





# **CONSORT CRXSL Single Zone Wireless Thermostat Controller Installation Guide**

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**CONSORT CRXSL Single Zone Wireless Thermostat Controller** 



#### Installation & Control Guide for CRXSL-10 Wireless Controller

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 interests of progress the Company reserve the right to vary specifications from time to time without notice.

#### **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**: <u>technical@consortepl.com</u>

Web: www.consortepl.com

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

BS EN ISO 9001 Registered Company No FM12671

# Warnings

- Do NOT handle the controller with wet hands.
- · Do NOT cover the controller.
- Do NOT use the controller if damaged.
- Operating temperature range-10 to +40°C.

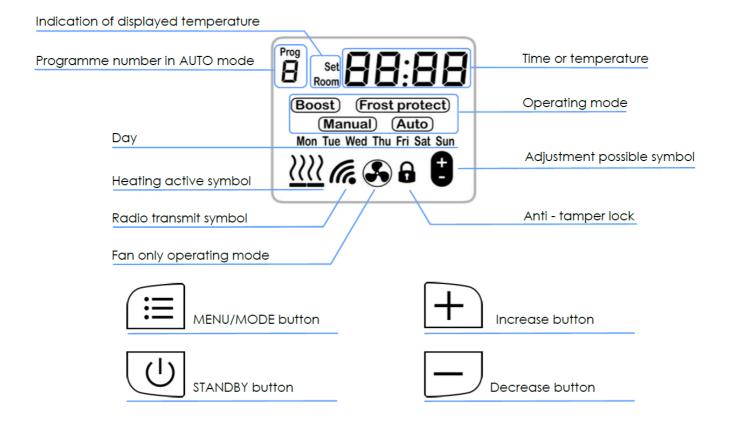
# Safety and Care

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

### Introduction

The CRXSL must be paired to each heater, otherwise the heaters will not work (see next page). The CRXSL Wireless Controller can control any 'RX' or 'SL' heater, including multiple products at the same time.

# Getting to know your CRXSL wireless controller



# **Buttons**

# **MENU/MODE** button

- Short press: Cycle through operat-ing modes BOOST, MANUAL, AUTO, FROST, FAN
- Long press: Used for advancing programme, setting the time and accessing programming menu.



### **STANDBY** button

Use this button to activate or deactivate the heating.



#### Increase/decrease buttons

Increase/decrease buttons are used to change the set temperature when in normal use or to change value when in setting up the controller.



### Pairing with heaters

This must be done, otherwise the heaters will not work.

- Ensure power to the heater is OFF.
- Turn power to the heater ON.
- Within 20 seconds, press and hold the 'MENU/MODE' and '+' buttons on the controller until the display shows 'PAIR'
- The heating will switch on. If the heating is set to off, after 4 seconds the heating will turn off.
- The heating is now ready to be used.

#### Installation

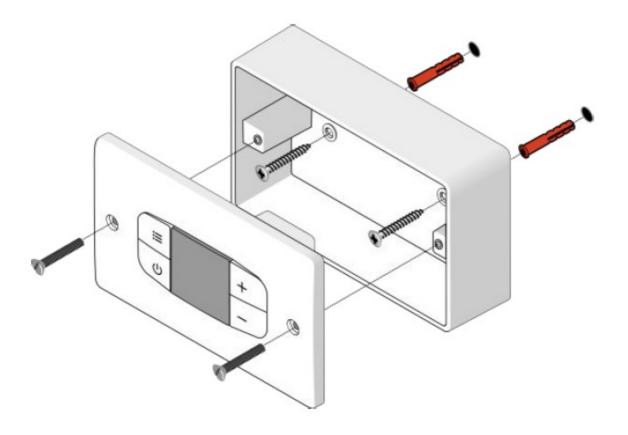
The controller must be wall mounted.

# Choosing a position in a room

When installing CRXSL, a suitable posi-tion in the room should be chosen. Ideal installation height is 1.2m – 1.6m. Avoid areas with draught or direct sun. Do not position CRXSL above or close to the heaters or other heat sources. Damp areas or areas where CRXSL can be mechanically damaged should also be avoided. As the CRXSL is measuring room temperature it has to be installed in the same room as heaters.

# Mounting the controller

The CRXSL was designed to fit any standard 2 gang back box with a minimum depth of 32mm. Use the supplied screws to secure controller on the back box. Avoid over-tightening.



#### **Electrical Connections**

Electrical installation should be carried out by a competent installer in accordance with the latest edition of the IEE Wiring Regulations, (BS.7671), and any relevant Local Authority Bye-Laws.

The CRXSL 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.

