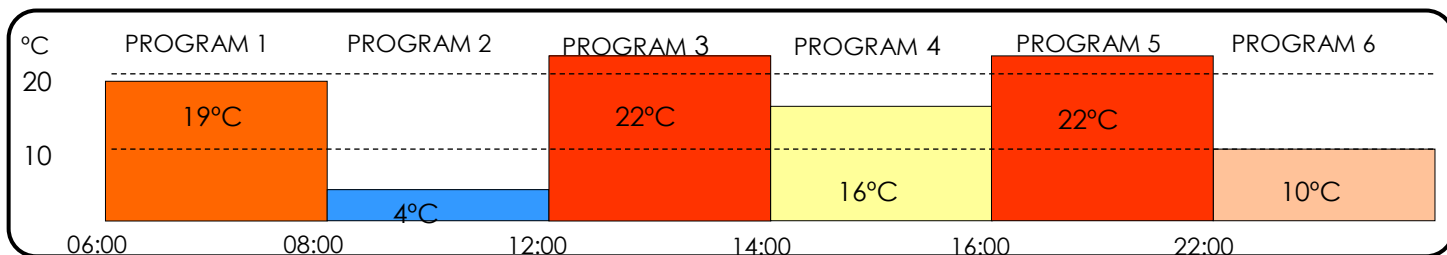
15. Optional PLK1 Locking Device

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.



16. Setting the automatic program schedule

An example of one day program on PLSTiE



This section provides an example of how to set the 7-day program for one day. The example will program the timer to maintain 21°C from 08:00 until 16:00. It will maintain 4°C from 16:00 onwards. It does this by setting the programs as follows;

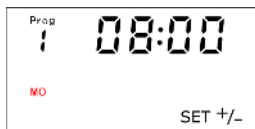
Prog 1 - Set to 08:00 and 21°C

Prog 2 - Set to 16:00 and 4°C

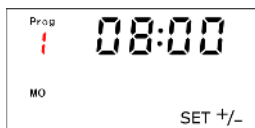
Prog 3, 4, 5, 6 - Set to inactive

The steps to program this are shown below;

Step 1: Press and hold the MENU button. The display below should show with Monday flashing.



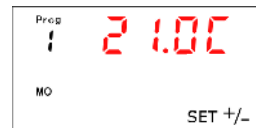
Step 2: Press the MENU button. Prog 1 in the top left of the display should flash. This represents the program number. Each day has 6 programs.



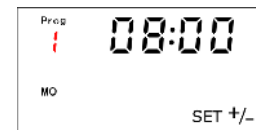
Step 3: Press the MENU button. The time should flash. Use the + and - buttons to set the time you want the heating to switch on.



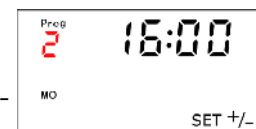
Step 4: Press the MENU button. The temperature should flash. Use the + and - buttons to set the temperature you want to maintain.



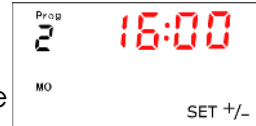
Step 5: Press the MENU button. Monday should flash again.



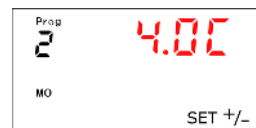
Step 6: Press the MENU button. Prog 1 in the top left of the display should flash. Use the + button to increment this to Prog 2. (Note: you can cycle between the different programs using the + and - buttons)



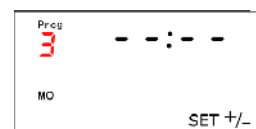
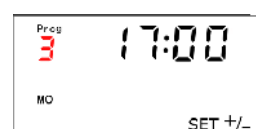
Step 7: Press the MENU button. The time should flash. Use the + and - buttons to select the time you want the heating to switch off.



Step 8: Press the MENU button. The temperature should flash. Use the + and - buttons to select a frost protection temperature.



Step 9: Repeat these steps for programs 3-6 if additional time periods are required. Any programs not being utilized must be deactivated. To do this, simply select the program in question as per step 6 and press the STANDBY button. The time should change to dashes as shown below. To reactivate the program, simply press the STANDBY button again.



17. Overview of program mode

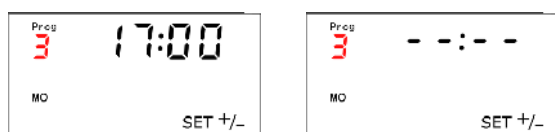
The PLSTi has a 7-day, 5-day + 2-day and a 24 hour timer available. This can be chosen in the setup menu. Up to 6 programming steps are available for each day. In the programming you can set a start time and a temperature for each program.

18. Basic operation in program mode

1. Press and hold MENU for 5 seconds to enter the program setting.
2. The day will be flashing. Use + and - to navigate day, press MENU to select day.
3. PROG 1 will be flashing. Use + and - to navigate program, use MENU to select program.
4. The time will be flashing. To set time, use + and - , press MENU to set the time.
5. The temperature will be flashing. To set temperature, use + and - to change temperature, press MENU to set temperature.

19. Setting program inactive

If you do not require the use of all 6 programs they can be deactivated. When in programming mode select the program you want to make inactive and press the STANDBY button. To activate the program again, press the STANDBY button.



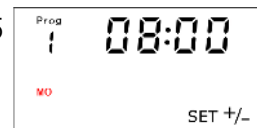
20. Copy day function

If you require the same set of programs throughout the week, a 24 hour timer is available. This will use the same program every day. A 5-day + 2-day timer is also available. This will use the same programs Monday-Friday, and the same programs Saturday and Sunday. These modes are enabled in the setup menu, as explained in the "setup menu" section 20.

