



# Your gas central heating

# How it works

Here's a diagram showing **hot water** from the boiler flowing to the radiators, bathroom and kitchen. **Cool water** flows back to the boiler from the radiators to be heated up again.

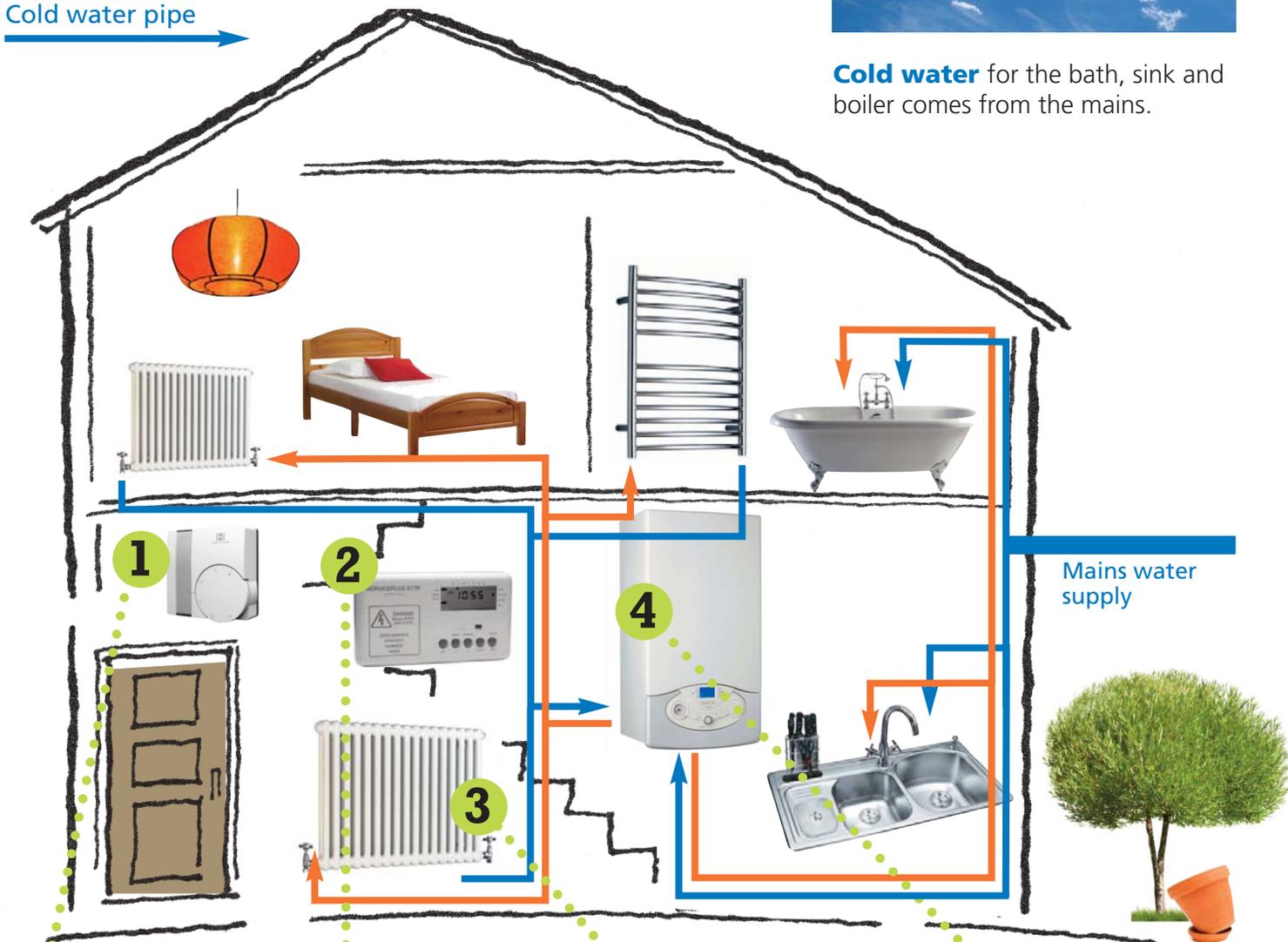
Hot water pipe



Cold water pipe



**Cold water** for the bath, sink and boiler comes from the mains.



The **room thermostat** controls temperature in the home. It senses the air temperature and tells the boiler if heat is needed.



The **timer** (sometimes called a 'programmer') controls when the central heating goes on and off.



