MANGROVE JACK'S BREWING Co.

# DUAL TEMPERATURE CONTROLLER INSTRUCTIONS

TECHNICAL SPECIFICATIONS

- TEMPERATURE MEASURING RANGE: -50-99°C (-58-210°F)
- ACCURACY: +/- 1°C (-50-70°C OR -58-158°F)
- POWER SUPPLY: 220V AC +/- 10%, 50/60Hz
- SENSOR: NTC Sensor
- RELAY CONTACT CAPACITY: Cooling (10A/250V AC), Heat (10A/250V AC)
- AMBIENT TEMPERATURE: 0 - 50°C (32 - 122°F)

SAFETY SPECIFICATIONS

- Make sure the Dual Temperature Controller is used on a flat dry surface.
- Do not plug any device into the sockets on the back that exceed the power ratings.
- Avoid getting water and dust into the air vents on the side of the Dual Temperature Controller.
- Always use the controller with the specified power ratings.
- Do not operate if the cord, plug or appliance is damaged.
- Do not let cord hang over the edge of a table or touch hot surface.
- Do not place on or near a hot gas or electric burner, or in a heated oven.

BASIC OPERATION

Set button
Up button
Down button
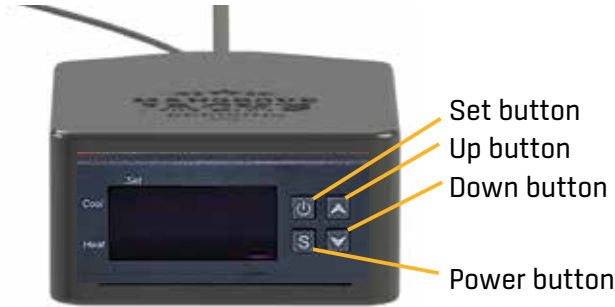
Power button

Button	Press Once	Hold for 3 Seconds	Holding Continuously
Power	Switch controller on and off.		
Set	Select, or finish step.	Indicator light will appear.	Hold the Set button and pressing either the up or down to enter target temperature.
Up	Display target temperature.		
Down	Display the hysteresis value.		

The temperature displayed on the screen under normal working status shows the current temperature.

SETTING A TEMPERATURE

1. Press the Set button and hold for 3 seconds. The Set indicator light on the screen will appear.

2. Press Set button again. The temperature displayed on the screen now is the target temperature.

3. While holding in the Set button, use the Up or Down buttons to enter a desired target temperature.

4. Once you reach your desired target temperature, press the Power button to set that temperature. You will then return back to the main screen.

Heating

Cooling

Thermometer

Power Cord
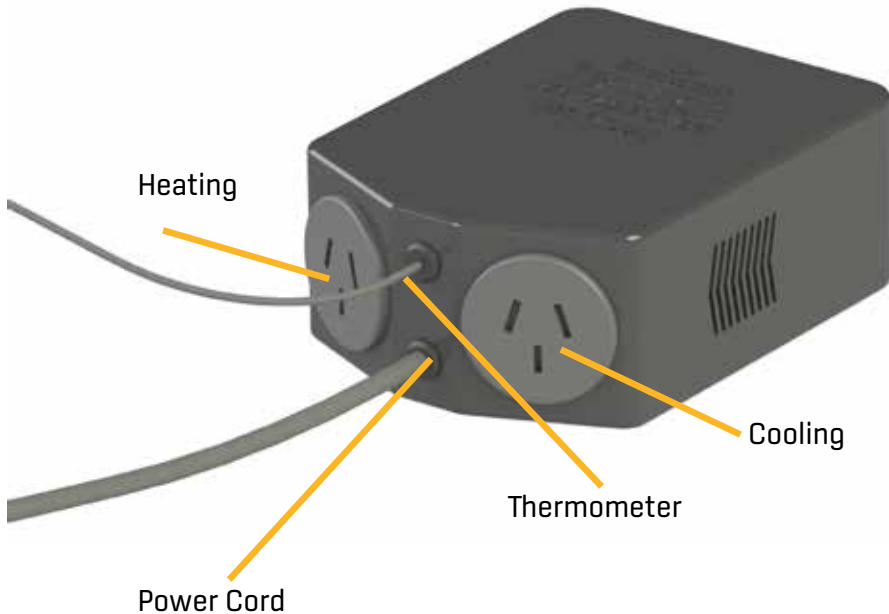
Heating
The heat socket on the controller is for plugging a heating device into. Most common is the Mangrove Jack's Heat Belt or Heat Pad.

Cooling
The cooling socket on the controller is for plugging a fridge or chiller into.

Temperature Probe
Insert the temperature probe into a fridge or temperature controller box. If using a fridge it is best to read the temperature from the middle of the fridge to get the most accurate reading of the temperature inside.

ADDITIONAL SETTINGS

Apart from setting a target temperature (code F1), we recommend keeping all other settings as their defaults. However, for your reference, a complete list of the settings that you can change are described in the table below:

Code	Function	Default
F1	Setting a target temperature	10°C
F2	Temperature hysteresis value	0.5°C
F3	Cooling delay time (for compressor delay protection)	3 minutes
F4	Temperature calibration	0°C

To change settings other than setting a target temperature (F1):

1. Press the set button and hold for 3 seconds. The Set indicator light on the screen will appear. The screen should also display "F1."

2. Use the Up or Down buttons to select the code corresponding to the setting of the function you would like to change.

3. While holding in the Set button, use the Up or Down buttons to enter the desired value for that function.

4. Once you reach your desired target value, press the Power button to set that value.

ADDITIONAL FAQS

How do I change the temperature hysteresis value?

1. Press the set button and hold for 3 seconds. The Set indicator light on the screen will appear.
2. Use the Up or Down buttons to select F2, the code corresponding to temperature hysteresis value.
3. While holding in the Set button, use the Up or Down buttons to enter the desired value.
4. Once you reach your desired target value, press the Power button to set that value.

The cooling does not switch on immediately when the measured temperature increases above the target temperature + hysteresis value. Is this normal?

The controller has been set to a default cooling delay time of 3 minutes. During this delay time the Cool indicator light should be flashing. If the delay time you experience is greater than 3 minutes, then this setting has likely been changed from its default. To change the cooling delay time back to 3 minutes:

1. Press the set button and hold for 3 seconds. The Set indicator light on the screen will appear.
2. Use the Up or Down buttons to select F3, the code corresponding to cooling delay time.
3. While holding in the Set button, use the Up or Down buttons to select 3.
4. Press the Power button to set that value.

My controller does not display the correct temperature. How do I fix this?

The most likely cause for this is that the temperature calibration setting has been changed from its default value of 0 ºC. To change this back:

1. Press the set button and hold for 3 seconds. The Set indicator light on the screen will appear.
2. Use the Up or Down buttons to select F4, the code corresponding to temperature calibration.
3. While holding in the Set button, use the Up or Down buttons to select 0.0.
4. Press the Power button to set that value.

NZ/AU:

Product name: Dual Temperature Controller
Model number: 71140
Voltage: 220-240V ~ 50/60Hz
Made in: China
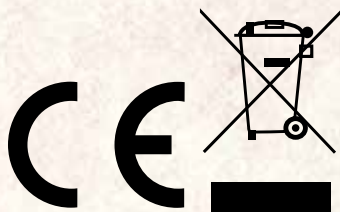
EU/UK:

Product name: Dual Temperature Controller
Model number: 71141 (EU) and 71142 (UK)
Voltage: 220-240V ~ 50/60Hz
Made in: China

Correct disposal of this product:
This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.