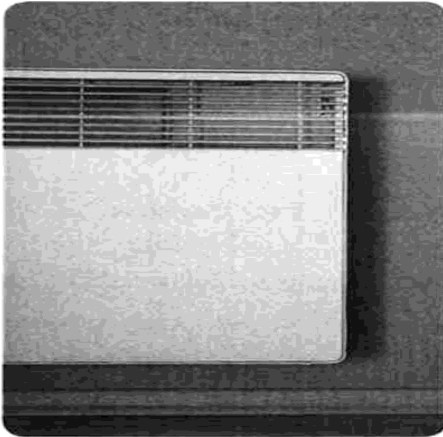


## Factsheet 13

# How to use an Electric Storage

### How Storage Heaters Work



Most storage heaters are wall-mounted and look a bit like radiators. They work by drawing electricity over the course of a few hours at night (normally between midnight and 7am during the winter months and between 1am and 5am during the summer (although this can vary) and storing the electricity as heat in a 'bank' of clay or ceramic bricks to use the following day.

The advantage is that they can consume electricity at night, when it is cheaper, and give out their heat many hours later. As a consequence, they work best if the household is on an Economy 7 tariff.

Avoid using supplementary plug-in heaters or the convector button (found on some storage heaters). It is better to turn up the input on your storage heater and store more heat. Understanding how to operate your storage heaters as effectively as possible will help you to stay warm enough and not waste energy.

### Storage Heater Controls

Most storage heaters have two controls, on the top right of the heater, sometimes under a flap. The **Input** control dial (sometimes called the **Charge**), controls how much heat is stored in the heater when it charges up overnight and the **Output** control dial (sometimes called the **Boost**) opens and closes the flap at the top of the heater to let the heat out. Some heaters have an automatic output control where a thermostat controls the opening and closing of the flap depending on the room temperature.

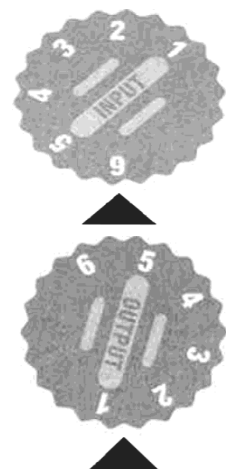
### Storage Heater Settings

In very cold weather, set the **Input** to maximum. As the weather gets warmer, and you need less heat, turn down the **Input** control to store less in the heater.

The **Output** regulates how much 'stored' heat is released by opening and closing the flap behind the front grille.

For the most economical heating, leave the **Output** control on a low setting during the day (lowest when you are out). Turn it up in the evening or when you come home if you need more heat.

Before bedtime: turn down the **Output** control to its lowest setting to stop heat being given out while you are in bed. Turn the **Input** up if you need to charge the heater more because you were cold or because you know the next day will be colder or turn down if you were too warm or you know the next day will be significantly warmer.



You may have a storage heater combined with a convector heater (usually in the living room) - which operates independently to the storage heater and uses on-peak electricity. The switch for the convector heater element may have a red or orange neon indicator to show it's on. This is useful to provide a 'top-up' in very cold weather but it is not economical to use as your main source of heat throughout the heating season.

If your house is warm enough in the summer, turn the heaters off at the wall - and back on again when it starts to get cold - remembering to turn them on again the day before you need the heating.

You can control storage heaters individually, choosing different heat settings for different rooms. Manufacturers recommend setting the Output control to '1' in unoccupied rooms and '2-4' when the room is in use.

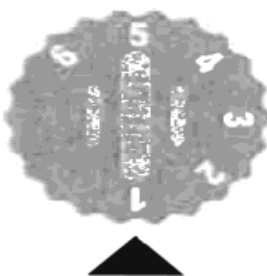
## Suggested Settings for Winter

(If you are at home all day)

### Night Time

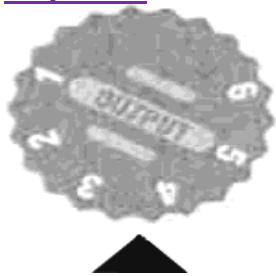


Input (night)



Output (night)

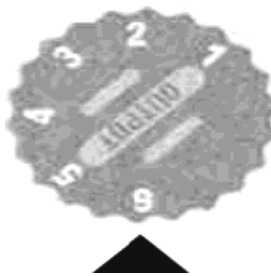
### Day Time



Output (early AM)



Output (mid AM)



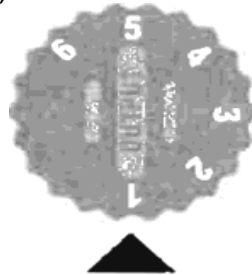
Output (evening)

## Suggested Settings for Spring / Autumn

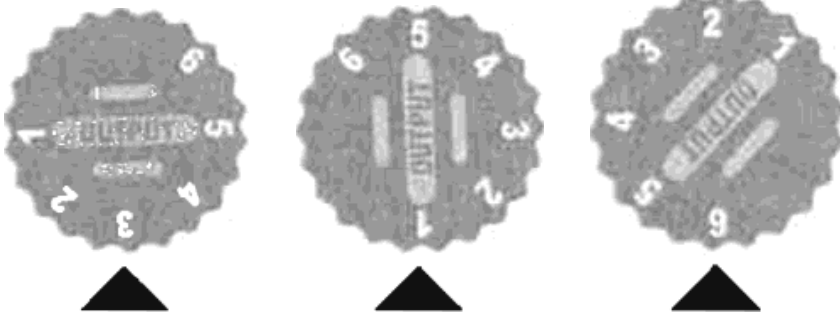
(If you are OUT all day)



Night Input (night)



Output (night)



**Output (early AM)    Output(mid AM)    Output(evening)**

### **How to Heat Hot Water**

If you have electric storage heaters to heat your home it is likely that the water can only be heated by an immersion heater. There may be two immersions, one in the top of the hot water cylinder and one in the bottom.

Usually, the bottom heater comes on at night, and heats the whole cylinder using cheap off-peak electricity (using Economy 7/10 tariffs). The top heater is used to provide additional hot water during the day if required, using expensive peak rate electricity.

**DO NOT** leave a peak rate immersion heater on all day and all night. You will waste a lot of money keeping water hot when you don't need it.

If your hot water cylinder has one immersion heater and is controlled by a timer control there is several types in use at the moment so the heating engineer will explain how to set up and use the timer correctly.