

# ecolec®

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Hereby Ecolec Limited declares that the radio equipment type WTC500/TX is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.ecolec.co.uk/support

V9 70°C

# ecolec®

WCT 500/TX wireless  
 7 day programmable  
 thermostat



## Setting the Time and Day



To set the clock press **HOLIDAY** and **BOOST** together. The hours will start to flash and you can adjust them with **▲** and **▼**. Using **SELECT** you can adjust minutes, day of week or change from 24 hour clock to 12 hour clock. When you are finished press **OK**.

## Your heater

Your heater has a control light which may be green - when no heat is needed to maintain the room temperature  
 yellow - when some heat is needed to maintain the room temperature  
 red - when the heater is on at full power or running at factory set surface control temperature (Panel heater only)

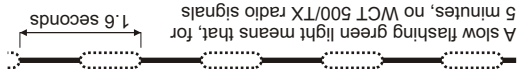
When you switch the heater on it simply heats up to its factory set surface temperature. The red light is always on.

*Manual Control (Panel heater only)*

The WCT 500/TX sends a radio signal every minute. When the heater receives the signal, the light winks off briefly and is always green until the first signal.

*Remote Control (Panel and Fan heater)*

A slow flashing green light means that, for 5 minutes, no WCT 500/TX radio signals have been received. Follow the steps in **START HERE** to fix this.



## START HERE

Once installed, your heater is controlled by a Celsia Zone Controller, WCT 500/TX. The WCT 500/TX is a wireless (433MHz) thermostat giving high precision room temperature control. It is also a seven day programmer with up to six temperature settings per day. Each WCT 500/TX can control any number of heaters.

### 1 Batteries

Remove the WCT 500/TX's battery cover and insert 2 new high quality alkaline AA batteries.

#### WARNING

The WCT 500/TX manufacturer is not responsible for damage due to corrosion. Battery leakage will cause permanent damage. To help avoid this:

- Replace the batteries annually, even if there is not a low battery warning. Remove failing or flat batteries immediately.
- Always fit a pair of new high quality alkaline batteries from the same pack. Never mix new and old batteries, or batteries of different brands or types.
- Never attempt to revive alkaline batteries by heating, crushing or recharging.

You must reset the clock after replacing the batteries, but all other settings are unaffected.

### 2 You must make a wireless connection between your heater and your WCT 500/TX

1. Switch your heater off.

**If you don't do this the heater is not going to work**

2. Now, **timing is critical**: switch it on for three seconds then off again. You can say, "On, one thousand, two thousand, three thousand, off".

3. Switch it back on. The light below the switch should be flashing; if it is not flashing restart the procedure.

4. You now have half a minute to press the button at the back of WCT 500/TX. Once pressed, the light on the heater will immediately stop flashing and possibly change to yellow or red depending on the WCT 500/TX settings and the room temperature.

Now that it's connected you shouldn't ever have to do it again, though you may also wish to follow this procedure if you add more heaters or move your heater to another WCT 500/TX.

### 3 Choosing a position in the room

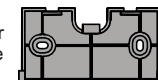
The WCT 500/TX should be positioned on the wall in the same room as the heater. It should be where its temperature will not be changed by local effects. Avoid:

- Draughty places near windows, doors and vents.
- Places near the heater itself or any other heat sources in the room.
- Places where the sun will shine on it.
- Places where, for example, it could be hit by a door.
- Places where it may get wet.

Before permanently fixing it, hold the WCT 500/TX in the chosen position and use **▲** to make the power bars appear (See *Quick Adjust* for more details). Check that the heater turns on. If it does not, consider a different position.

### 4 Fixing your WCT 500/TX to the Wall

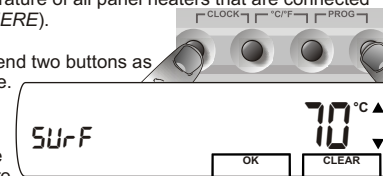
Remove the wall plate from the rear of the WCT 500/TX and mark through the screw holes on the rear (60 mm centres). Drill and plug the wall to accept No. 6 or No. 8 screws and mount the wall plate. Clip the WCT 500/TX back onto the wall plate.



## Setting surface temperature

It is possible to alter the surface temperature of your panel heaters (**but not fan heaters**). This procedure changes the surface temperature of all panel heaters that are connected (see **START HERE**).