### **Heating Not Working**

- Check that the power is available to the CRXSL and heater.
- Check the LCD display isn't blank and there is a green light on the heater.
- Is CRXSL paired with the heater?
- Check that the overheating pro-tection on the heater has not operated. Follow the heater's in-structions; section headed 'Overheating protection'.
- Check that the fuse in the fused connection unit has not blown. This fuse can be replaced.
- Should none of the above remedies work, then please telephone the helpline number shown in these instructions. Do not attempt to repair the heating.

# **Basic Operation**

The CRXSL has 5 standard operating modes: BOOST, MANUAL, FROST PROTECT, AU-TO and FAN.

Each mode can be selected by short pressing of the MENU button to cycle through the options. The cycle sequence will always start with BOOST mode followed by MANUAL, FAN, FROST PROTECTION and AUTO. The FAN mode is only available if there is no demand for heating. If the CRXSL shows heating symbol the FAN mode isn't available. FAN mode only works with compatible heaters.

The CRXSL also has a STANDBY MODE. To enter/exit this mode, press the standby button. In STANDBY MODE, the heating will not be activated and the display will show time and day.

To adjust temperature in any heating mode use 'PLUS' or 'MINUS' buttons.

The CRXSL has a battery backup which will keep the correct time and allows for the change of hour associated with British Summer Time.

The CRXSL will also remember all time schedules and settings even if the power is interrupted.

#### **Boost Mode**

The boost feature increases the room temperature for 15 minutes.

To amend the set temperature when in BOOST mode, 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 CRXSL will return to the previous operating mode.

# **Manual Temperature 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, use the + and – buttons. 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 will be deactivated.

#### **Frost Protection Mode**

In FROST PROTECT mode, the heater maintains a chosen set temperature between 4°C and 15°C. To amend the set temperature when in FROST PROTECT mode, use the + and – buttons. Once the temperature is set, you can leave the display to return to the main screen and the settings will be saved.

#### **Auto Control Mode**

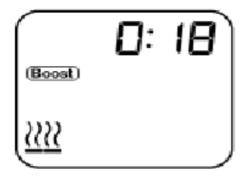
In this mode, the heater will follow the week's time/temperature program.

The temperature can be temporarily overridden in AUTO mode by using the + and – buttons to set the new temperature. The new set tempera-ture will be then maintained until the next program step.

### **Fan Mode**

The FAN mode is only available if there is no demand for heating. If the CRXSL shows heating symbol the FAN mode isn't available. FAN mode only works with compatible heaters.

# **Boost Mode**



# **Frost Protection Mode**



# Manual Temperature Mode



# **Auto Control Mode**

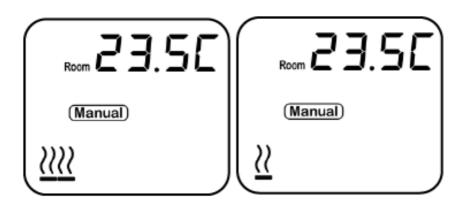


# Fan Mode



# **Heat Symbols**

Every time there is a demand for heat, the display will show the heat icon. The symbols shown below are used to represent full heat and half heat. The half heat only works with 'RX' heaters. The CRXSL will set heating to half heat automatically when the room is almost at the required temperature. This will stop tempera-ture overshooting.



Full heat

Half heat

# **Keys Locking**

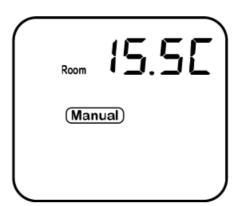
Press and hold the + and – buttons together for 5 seconds. The display will show the symbol. Repeat the step to unlock.



### **Open Window Detection**

Ensuring you don't waste energy by heating the outside world, the heater is equipped with optional open/closed window detection. The heater recognises sudden drops in tempera-ture when a window or a door is opened and turns the heating off.





When the window is closed, the heater will automatically detect a temper-ature 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 open window detection has been triggered, the heat symbol will flash on/off as shown above. The sys-tem 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 (the 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 (the temperature can be changed in menu A and the time in menu 9).

# **Setting The Time and Day**

The CRXSL 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 the British summer time. Should you need to alter the time, see the section "set-up menu".

# Set up Menu

- Press and hold 'MENU' and '-' together for 5 seconds.
- The display will enter the setup menu.
- Use '+' and '-' to change a value.
- Use MENU to scroll between the settings.
- · Use standby button to exit the setup menu
- 1. Temperature Calibration

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

- 2. Celsius / Fahrenheit
- 3. Adjust fan speed

(Select models only. Does not apply in manual control mode)

- 4. Set minimum temperature
- 5. Set maximum temperature
- 6. Enable/disable open window detection

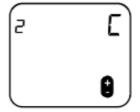
# 1 - Temperature Calibration

The temperature reading is factory calibrated but if for any

reason it needs adjusting (better accuracy required, to suit particular position in the room etc.), the reading can be recalibrated in 0.5 degree steps.



