# **Waterline Room Controller - Type WLCT3**

## Introduction



Room controller type WLCT3 is a 4-event programmable controller used to control areas with underfloor heating or special features of a WLM3 installation. The standard WLCT3 can be used to programme up to 4 time and temperature events over a 24 hour period, based on a 7 day schedule. Once a WLCT3 has been installed, the times and temperatures for the area(s) it controls will no longer be the defaults set on the main WLM3 master.

In addition to the WLCT3's immediate area of control, set in the 'AREA' option of its internal menu, the WLCT3 can control the time and temperature characteristics of other sensors (up to 14) connected to the WLM3 master. This maximises comfort and efficiency while saving energy and reducing costs.

When the WLCT3 is used to control other areas, the  $\pm 4^{\circ}$ C adjustment possibility on the other sensors will now be relative to the WLCT3 setting. Example: A WLCT3 is set to 22°C and has been given control over 'Area 1'. The WLTA3 sensor installed in 'Area 1' now has a control range of 18°C (22-4°C) to 24°C (22+4°C). In addition to the standard WLCT3 room controller, you may have added one of the following to your system:

2-step mode: This mode controls a secondary heat source, operating in a specific area as a boost function in

conjunction with the underfloor heating.

Radiator mode: This mode is used to control the radiators in a central heating system. Hot water mode: This mode is used to control the production of domestic hot water.

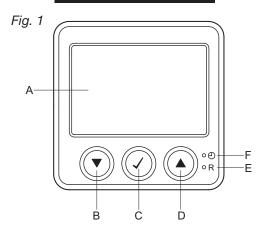
Your installer should have set up the WLCT3 controller to suit your needs during installation. If, however, you wish to change any of the settings, please follow the instructions detailed in the following pages.

The WLCT3 can be reset by pressing the button marked 'R' (see fig 1), this will allow you to return to the factory settings at any time. Details of the default factory settings are given after the WLCT3 programming section of this manual.

## Installation

For installation instructions, see "Installation" under "Waterline Room Sensors - Type WLTx3".

## **Getting started**



#### **Buttons**

BR1026A05a

A:	B: <b>▼</b>	C: √
Display	Adjustment down	OK - Accept

D: <b></b>	E: R	F: <b>()</b>
Adjustment up	Reset to factory settings	Pinhole button for clock adjustment

# 

Display

#### **Buttons**

G:	H:	I:
Automatic mode	Manual mode	Time and temperature
J:	K:	
Day number	4-event symbol  ★ Wake	

Activating the room controller (first-time startup)

- 1. The first time power is connected (or after a factory reset), the clock and weekday will flash and must be set.
- 2. The channel to be controlled from this room controller must then be selected.
- 3. Finally the "Area" (other channels) controlled from this WLCT3 must be selected.

NOTE: If you need to adjust the time at a later date, insert a pin into the hole marked for setting the clock.

	Press the UP ( $\triangle$ ) or DOWN ( $\nabla$ ) button to select the correct <b>hours</b> and then press the OK ( $$ ) button.	Ф
5:00	Press the UP ( $\triangle$ ) or DOWN ( $\nabla$ ) button to select the correct <b>minutes</b> and the press the OK ( $$ ) button.	<b>9</b>
5: 10	Then press the UP $(\triangle)$ or DOWN $(\nabla)$ button to select the correct <b>day</b> and press the OK $()$ button to confirm.	1-7

AREA SETUP - see next page.

Ar ER

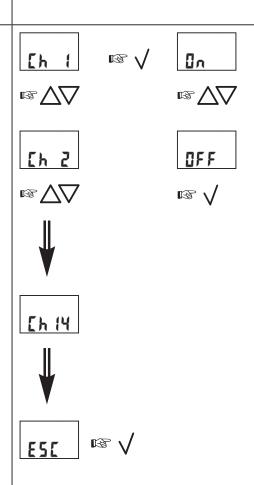
#### ArEA - (group of rooms)

The rooms/channels set as part of the WLCT3 area will follow the automatic temperature settings of this room controller (4-event timer, min. and max. floor temperature limits).

Set a channel (room) to ON if it is to be part of this area.

Example: An area could be the living room, kitchen, and children's rooms, all of which have a high temperature requirement during the afternoon and early evening and a lower temperature requirement during the morning and night. Each room has an associated channel number (Ch1, Ch2, etc.) determined by the number of the output on the master which controls the valve/actuator for that room.

Example: A system may have the kitchen room sensor operating master output #4 and the children's room sensor operating master output #5. If the WLCT3 room controller is situated in the living room and operates output #1, the WLCT3 must be programmed to control output channels 1, 4, & 5.



- 1. Press the UP ( $\triangle$ ) or DOWN ( $\nabla$ ) button to select the channel/room.
- 2. Press the OK (,/) button to view the ON/OFF settings.
- 3. Press the UP  $(\triangle)$  or DOWN  $(\nabla)$  button to change the ON/OFF settings.
- 4. Press the OK (√) button to return to the channel/rooms select menu.

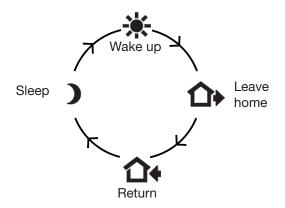
Set the channel/room (Ch) to ON if it is to follow the settings of this room controller.