**Thermostatic radiator valves** control the heat in individual rooms.



The **boiler controls** regulate how hot the water in the radiators and hot water taps gets.

# The recommended temperature for your home is between **18-21°C**.

Your central heating needs to be set high enough to keep you warm in the rooms you are in most often (e.g. the living room) but not so high that you're wasting money.

This is normally around 18-21°C, which is a healthy temperature for adults who are reasonably active and mobile. Older people, or those with certain health problems, may need it a bit warmer.

If your home gets too cold, damp and mould can form with possible risks to your health. And homes that are too hot aren't good for your health either, and are particularly bad for babies and young children.



## Setting your room thermostat



Room thermostats measure the temperature of the air around them, and tell the boiler to go on or off accordingly. So you can use your thermostat to set your heating to a temperature that suits you.

To find your **lowest comfortable temperature**, try turning the thermostat down by 1°C for a day. If you don't notice the difference, turn it down another degree the following day. If this feels too cold, turn it back up to what it was the day before.

The location of the room thermostat – usually the hall or living room – will affect the overall temperature in your home. Setting it a little lower will reduce your fuel bills.

The room thermostat will only work at times when the **timer** is set to allow the heating to come on.

You can use the room thermostat manually, e.g. turning it up/down when you want the heating on/off. This offers easy control, but people often forget to turn the heating off when they go out, so it can work out more expensive. It's better to use your timer ...

## Radiator valves



Radiator valves allow you to turn individual radiators up or down, which can save you money because it means your heating doesn't have to work so hard. Turn radiators to **low (1-2)** in rooms that you don't use much (to stop them getting damp or mouldy), and to **middling (3-4)** in main living areas. On very cold days, turn them all up a little.

Radiator valves do not directly signal to the boiler; they only control the temperature of the radiator they're fitted to.

## Timer



This controls when the heating goes on or off. It's best to set your heating to fit your daily routine, which for many people is heating twice a day (morning and evening).

If you select **AUTO** your central heating will run up to three times a day, according to the times you have set. Some other models of timer call this 'timed' or 'twice'.

If you select **ALL DAY** your central heating will run from the start of the first time period through to end of the last time period that you have set.

If you select **24 HRS** your central heating will run all day and night without stopping.

If you select **OFF** your central heating won't come on at all.

The **BOOST** button (5) puts the heating on for 1 hour, so you can get a bit of extra heat if you need it after the heating has gone off.

The **ADVANCE** button (6) moves the heating onto the next programmed change, so if pressed when the heating is on, it would turn the heating off until the start of the next heating period later in the day.

## Boiler controls



If you look at your boiler, you'll see that it also has settings that you can change for central heating and hot water. Select **high-to-medium** in winter and **medium-to-low** in summer.

