

# Basic Settings and Configuration for Thermok Solar

The Thermok Solar Device has 4 temperature input channels, and 2 individually controllable DC relays. To configure the two relays, enter the Main Setup Menu.

**Relay A Mode** – Where you select the operational mode of the relay

Off Always – Relay is always off

Differential – (default) Differential Temperature Control

On Over – Relay is on when temperature is over a specified limit

On Under – Relay is on when temperature is under a specified limit

On Always – Relay is always on

**Relay A Settings** – Where you configure the temperature set points and channels to use  
**Settings for Differential Mode**

High Side: (1 – 4) Select which temperature channel you wish to use for your high side.

For a standard solar hot water system, this would be the temperature channel monitoring the temperature of your solar collector.

Low Side: (1 – 4) Select which temperature channel you wish to use for your low side.

For a standard solar hot water system, this would be the temperature channel monitoring the temperature of your hot water tank.

Delta T: Temperature Differential that must exist before the relay will turn on.

For example, if set to 20 degrees, the high side (collector) must be at least 20 degrees warmer than the low side (tank) before the relay will turn on.

This setting will depend on your particular system, and may take some experimentation to fine tune.

Hi Limit: A maximum temperature limit.

When this temperature is reached on the low side (tank), the relay will turn off to prevent the tank from over-heating.

**Settings for On Over or On Under Mode**

Use Channel X: (1 through 4) Select whether or not you wish to use each channel for temperature monitoring.

Over T or Under T: Enter the temperature set-point at which the relay should turn on.

Relay B is configured the same way as Relay A. It can be used for various purposes such as to sound an alarm buzzer when a set temperature is reached, or to start another pump to start dumping excess heat to a secondary system. It can also be used as a differential controller for a second pump.

Note: Relay C and RS-232 Setup are not used on the standard Thermok Solar model.



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