

# **Ecostrad IR Infrared Panels**

Remote Control User Manual





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# 1 | Technical Data

### **Remote Control**

Battery power	DC 3V (2 x 1.5V AAA batteries, not included)
Power consumption	3V, 0.1mA
Set temperature range	0-45 °C
and resolution	1°C
Room temperature range	0-50 °C
and display resolution	0.1 °C
Measured temperature accuracy	±0.5 °C
Working environment range	1-50 °C
Dimensions (mm)	W56 x L135 x D18
Weight	86g
Radio frequency	433.92MHz

### **Built-in Receiver**

Power supply	AC 220-240V, 50/60 Hz
Power consumption	0.4W

Warning – Do not use in environments with temperatures over 50 °C. The LCD screen can only work in a temperature range from 1°C – 50 °C.

# 2 | Components

This infrared panel control system comprises two parts:

A remote control with digital display.

This accommodates the electronics, control interface and the room temperature sensor.

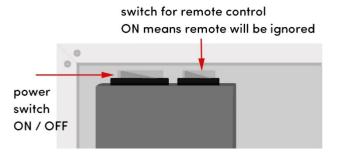
A receiver, built into the heater.

This receives and executes signals from the remote control.





The remote switch on the receiver enables two modes of operation:



Remote switch is	The heater is controlled by the remote control.	
OFF.	The remote uses its temperature sensor to measure the temperature of the room. If the temperature falls 0.5 °C below the set temperature, it will switch the panel on. If the temperature rises 0.5 °C above the set temperature, it will switch the panel off. This maintains a constant temperature.	
Remote switch is ON.	The heater is not controlled by the remote control.	
	The heater will ignore the remote and will simply heat if the ON/OFF switch is ON, and stop heating when the switch is OFF.	

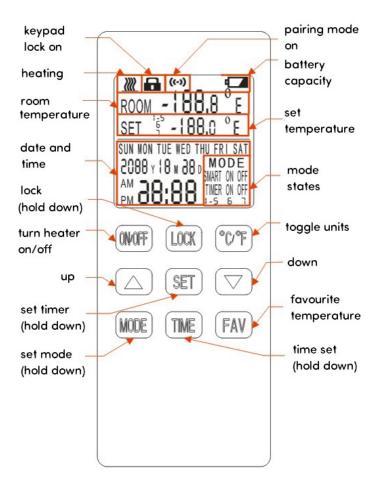


The remote can be paired with as many panels as you wish. This can be useful if you have several panels in one room, because you can pair them all with the same remote.

NOTE – each heater can only be paired with one remote control. If you pair the panel with a new remote control, the original connection will be broken.

# 3 | Using the Remote

## 3 – 1 | Display



### 3 – 2 | Batteries

The remote requires 2 x 1.5V AAA batteries. (Not included). Alkaline batteries are recommended.



Remove the batteries from the remote whenever you expect the heater to be out of use for long periods.

### 3 - 3 | Pairing

The first step when using for the first time is to pair the heater with the remote.

1. Plug the heater in and switch the power switch to ON. Make sure the remote control switch is set to OFF.



2. Turn the remote ON at the ON/OFF switch. Hold the °C/°F and MODE buttons down together to activate pairing mode. The pairing mode icon (\*\*) will flash.



3. Keep holding down the buttons until you hear a long beep from the heater. This means it has successfully paired with the remote.

#### NOTE:

- Heaters will only pair up to 1 minute after being switched on. If the heater is not pairing, use the ON/OFF to switch it off and on again and try again.
- Once paired, the connection between the remote and the heater will only be broken if the heater is paired with another remote.
- Heaters can only be paired with one remote.
- To pair with a new remote, first use the ON/OFF button to switch the heater off and on again, then follow the steps above.
- Remotes can pair with multiple heaters. If there are heaters you DON'T want to pair with the remote, switch them OFF at the ON/OFF switch before activating pairing mode.

### 3 – 4 | Setting Time

Hold down the TIME button for 3 seconds to set date and time.

The year will flash. Use the UP and DOWN arrows to adjust, and press TIME to set. The months will flash. Repeat the process until year, month, date, hours and minutes are set.



