# Heating controls on gas systems

To get the best out of your heating system, you need to use the controls you have in the best possible way. Look out for one or more of these controls on your system and have a go at setting them.

## What is a thermostat?

A thermostat adjusts the amount of heating and cooling produced and/or distributed by automatically responding to the temperature surrounding it

## Time switches or programmers

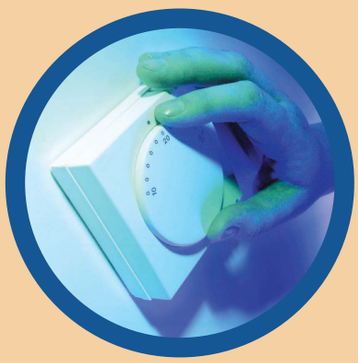
These control the times at which the central heating and hot water systems are switched on and off. You may be able to control these separately, although many older versions only allow you to set the same time for both. Make sure of the following;

- The on/off periods are set as required (many have 24 hour clocks)
- You have selected an appropriate programme, for example 'twice a day' or 'hot water only'
- Each day has been programmed as required if it is a more modern 7- day programmer

Most programmers have an 'override' facility. If the programmer has switched the system off, using the override switch will bring the heating on. Following this, the programmer will resume control and switch the system off at the pre-set time.

## Room thermostats

If you have one of these it may well be in the living room or the hall. It responds to the temperature in that room. When the room is warmed up to the temperature set, the thermostat tells the central heating system to switch off. Room thermostats should be set between 18-21°C and ideally should not be placed where other sources of heat may affect them. For example, sunshine, cookers, TVs, in very cool places or very close to an outside door. Remember that the room thermostat only works to turn the heating on and off when the programmer is in an 'on' phase.

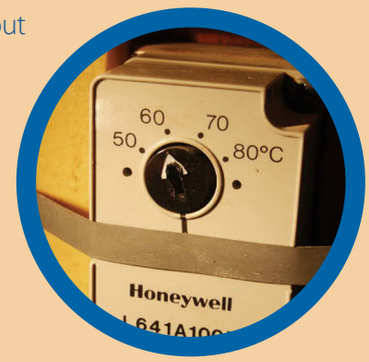


## Thermostatic radiator valves

It is possible to control the temperature in each room by using thermostatic radiator valves (TRVs). Fitted on radiators, TRVs incorporate a thermostat that senses air temperature in the room. They can be set to a required temperature and will work automatically to maintain that temperature. Some systems are fitted without a room thermostat but include TRVs on all radiators except one, so that all rooms are controlled independently.

# Boiler thermostat

This thermostat is fitted on the boiler itself and controls the temperature of the water going through the radiators and hot water cylinder. The boiler thermostat is usually marked 1-9 or 1-max, which is the same as the temperature of around 50°C to 90°C. Some older central heating systems do not have room thermostats but depend on the boiler thermostat for the control of the room temperature. You will have to find out the appropriate setting by trial and error. If there is a room thermostat, the boiler thermostat should be set high 80°C (180°F) in the coldest part of winter to enable the heating system to warm the house more rapidly. During the milder parts of the year the temperature should be reduced to about 75°C (170°F) or to about 65°C (150°F) when used for hot water only.




# Hot water tank thermostat

If you have a tank thermostat, this should be set at 60-65°C. Any hotter and it will scald, any cooler and bacteria may breed in the cylinder.

# Controls on a solid fuel systems

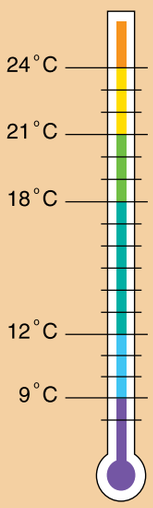
Controls on a central heating system which runs on solid fuel, e.g. coal, are basically the same as for those for other 'wet' systems with one or two exceptions. Because the fuel source cannot actually be switched off, there is always hot water available, so the hot water cylinder acts as the heat escape. When the thermostat or the timer for the central heating system calls for heat, a fan or bellows draws air over the coals to make them burn more vigorously.

# Controlling gas room heaters

Gas, paraffin and bottled gas heaters normally have a range of settings, but these too have to be controlled manually. Many electrical portable heaters have thermostatic control. Fan heaters, oil filled radiators, and convector heaters and radiators have built-in time switches so that they can be timed to come on and go off when required, and are used as part of total heating packages.

# Warming up and cooling down

If you have a timer on your heating, you'll be able to use this to help keep the house warm when you need it to be. Do remember that the house will take time to warm up but will also take time to cool down once everything is switched on. It is worth experimenting to find out how long the 'warming up' and 'cooling down' periods take so you can plan for this.

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