

# Standard Heater Control

## User Settings

None - heater is controlled automatically according to room Actual temperature compared to Set Temperature.

## Configuration Settings

### Heater Offset

Starting point for heater control. Default value **1.0°F**.

### Heater Band Width

Switching differential or variable band for heater control. Default value **1.0°F**.

## Description

### Heater switches on -

When temperature falls, the heater is switched on when room temperature falls below Set Temp - Heat Offset - Heat Band.

Example : If Set Temp = 70°F, heater switches on if temperature falls below 68°F (70 - 1 - 1°F).

### Heater switches off -

When temperature rises, heater switches off when room temperature is above Set Temp - Heat Offset.

Example : If Set Temp is 70°F, heater switches off if temperature is higher than 69°F (70 - 1°F).

### Heater is on,off or variable -

When temperature is within the Heat Band, the program determines a required "variable level" between 0% and

100%, but the actual switching action depends on the output configuration.

With the default configuration (On-Off), the output responds only to values of 0% and 100%. For values in between, it simply stays doing what it was doing previously. So it will switch on when temperature falls (requiring 100%) and stay on until it rises (requiring 0%).

If the output is configured as a variable type output (Lamp or Simmer), the output will give a variable output. This feature can only be used with output drivers and types of heater that permit variable levels. For example, gas heaters do not permit variable levels and so must only be used On-Off or damage might occur.

### No Temperature reading -

If there is no temperature reading - because the only sensor (or all sensors) in the room - have failed or have excessive errors, heaters are switched off.

## Set up Hints

### For better control

Default set up is On-Off which gives adequate performance in most circumstances. But if your heater (and driver modules) will allow it, use variable level (modulating) heating control - lamp or simmer. This gives a more progressive action and reduces temperature swings.

**Warning** : This is only possible with types of heater. If you're not sure, call Technical Support for advice. Incorrect setting or set up may cause damage to equipment and heaters.

### Better Economy

Default set up is a with small offset and band. But running costs can be reduced by increasing the offset.

This means the building will run at a lower temperature when heating is required and reduce risk of temperature overshoot when heating is switched off.

### Reduced switching cycles

For gas heaters which do not strike up easily or quickly, increase the Band. This allows higher temperature swings, but reduces the number of times heaters are switched on and off, and means they run longer on each occasion.