You can single press TIME at any point in normal operation to toggle between 12 hour and 24 hour clock display.

### 3 - 5 | Modes

There are two optional modes which you can use to make your heating smarter: timer mode and smart mode. The two modes work independently from each other, so both can be switched on at the same time if you want.

#### **Timer Mode**

With timer mode on, the heater will come on and off automatically according to your settings. With timer mode off, the heater will continue with the current settings until you change them. You can set timer mode to work either all week, some days a week, or no days a week.

#### **Smart Mode**

With smart mode on, two smart functions are activated: open window detection and adaptive start.

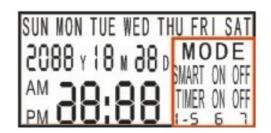
**Open window detection** prevents energy being wasted when a window is left open. If the remote detects a continuous fall in temperature over 1.5 °C within 3 minutes, it will switch the heater off automatically. It will switch the heater back on automatically if it senses the same rise in temperature. Alternatively, you can override manually by switching the remote back on.

Adaptive start gives you an extra scheduled interval once per day where the heater switches on ahead of its programmed start time, calculating the warm-up period so it reaches the set temperature ready for the set time, rather than heating up from cold when the time arrives. Three hours before the scheduled start, the remote will measure the difference between the set temperature and the room temperature and calculate how much earlier to switch on, allowing 6 minutes per 1 °C. Note – if timer and smart mode intervals are set to conflict, the timer will take priority.

#### **Selecting Modes**

Hold down the MODE button for 3 seconds to set which modes you want on which days.

 First, the timer settings will flash. The flashing numbers show which days you are setting the timer for, starting with 1-5, the weekdays. Use the UP and DOWN keys to toggle between ON and OFF, then press MODE to set.



- The 6 will then flash, inviting you to set mode for Saturday. Use UP and DOWN to choose and press MODE to set.
- Repeat as the 7 flashes to set for Sunday, and press MODE to confirm.
- Next, the smart setting will flash. Use the UP and DOWN keys to toggle between ON and OFF, then press MODE to set.

### 3 - 6 | Setting Timer

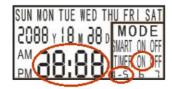
Timer settings, smart mode settings and favourite temperature can be adjusted by holding down SET. Be aware that the settings screen will time out after 10 seconds of no activity. You may find it easier to decide your settings before starting.

Remember, the remote will only act on these settings if timer and smart mode have been enabled in the mode menu, see 3-5.

#### **Timer Settings**

You can set an ON time and an OFF time for each block of days. The heater will be ON for your chosen interval and OFF the rest of the time. Or, if you set your ON time later than your OFF time, the panel will instead be OFF for the chosen interval and ON for the rest of the time. You choose the temperature of the ON intervals.

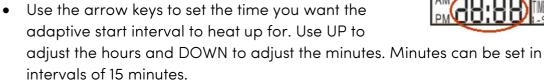
- Hold down SET for 3 seconds. Time, TIMER ON and 1-5 (weekdays) will flash.
- Use the arrow keys to set the time you want the heater to come on. Use UP to adjust the hours and DOWN to adjust the minutes. Minutes can be set in intervals of 15 minutes.



- Press SET to confirm. Time, TIMER OFF and 1-5 (weekdays) will flash.
- Use the arrow keys to set the time you want to heater to go off.
- Press SET to confirm. The temperature will flash.
- Use the arrow keys to choose your ON temperature. Press SET to confirm.
- Time, TIMER ON and 6 (Saturday) will flash. Repeat the above steps to choose ON and OFF times and temperature for Saturday.
- Press SET to confirm. Time, TIMER ON and 7 (Sunday) will flash. Repeat for Sunday.

### **Smart Mode Settings**

Once the timer is set, the remote will move onto the smart mode settings. SMART ON and the time will flash.



- Press SET to confirm. The temperature will flash.
- Use the arrow keys to choose your ON temperature.
- Press SET to confirm.



#### **Favourite Temperature**

Once the smart mode settings are set, the remote will move onto the favourite temperature setting. The temperature only will flash.

- Use the arrow keys to choose your favourite temperature.
- Press SET to confirm.

