

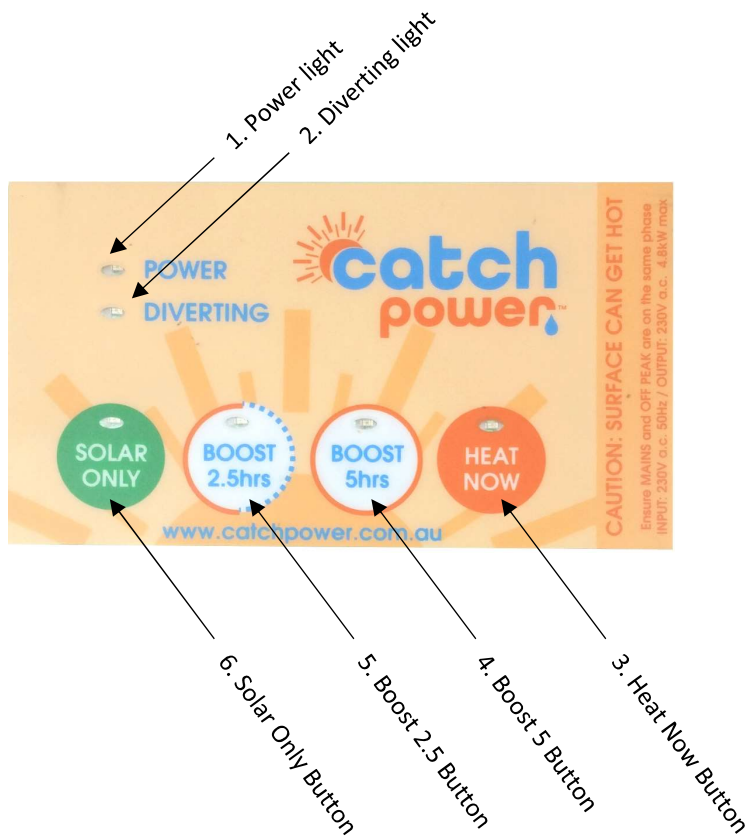


# **GREEN**

## **USERS GUIDE**

## 1 – How to Control Catch

Catch has been designed with simplicity in mind. The interface has only 4 buttons.



### 1. Power light

The power light indicates the unit has power to it and is ready to operate. Most of the time this led will be solid green.

If you see the power led flashing on and off it means the unit is restricting power delivery to the hot water because it is getting hot.

The device getting hot is not an indication of a problem, the small form factor means there will be times the unit needs to slow down because it is getting hot.

### 1. Diverting light

The diverting light indicates how much energy is being sent to the hot water service. The faster the diverting light is flashing the more energy is being sent to the hot water.

If the diverting light is solid green it means the unit is as at 100%, which means Catch is sending as much power as the hot water element can handle.

If the diverting light is off and you see a very short pulse of light every few seconds it means the hot water service has hit temperature and the hot water thermostat has shut the element off.

## **Understanding the CATCH buttons**

Each button on the control console represents a different mode of operation. You change modes by gently pressing on the round circle that represents each button. Catch will let you know if it has changed modes by the green LED lighting up on the button you have just pressed.

### **3. Heat Now Button**

The Heat Now mode is entered into by pressing the Heat now button.

The Heat Now mode is used to get your hot water heated as soon as you press the button. In this mode the device will first check to see if it can you power from the Off Peak line. If the off peak is not installed or is not available then it will use normal mains power.

Once the hot water service hits thermal cut off CATCH will move out of Heat now mode and go back into Boost 5hrs mode.

Heat Now Lock mode can be entered by pressing the Heat Now button a second time. CATCH will tell you it is in Heat Now Lock mode by flashing the led on the Heat Now Button on and off. When CATCH is in Heat Now Lock mode CATCH stay in Heat Now mode until it is manually changed to another mode.

### **4. Boost 5hrs Button**

The Boost 5Hrs mode means CATCH will use a maximum of 5hs of Off Peak energy each day as well as the excess solar energy to heat hot water. This value will change (default) depending on when thermostat cut-off is reached from solar. This value can also be fixed (flashing LED). See chart below for details.