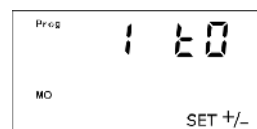
Alternatively, it is possible to copy a program from one day to another.

To do this, follow the steps below;

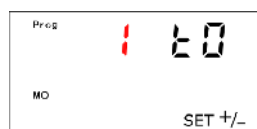
Step 1: Press and hold MENU for 5 seconds to enter the program setting.



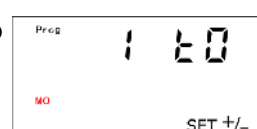
Step 2: Press and hold STANDBY for 5 seconds to enter the copy day setting.



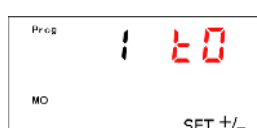
Step 3: Use the MENU button to select the day to copy the programs from. 1= Monday, 2 = Tuesday and so on.



Step 4: Use the + and - buttons to select the day to copy the programs to.



Step 5: Press the STANDBY button to copy the programs. The 'TO' will flash to confirm the programs have been copied.



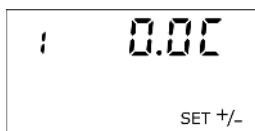
21. Setup Menu

1. Press and hold MENU and - together for 5 seconds.
2. The display will enter the setup menu.
3. Use + and - to change a value.
4. Use TIME to scroll between the settings.
5. Use standby button to exit the setup menu.

Each available setting is explained on the following page.

1 - Temperature Calibration.

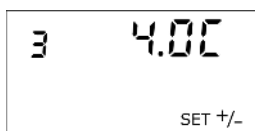
The temperature reading is factory calibrated but if for any reason it needs adjusting (better accuracy required, to suit different position in the room etc.), the reading can be recalibrated in 0.5 degree steps.



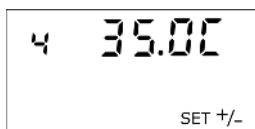
2 - Celsius / Fahrenheit.



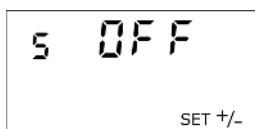
3 - Set minimum temperature.



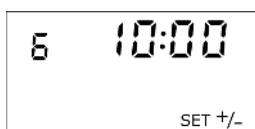
4 - Set maximum temperature.



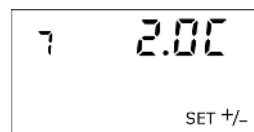
5 - Enable/disable open window detection.



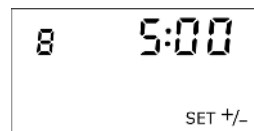
6 - Open window detection time.



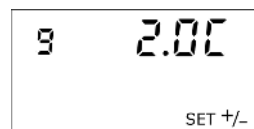
7 - Temperature drop in open window detection time.



8 - Closed window detection time.

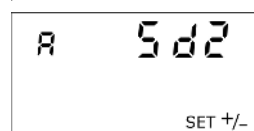
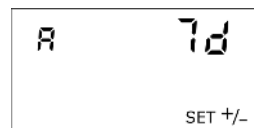


9 - Temperature rise in closed window detection time.



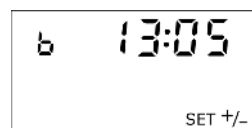
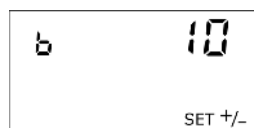
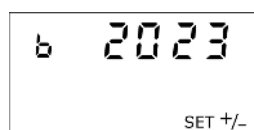
A - Program mode select.

Choose between a 7-day, 5-day 2-day or a 24 hour timer.



B - Time and Date setting.

The year is shown first, use + and - to change, then press menu to change month, day, hours and minutes.



Declaration Of Conformity

In accordance with UK Government Guidance.
WE HEREBY CERTIFY THAT THE APPLIANCES DETAILED HEREON HAVE BEEN
INSPECTED AND TESTED, AND CONFORM TO THE REQUIREMENTS OF THE
FOLLOWING UK STATUTORY INSTRUMENTS WHERE APPLICABLE:

Electrical Equipment (Safety) Regulations 2016 SI. 2016 1101

Electromagnetic Compatibility Regulations 2016 SI. 2016 No. 1091

Radio Equipment Regulations 2017 SI. 2017 No. 1206

The Ecodesign for Energy Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019. SI. 2010 2617

The Restriction of use of Certain Hazardous Substances. SI. 2012 No. 3032

The Waste Electrical and Electronic Equipment Regulations 2013. SI. 2013 No. 3113

Security requirements for 'Connectable Products' PTSI Act 2022

Transposed standards used:

- **BS EN 55014 (2006)**
- **BS EN 301489.1 & .3**
- **BS EN 300220.1 & .2**
- **BS EN 60730.2.9**
- **BS EN 60335.1 (2012)**
- **BS EN 60335.2.30 (2009)**
- **ETSI BS EN 303645**

PART NUMBER AND DESCRIPTION OF APPLIANCE:

LST500E, LST800E

NAME OF RESPONSIBLE PERSON:

POSITION:

DATE:

DAVID O'SULLIVAN

OPERATIONS MANAGER

24/06/24



FM 12671

CONSORT EQUIPMENT PRODUCTS LTD.

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WWW.CONSORTEPL.COM