Favourite temperature can be activated at any time by pressing the FAV button.

NOTE – All settings will be forgotten if the remote batteries run down or are removed. You will need to re-set all settings if the batteries are replaced.

### 3 – 7 | Switching ON/OFF

The ON/OFF button on the remote switches the heater off and turns off the remote display.



However, the remote continues to work, sensing the temperature and preparing automatic settings.



If the remote is set to a timer, the remote and heater will switch back on when the next ON interval is scheduled.



If the remote is not set to a timer, the heater will remain switched off.

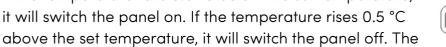
### 3 – 8 Adjusting Temperature

You can use the UP and DOWN arrows on the remote to adjust the set temperature. This can be adjusted in steps of 1  $^{\circ}$ C from 0–50  $^{\circ}$ C.



If the temperature falls 0.5 °C below the set temperature, it will switch the panel on. If the temperature rises 0.5 °C









remote displays this symbol when it is asking the panel to heat.

If you are using the heater with timer mode on, the remote will work to the adjusted temperature until the next scheduled ON or OFF period.

### 3 – 9 | Favourite Temperature

Press FAV to switch the heater to a pre-set favourite temperature. See how to set the favourite temperature in **3-6**.



3-6.

If you are using the heater with timer mode on, the

remote will work to the favourite temperature until the





next scheduled ON or OFF period.

### 3 – 10 | Toggle Temperature Units



ONOFF





Press °C/°F to toggle the remote display between degrees Celsius and degrees Fahrenheit.

LOCK



### 3 - 11 | Keypad Lock

The keypad lock function is designed to prevent children playing with settings.



TIME

Hold down LOCK for 3 seconds to activate lock. Keypad buttons will not respond until the lock has been released.





Hold down LOCK for 3 seconds to release the lock.

### 3 – 12 | Backlight

The backlight on the display switches on whenever the remote is in its ON state and buttons are being pressed. The light switches off after 5 seconds of no activity.

# 7 | Troubleshooting

Problem	Possible Cause	Action
Heater is not heating.	Set temperature is lower than room temperature.	Go to section <b>3-8</b> to change set temperature. You can also change the temperatures set in the timer by following section <b>3-6</b> .
	Heater is not correctly switched on.	<ul> <li>Check all connection points:</li> <li>Heater plugged in</li> <li>Socket switched on</li> <li>Heater power switch ON</li> <li>Remote control switched ON</li> </ul>
Heater is not pairing with remote.	Remote switch on heater is switched to ON. This means the heater will ignore the remote.	Turn remote switch on back of heater to OFF.
	Pairing mode has timed out. Heaters will only pair up to 1 minutes after turning on.	Switch the heater off and on at the power switch and try again immediately.

Heater is not responding to remote.  Remote switch on heater is switched to ON. This means the heater will ignore the remote.  Heater is not correctly	Turn remote switch on back of heater to OFF.	
	Check all connection points:	
	switched on.	Heater plugged in
		Socket switched on
		Heater power switch ON
		Remote control switched ON
Heater is not following timer.	Timer mode is switched off.	You can change which days the timer works using the MODE menu. See <b>3–5</b> for instructions.
Remote is sensing the temperature too high or too low.  The remote, which houses the temperature sensor, is being stored in a location with unrepresentative temperature.	houses the temperature sensor, is being stored in a location with	Remote should be left in a normal open room environment, rather than inside a drawer, under a blanket, in a pocket, etc. Do not cover or touch the sensor.
	If the temperature is too high, check the remote is not in a hot location – e.g. near the heater, in direct sunlight, close to hot water pipes. If the temperature is too low, check the remote is not in a cold location – e.g. in a draught or by a window.	
Remote not switching on.	Batteries have run out or been removed.	Put batteries back in or replace. You will need to re-set settings.
		Try to replace batteries when the battery capacity symbol flashes, so you don't lose settings unexpectedly.
	Batteries used are not suitable.	The remote needs 2 x 1.5V AAA batteries. Alkaline batteries are recommended.
The remote has forgotten my settings.	Batteries have been removed or replaced.	Settings are always lost when the batteries are removed. You will need to re-set your settings.