### **5. Boost 2.5hrs Button**

The Boost 2.5Hrs mode means Catch will attempt to use 2.55hs of Off Peak energy each day as well as the excess solar energy to heat hot water. This value will change (default) depending on when thermostat cut-off is reached from solar. This value can also be fixed (flashing LED). See chart below for details.

### **6. Solar Only Button**

The default (solid LED) is for the solar to provide required energy unless thermostat cut-off is not reached during the day. In this case, the off-peak is called on to complete the process that night.

If the mode button is selected twice (LED flashing), the Solar Only mode means CATCH will not use any Off-Peak, or any other source of mains power, to heat the hot water tank. The only energy that will be sent to the hot water service is solar energy that would have otherwise been exported to the grid.

For more details, refer to the chart below.

For further assistance please contact our support team on 02 5700 5717,  
or complete the form on the Contact Us page

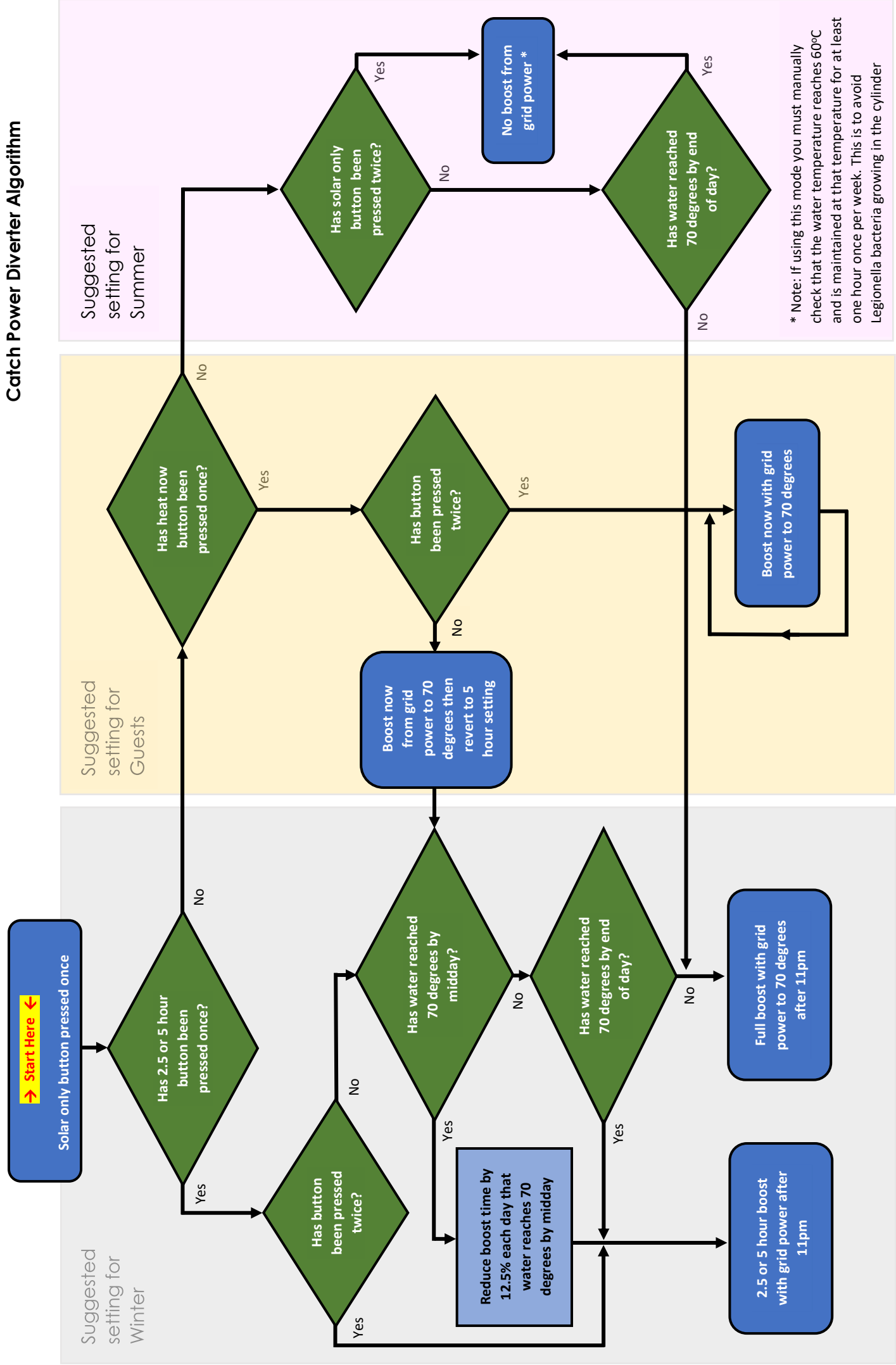
## Green CATCH Firmware Steps

Setting	Description	Question	Result	Action
<b>Solar Only – Default (Solid LED)</b>	Solar PV is the only energy source available to divert to hot water. If thermostat cut-off is not reached from solar, then off-peak will be used to finish the process that night, or at 11pm if there is no off-peak.	Has the hot water tank reached thermostat cut-off from Solar?	Yes.  No.	Mains (off-peak or otherwise), is NOT called on.  Mains (off-peak or otherwise) used to boost the tank to the tank to thermostat cut-off.
<b>Solar Only – Selected Twice (Flashing LED)</b>	The unit is now in absolute Solar Only mode. The only energy source available is surplus solar PV.	Has the hot water tank reached thermostat cut-off from Solar?	Yes.  No.	No mains boost (off-peak or otherwise), is called on.  No mains boost (off-peak or otherwise), is called on.
<b>Boost 2.5Hrs</b>	Diverters surplus solar PLUS draws from Off-Peak/Controlled Load to Boost.	Has the HW reached cut-off?	Yes, before midday.	Reduce boost time by 12.5% of 2.5hrs (this process continues until there is no overnight boost).
