

Temperature close to the target temperature but the boiler does not come on or the boiler stays on

The target temperature does not seem to trigger the system **on/off (orange or blue)**, unless it's 0.6° above or below the set temperature. For example, you set it to 20° (on timer mode), the app is measuring 19.5°, so under the target temp, but the room does not come on, or the room overheats up to 20.5° and the boiler continues to run and does not turn off.

This is because there is a +/- 0.5° deadband on the system so that the rooms maintain a stable temperature.

To solve this problem you can set a positive valve hidden offset on the valves in the rooms affected, to raise the temperature the valve controls the room to. This will turn the boiler off once the room overheats by more than 0.5° (and sending the valve 4° to shut the room off, if Valve Shutoff is enabled):

[Genius Radiator Valve Offset Temperature.](#)

Why do we do this?

When a room is heating the boiler needs to stay on so that the valve can maintain a stable temperature in the room. The valve modulates exactly to allow just the right amount of heat into the room to keep the room at exactly the temperature you set. See the accuracy of the valve here: [How the Genius Radiator Valve controls the temperature accurately.](#)

If the boiler is allowed to shut down during this time, though it may appear that this will save energy the problem is you get an undesirable temperature drop in the room and this causes inefficient temperature swings in the room. This is because by the time the valve has responded to the temperature falling too low, and the boiler re-started, all the pipework warmed up, and the radiator warmed up again, you will now be in a room that is too cool. To save the most amount of energy the room needs to be at a stable temperature and the one that you set on the app. This is achieved by the valves allowing just the correct amount of hot water into the radiators that the room requires.

However, if a room were to overheat (because of a secondary heat source like a log fire in a living room or an oven in the kitchen) then we will keep the boiler off until the room has cooled sufficiently. I.e after an overheat the room will only be allowed to come on once the measured temperature drops below 19.5° (i.e the temperature is on a downwards slope and the room is currently cooling). If the target temperature is 20°, then on a rising or stable measured temperature of 20° this would turn the room on, so that it can control to 20° accurately.

Related Information:

Content by label

There is no content with the specified labels