# 2 - Celsius / Fahrenheit



# 3 - Adjust fan speed

(Select models only. Does not apply in manual control mode)



# 4 - Set minimum temperature



# 5 - Set maximum temperature

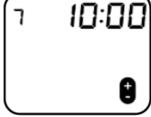


# 6 - Enable/disable open window detection



- 7. Open window detection time (minutes)
- 8. Temperature drop in open win-dow detection time
- 9. Closed window detection time (minutes)

# 7 - Open window detection time (minutes)



8 - Temperature drop in open window detection time



# 9 - Closed window detection time (minutes)



- A Temperature rise in closed window detection time
- **B** Program mode select.

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

- C Select operating mode:
  - 1 = temperature control
  - 2 = manual control
  - 3 = local temperature control (Specific heaters only)
- **D** Time and Date setting.

The year is shown first, use + and – to change, then press menu to change date and time.

• E - Backlight Setting

If this is OFF the backlight will turn off after 15 seconds. The display must be activated before using the controls.

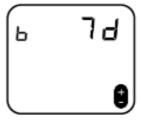
If this is ON the back light will be permanently on when the heater is active.

# A - Temperature rise in closed window detection time



# B - Program mode select.

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



# C - Select operating mode:

1 = temperature control
2 = manual control
3 = local temperature
control (Specific heaters only)



# D - Time and Date setting.

The year is shown first, use + and - to change, then press menu to change date and time.



# E - Backlight Setting

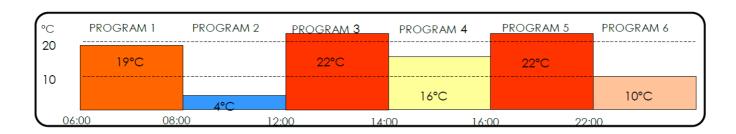
If this is **OFF** the backlight will turn off after 15 seconds. The display must be activated before using the controls.

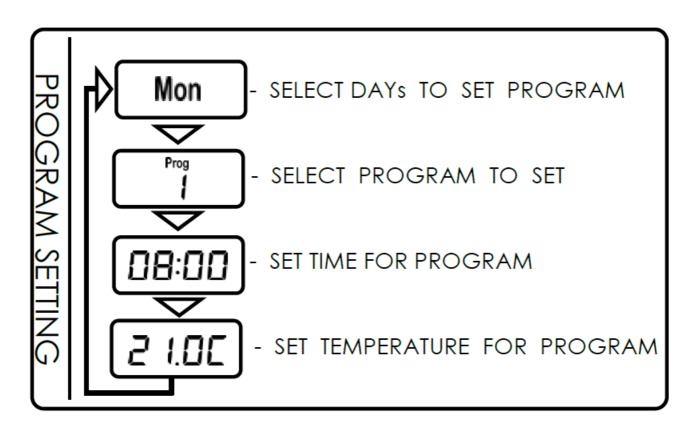


If this is **ON** the back light will be permanently on when the heater is active.

Setting the automatic program schedule

An example of a programs on CRXSL





The timer is set to 5 days and 2 days as default. This section provides an example of how to set the program for Monday to Friday. 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  $21^{\circ}$ C Prog 2 – Set to 16:00 and  $4^{\circ}$ C

Prog 3, 4, 5, 6 – Set to inactive

The steps to program this are shown below;

• Step 1: Heater must be ON. Press and hold the MENU button. Monday to Friday should flash.

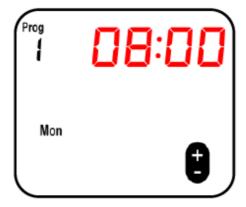


- Step 2: Press the MENU button. Prog 1 in the top left of the display should flash. This represents the program number. Each day has 6 programs.
- Step 3: Press the MENU button. The time should flash. Use the + and buttons to set the time you want the heating to switch on.
- Step 4: Press the MENU button. The tempera-ture should flash. Use the + and buttons to set the temperature you want to maintain.

# Step 2:



# Step 3:



# Step 4:



- 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 5:

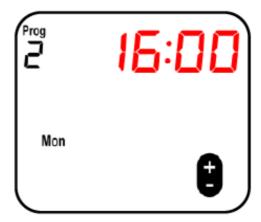


# Step 6:



- 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 tempera-ture should flash. Use the + and buttons to select a frost protection temperature.