“		Has the HW reached cut-off?	Yes, after midday.	No further reduction in boost time.
“		Has the HW reached cut-off?	No	Boost to cut-off from mains when off-peak becomes available or at 11pm.
<b>Boost 2.5Hrs (Fixed) (Alternative)</b>	Press this button again to toggle and fix the boost amount to 2.5Hrs	No change in condition.	CATCH will boost for 2.5Hrs, or until thermostat cut-off is reached, at 11pm or when the off-peak is present.	As described.

## Green CATCH Firmware Steps

Setting	Description	Question	Result	Action
Boost 5Hrs	As above but with maximum of 5 hours of mains power.			As with 2.5Hr Boost procedure.
Boost 5Hrs (Fixed) (Alternative)	Press this button again to toggle and fix the boost amount to 5Hrs	No change in condition.	CATCH will boost for 5Hrs, or until thermostat cut-off is reached, at 11pm or when the off-peak is present.	As described.
Heat Now	Will use off-peak mains or general rate mains to heat the hot as soon as pressed.	Has the tank reached thermostat cut-off?	When the answer is Yes, the unit will revert back to the Boost 5Hr mode automatically.	Once the HW reaches cut-off the unit will automatically revert back to the Boost 5Hr mode automatically.
Heat Now - Fixed	Press the Heat Now button twice and the LED will flash indicating that it is in the Fixed mode. Press the button again to revert to default Heat Now mode (above).	Has the tank achieved thermostat cut-off?	<b>Yes;</b> then the unit will wait until the thermostat closes again and requires energy to heat again. <b>No;</b> then will continue to supply energy to the element in the tank until the thermostat opens.	Always keeping the tank at top temperature via the mains. Every time the thermostat closes for heating CATCH will allow the energy to be taken from the mains, regardless of solar, off-peak conditions or the time.

# Catch Power Diverter Algorithm



\* Note: if using this mode you must manually check that the water temperature reaches 60°C and is maintained at that temperature for at least one hour once per week. This is to avoid Legionella bacteria growing in the cylinder