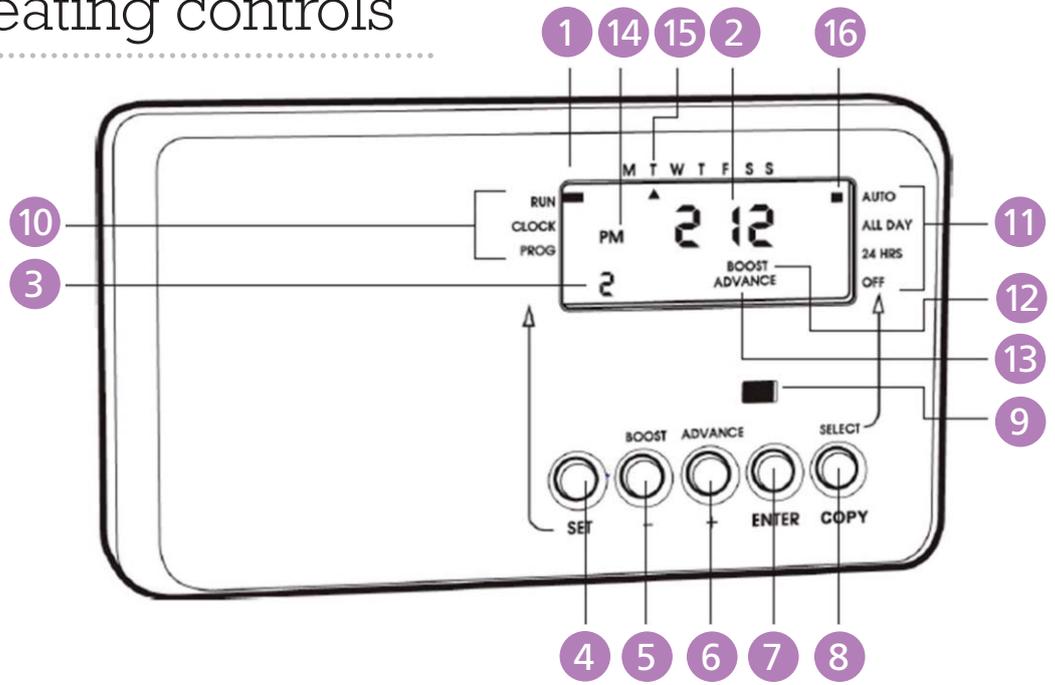
# Using your heating controls

## Setting the Timer

The digital timer allows you to set the times that your heating comes on and off. You do this by using the buttons at the bottom of the unit and by watching the information on the display.

With this type of programmer you are able to have three on/off periods each day. It also has the option to boost the heating for one hour or even to advance the programme forward to the next 'on' or 'off' time you have chosen.

**NB** We're using this particular timer in this illustration as it has been installed in hundreds of homes by the local authority and housing associations in our area. Other digital timers are available and the method for setting them may vary from our example.



- |  |                                |                          |
|--|--------------------------------|--------------------------|
| 1 SET indicator (RUN is the normal position) | 6 Advance or adjust (+) button | 11 PROGRAMME positions   |
| 2 Time of day                                | 7 ENTER button                 | 12 BOOST symbol          |
| 3 Heating period                             | 8 SELECT or COPY button        | 13 ADVANCE symbol        |
| 4 SET button                                 | 9 System ON indicator          | 14 AM/PM symbol          |
| 5 BOOST or adjust (-) button                 | 10 SET positions               | 15 Day of week indicator |
|  |                                | 16 PROGRAMME indicator   |

## Setting the on and off times

Before setting the on and off times you want, remember to make sure that the time and date shown on the display are correct. If they're not, press the **SET** button until the indicator is next to '**CLOCK**' and then use the **+**, **-** and **ENTER** buttons to set the correct date and time.



- Press the **SET** button (4) until the indicator is next to the word **PROG** on the display.
- Use the **+** and **-** buttons to choose the day you want to set the heating times for. The days of the week are shown by their first letter along the top of the display (**MTWTFSS**). The **+** and **-** buttons allow you to move the arrow to the day you want to set.
- Press **ENTER** (7).
- Now the **+** and **-** buttons will let you change the time when the heating will come on for the first time that day. This should be about 15-30 minutes before you usually get up.
- Press **ENTER**.
- Now use the **+** and **-** buttons to set the time when the heating goes off. Remember the programmer will let you set three different heating periods so you don't need to set it to run all day. If your daily routine is quite regular in the morning then set the heating to go off about 30 minutes before you would normally be going out.
- Press **ENTER**.
- You can then repeat this process to set the second and third times that the heating comes on and off for that day. This might be for a couple of hours in the afternoon and then for a few hours in the evening. Once you've set the time when the heating will go off for last time on your chosen day the word **COPY** will appear on the screen.
- If you just want the heating to come on and go off at the same times every day then simply use the **+** and **-** buttons to select the next day of the week and press the **COPY** button (8).
- The word **IN** will be displayed to confirm that you've copied your heating times to the next day successfully.
- You can then repeat this process for each day of the week.
- The programmer will let you set the three heating periods for different times on different days.
- To do this press **ENTER** and then use the **+** and **-** buttons to select the day of the week you want to change and press **ENTER** again.
- Set the times for the heating to come on and go off again as described above. You can repeat this for any day of the week so that the heating is on when you are going to need it and is off when you don't.
- When you have completely finished setting the programmer press the **SET** button (4) until the indicator on the screen is next to the word **RUN**.

# Gas central heating tips

## How can I reduce my gas costs AND stay warm in my home?

### Heat **when** you need it.

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It's all about timing. Set your programmer/timer so the heating on when you need it. Have it coming on half an hour before you get up, and going off about half an hour before you go to bed. Turn the heating off when you are out. If you are away for more than a day, turn the heating off or put it to 'frost setting' (where the heating comes on for a short time each day to stop the pipes freezing).