# Step 7:

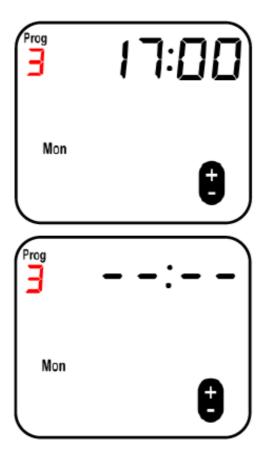


# Step 8:



• 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 adjacent. To reactivate the program, simply press the STANDBY button again.



# **Overview of Auto Mode**

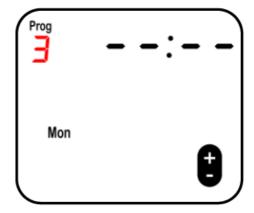
The CRXSL has a 7-day, 5-day + 2-day and a 24 hour timer available. These can be chosen in the setup menu. Up to 6 programming steps are available for each day. In the programming you can set a start time and a temperature for each program.

- 1. Press and hold MENU for 5 seconds to enter the programme settings.
- 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.

# **Setting Programme 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.





# **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 separate programs Saturday and Sunday. These modes are enabled in the setup menu, as explained in the "setup menu" section.

When the timer is set in setup menu as 7 day, it is possible to copy a program from one day to another.

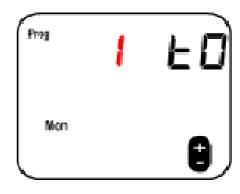
# To do this, follow the steps below;

- 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.

Step 1:

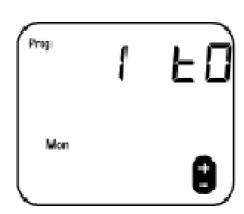


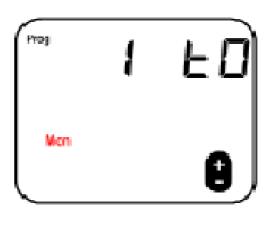
Step 3:



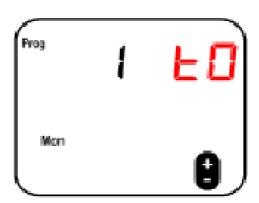
Step 4:

Step 2:





Step 5:



# Local temperature control mode

Local temperature control mode is only compatible with certain heaters. Unlike normal temperature control mode, the temperature measured on the controller does not affect the heater output. Instead, the CRXSL simply sends the target temperature to the heater.

The heater uses this as the set temper-ature. It uses a local temperature sensor to measure the room temperature at the heater location itself. When the local temperature reaches the set temperature, the heater will switch off. Refer to section 'set-up menu' for information on how to access local temperature control mode.

Manual control mode allows the heat and fan settings to be selected manually regardless of the room temperature.

To operate manual control mode, activate the display and press the MENU/MODE button. The fan speed can now be set using the + and – buttons. Press the MENU/MODE button again. The heat setting can now be set using the + and – buttons.

Manual control mode has 3 fan speeds and 3 heat settings available. Not all products have multiple fan and heat settings. Please refer to the heater's user manual to check how many heat/fan settings it has available. Refer to section 'set-up menu' for information on how to access manual control mode.

## **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

The Product Security and Telecommunications Infrastructure (Security Requirements for Relevant Connectable Products) Regulations 2023

# 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
- EN 50663 (2017)
- EN 60730-2-9 (2010)
- EN 60730-1 (2011)
- ETSI EN 300 220-1 V3.1.1 (2017-02)
- ETSI EN 300 220-2 V3.2.1 (2018-06)
- ETSI EN 301 489-1 V2.2.2 (2019)
- ETSI EN 301 489-3 V2.1.1 (2019)

PART NUMBER AND DESCRIPTION OF APPLIANCE: CRXSL-10

NAME OF RESPONSIBLE PERSON: ED SPANKIE

POSITION: MANAGING DIRECTOR

DATE: 08/08/23

### CONSORT EQUIPMENT PRODUCTS LTD.

THORNTON INDUSTRIAL ESTATE, MILFORD HAVEN, PEMBROKESHIRE, SA73 2RT. UK

TEL: +44 1646 692172 FAX: +44 1646 695195.

E-MAIL: ENQUIRIES@CONSORTEPL.COM

WWW.CONSORTEPL.COM

### **Documents / Resources**



<u>CONSORT CRXSL Single Zone Wireless Thermostat Controller</u> [pdf] Installation Guide CRXSL, CRXSL Single Zone Wireless Thermostat Controller, Single Zone Wireless Thermostat Controller, Wireless Thermostat Controller, Controller

#### References

- <a>Consort Claudgen Electric Heating Solutions</a>
- User Manual

Manuals+, Privacy Policy

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