1. Press the end two buttons as shown here.
2. Now you can adjust the surface temperature in degrees Celsius using **▲** and **▼**. New heaters are set to 70°C. **Do NOT go above 70°C.**
3. Press **OK** to transmit the new temperature to your panel heater(s), or **CANCEL** to leave them unchanged. The light on the heaters will flash 4 times to confirm that it has changed.



## Cleaning the WCT 500/TX

Clean the WCT 500/TX only with a soft, lint-free cloth. Avoid getting moisture on buttons or openings. Do not use sprays, liquids or abrasives; doing so may damage the WCT 500/TX.

## Reverting to manual control

If for any reason you want to use your panel heater without the WCT 500/TX, it can operate independently (a fan heater cannot). To revert to Manual Control:

1. If the panel heater is on, switch it off.
2. Switch it on for three seconds then off again. Do this 5 times and your heater will be back to manual control.

## Time, Day and Program

Here you can see the current time and day of the week. **PROG.** shows which step of the program it is currently on.

## Holiday (no program)

Pressing **HOLIDAY** switches the program off while you are away. Use **▲** and **▼** to alter the temperature. You can choose --- (no heating), 4°C (frost protection) or anything up to 12°C. It stays like this until you press **CLEAR**.

## Boost (on timer)

Press **BOOST** to turn the heater on for 15 minutes. If you press **BOOST** again it adds another 15 minutes up to a maximum of 4 hours. You can use **▲** and **▼** to adjust the boost temperature. Boost ends when the time runs out, or you can cancel it by pressing **CLEAR**.

## Locking the WCT 500/TX

You can lock the WCT 500/TX to prevent tampering. When locked all buttons are disabled. **HOLIDAY**, **BOOST**, **SET-BACK**, **ADVANCE**, **▲** and **▼** are not displayed.

To lock it press **SET-BACK** and **ADVANCE** together to enter program setting, then press the button on the back for 2 seconds.

To unlock press **SET-BACK** and **ADVANCE** together, release them, then press the button on the back within 2 seconds.

## Factory set program

On each weekday it is 21°C from 6:30am to 8:30am, then 4°C (frost protection) until 4:30pm, then it is 21°C until 11:00pm and finally 4°C until prog.1 the next day. To restore this program press **▲** and **▼** together during *Copy Day* in *Setting the 7 day program*.

	Mon to Fri	Sat and Sun
1	06:30 21°C	08:00 21°C
2	08:30 4°C	23:00 4°C
3	16:30 21°C	---:-- ---:--
4	23:00 4°C	---:-- ---:--
5	---:-- ---:--	---:-- ---:--
6	---:-- ---:--	---:-- ---:--

## Frost Protection 4°C

For frost protection, set the Target temperature to 4°C. There is no frost protection if you set it to ---. The snowflake symbol appears if the Actual temperature ever falls below 4°C.

## Celsius or Fahrenheit

Pressing **BOOST** and **SET-BACK** together changes Actual and Target temperature between Celsius and Fahrenheit.

20.8°C 69.4°F

## Power and Transmit symbols

As your room reaches the target temperature, heating is reduced from 100% 4 bars to 0% no bars.

The radio transmit symbol appears whenever the WCT 500/TX transmits to your heater. This happens about once per minute.

## Actual and Target Temperature

Actual is a thermometer showing the room temperature. Target is the temperature you would like. It is set manually or by the program and can be --- when no heating is needed.

ACTUAL 20.8°C TARGET 21.0°C

## Quick Adjust

During normal operation you can use **▲** and **▼** to alter the temperature. The effect is temporary; it reverts to normal temperature on the next prog or if you press **CLEAR**. You can set it to --- (no heating), or anything from 4°C (frost protection) to 30°C.

## Continuous Fan

If you press **▲** and **▼** together, it starts or ends *FRn*. With *FRn*, heaters operate as normal but if they have fans, the fans blow continuously. It reverts to normal on the next prog or if you press **CLEAR**.

## Advance (early bird)

Press **ADVANCE** if you wish to bring forward the next prog; for instance if you arrive in or leave the room earlier than normal. The program stays Advanced until the prog's normal time or until you press **CLEAR**.

## Set-Back (economy)

For economy press **SET-BACK**. The 7 day program continues to run but all temperatures (except frost) are lowered by 5°C. Set-Back continues until you press **CLEAR**.