### Heat **where** you need it.

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Remember to vary your radiator valve settings in different rooms. Have them set to a lower number in rooms you don't spend much time in. Using the timer, room thermostat and radiator valves can help you reduce your gas bill by £30-£100 a year.\*

### Feel good

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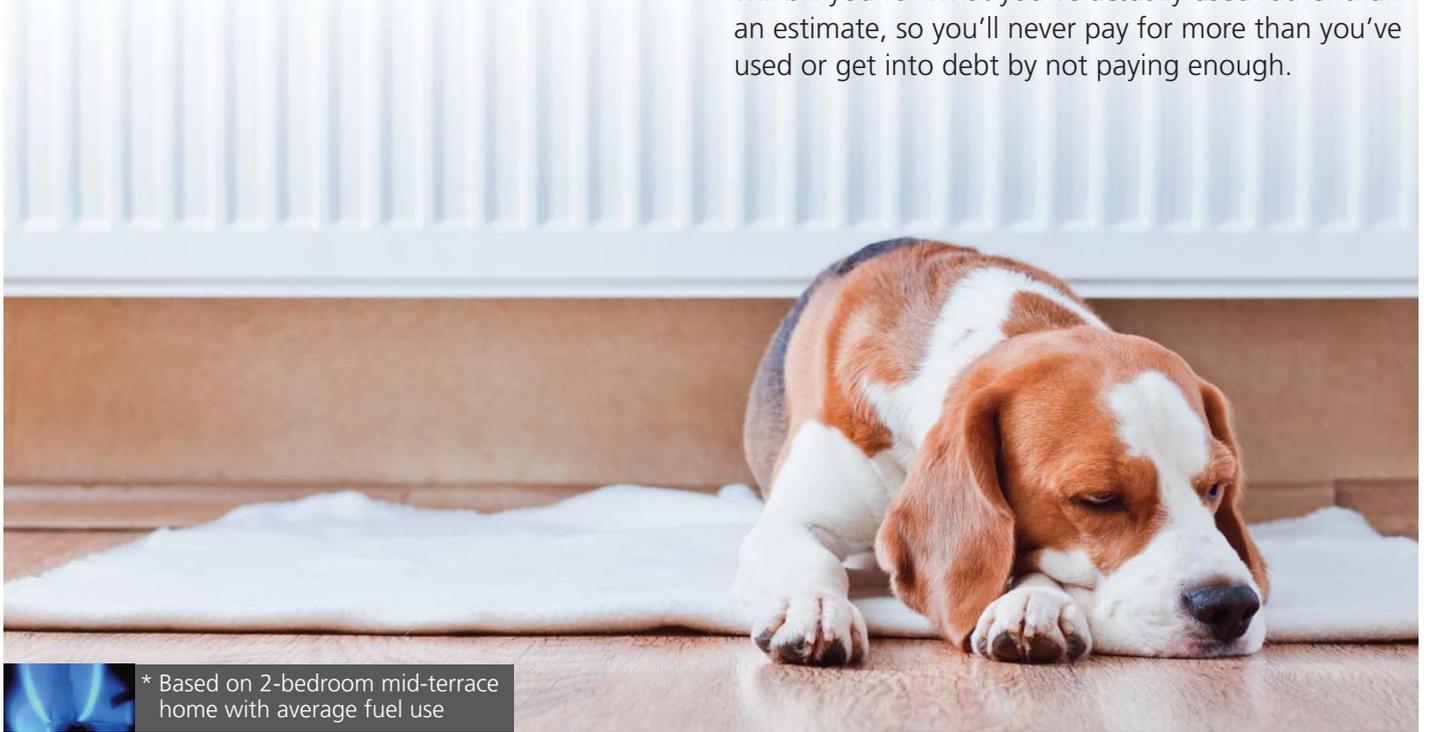
Find out the lowest room temperature that you feel comfortable at. Turn down your room thermostat a degree a week till you find a temperature comfortable for you. Possible savings are £45 a year.\*

Lower your heating and hot water temperature in hot weather by adjusting your boiler's thermostat controls.

### Know what you're using

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Read your gas meter regularly so you know how much you are using. Or get in touch with your supplier and ask for a smart meter – they come with a handy in-home display which gives real-time information on your energy use. And smart meters will bill you for what you've actually used rather than an estimate, so you'll never pay for more than you've used or get into debt by not paying enough.



\* Based on 2-bedroom mid-terrace home with average fuel use

Photos: dog, igor11; flame, Gordian Poropat



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Charity: 298740  
Founded: 1979

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