A total of 14 channels/rooms can be controlled.

NOTE: If the channel selector (hex encoder) is set to 1  $\dots$  14, the selected channel will always be ON (cannot be set to OFF).

## **Everyday use of the room controller**

### 4-Event Clock Mode



The day has been split into 4 events describing a typical day. When the room controller is in 4-event mode, it will automatically change the temperature to the required level at the programmed times. As standard, the room controller uses 4 events on days 1 to 5 (Monday to Friday) 2 events on days 6 and 7 (Saturday and Sunday). Each event allows you to increase or decrease the set temperature. For information on programming, see "Programming 4-Event Clock Time and Temperature" and "Advanced Settings and Readouts".

4-event clock mode / automatic mode:	. ⊕ * . ⊕ *	In automatic mode, the clock symbol ( ) and one of the 4-event symbols ( ) will be shown along with the time and setpoint. For information on programming, see "Programming 4-Event Clock Time and Temperature".
Comfort mode:		<b>Temporary override</b> To temporarily override any temperature in the 4-event schedule, press the UP $(\triangle)$ button once to show the temperature in the display. Then press the UP $(\triangle)$ or DOWN $(\nabla)$ button to increase or decrease the temperature. The display flashes for 5 seconds, and then reverts to the time. Override will operate until the next programmed event, when the thermostat will return to the scheduled 4-event program.
	# @ *	Cancelling comfort mode (temporary override) To cancel temporary override, press the OK (√) button twice.
Manual mode:	2 <u>3.0</u> €	Permanent override  During holidays, the scheduled 4-event program can be overridden. Press the OK (√) button and then the UP (△) or DOWN (▽) button until the override temperature is set. The set temperature will remain on the display and the unit will continue to operate to this temperature permanently.
	# © *	Cancelling manual mode To cancel permanent override, press the OK (√) button once, and the unit will resume automatic operation.

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## **Programming 4-event times and temperatures**

For each event, start time and required temperature must be set.

Example: You want the heating to start at 07:00 in the morning and the temperature to be 25°C. Press the OK ( $\checkmark$ ) button for 3 seconds and the start time will be displayed. Change this to 07:00 with the UP ( $\triangle$ ) or DOWN ( $\nabla$ ) button. Press the OK ( $\checkmark$ ) button to confirm.

The temperature will now be displayed. Change this to 25°C with the UP ( $\triangle$ ) or DOWN ( $\nabla$ ) button. Press the OK ( $\sqrt$ ) button to confirm. This procedure can now be repeated for the second, third and fourth events.

These settings will be valid for days 1-5, as shown on the display. To program days 6 and 7, repeat the above. Days 6 and 7 are usually Saturday and Sunday, and only have two events (generally morning ON and evening OFF).

The temperature can be set within the range of +5 to +35°C. It is also possible to switch heating OFF for an event by reducing the setting to 5°C and then pressing the DOWN ( $\nabla$ ) button once more.

NOTE: When programming the "Sleep" time (event 4), ensure that it is before midnight (00:00).

Press the OK (√) button for 3 seconds to start programming					
Days 1-5					
* 6:00 * 20.0° * * * * * * * * * * * * * * * * * * *	- : Time and temperature				
	☆ : Time and temperature				
16:00 ES AV	☆ : Time and temperature				
	): Time and temperature				
Days 6-7					
* 8:00	🔆 : Time and temperature				
	: Time and temperature				

# Reset to factory settings - room controllers

NOTE: If more than one WLCT3 is present in the system, please copy this page.

•<sup>R</sup>

Press the pinhole button R for 3 second. and the thermostat will return to factory settings.

Remember to set time, day and area.

4-event times and temperatures					Own settings		
		Standard Mode	Radiator mode	2-step mode	Hot water mode		
	Time	Temperature	Temperature	Temperature	Temperature	Time	Temperature
Days 1-5							
*	06:00	21.0°C	21.0°C	21.0°C	50.0°C		
<b>△</b>	08:00	19.0°C	19.0°C	19.0°C	30.0°C		
<b>∆</b> 4	16:00	22.0°C	22.0°C	22.0°C	50.0°C		
)	22:30	17.0°C	17.0°C	17.0°C	30.0°C		
Days 6-7							
*	08:00	22.0°C	22.0°C	22.0°C	50.0°C		
)	23:00	17.0°C	17.0°C	17.0°C	30.0°C		
Other settings							
4-event sequence	-	4:52	4:52	4:52	4:52		
High floor limit temperature	-	27.0°C	-	27.0°C	-		
Low floor limit temperature	17.0°C	17.0°C	-	17.0°C	-		
Special settings							
2-step time	-	-	-	60 min	-		
2-step temperature difference	-	-	-	2.0°C	-		

Group		Room	
Ch 1	OFF		
Ch 2	OFF		
Ch 3	OFF		
Ch 4	OFF		
Ch 5	OFF		
Ch 6	OFF		
Ch 7	OFF		
Ch 8	OFF		
Ch 9	OFF		
Ch 10	OFF		
Ch 11	OFF		
Ch 12	OFF		
Ch 13	OFF		
Ch 14	OFF		
Example			
Ch 1		Kitchen	ON
Ch 2		Living room	ON

Write the room name in the box beside each Ch number, and add ON if it is controlled by a clock thermostat.