## Adaptive Start (auto advance)

If you enable adaptive start, the thermostat learns to predict how long the room takes to heat up. You should design your 7 day program accordingly. So suppose you need it to be 21°C by 08:00. Without adaptive start you might program it to start at 07:30 hoping it will be warm by 08:00. But with adaptive start you simply program it for 08:00 and the thermostat starts heating up at its predicted optimal time.

To enable or disable adaptive start, first find *Copy Day* as explained in *Setting the 7 day program* then press these two buttons. Now that the display shows Auto ADVANCE you can switch adaptive start on or off with **▲** and **▼**. Press **OK** when you are done.

Once enabled, it flashes **ADVANCE** during predicted heat ups. Here, at 07:35 it has advanced to prog.1 to reach 21°C by 08:00.

A newly installed thermostat may take about a week to optimise its predictions for your room and heater configuration.

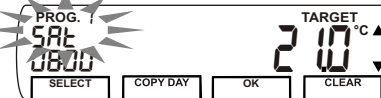
## Setting the 7 day program

To set the program press **SET-BACK** and **ADVANCE** together. This will take you to stage 1 below. You can program the WCT 500/TX with up to 6 temperature levels per day.

**Program times cannot overlap**, for example if prog.3 Mon is 16:30 then prog.2 Mon can only be set to times before 16:30.

**Note:** You might accidentally "lock" it while setting the program. To unlock it see *Locking the WCT 500/TX*.

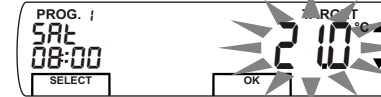
1 The prog number and day will flash. You can change it with **▲** and **▼**. **SELECT** takes you to stage 2.



2 The time flashes. You can adjust it with **▲** and **▼**. **SELECT** takes you to stage 3.



3 The temperature flashes. You can adjust it with **▲** and **▼** for room temperature, 4°C (frost protection) or --- (no heating). **SELECT** returns to stage 1.

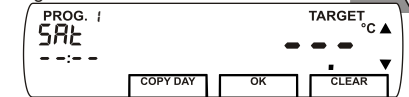


4 When you have finished setting the program press **OK** to return to normal operation.

SET-BACK ADVANCE

CF PROG

**Clearing A Prog:** If you clear a prog it displays as ---, ---°C and the prog is ignored. From stage 1 press **CLEAR** to clear a prog and press it again to un-clear it.

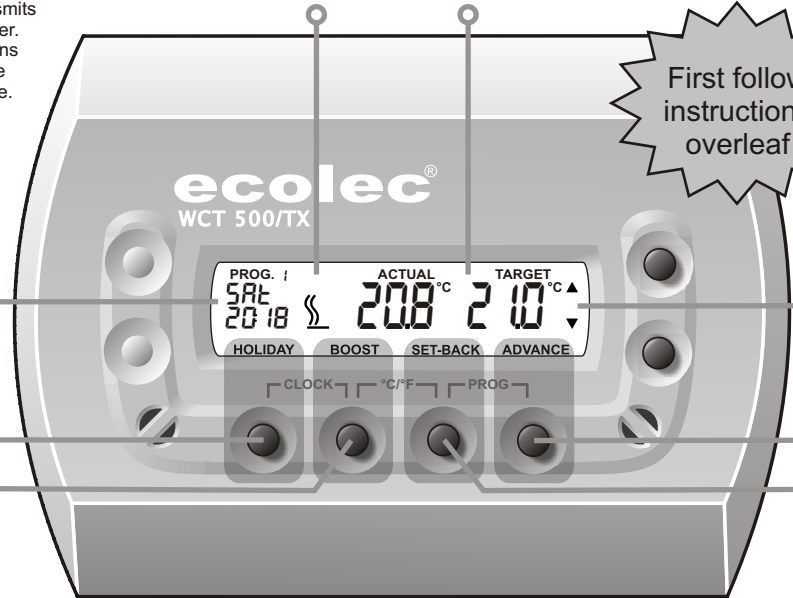


**Copy Day:** Use this to copy all 6 progs from the day you were adjusting to another day. Press **COPY DAY** to actually do the copy. **CLEAR** returns to stage 1.



**Continuous Fan:** While temperature is flashing press **▲** and **▼** together to choose *Continuous Fan* for this prog.

**Manual Operation:** If you clear all 6 progs in all 7 days, there is no program at all. The temperature control is done entirely by *Quick Adjust*.



First follow instructions overleaf