



# STORAGE

## and Hot Water Heating with Economy7

### How Storage Heaters Work

Storage heaters run on electricity. The storage heater has elements inside it similar to an electric kettle element. The elements heat up blocks during the time when electricity is cheaper (off peak), and this stored heat is released the following day into your home.

The times at which the storage heaters store heat are set up by the electricity generating companies to ensure the electricity being used is during the quieter 'off peak' times, when it is approximately a third of the standard price of 'on peak' electricity.

This is for 7 (or eight in Scotland) hours overnight and is called the economy 7 tariff. You cannot change the times of the cheap rate or the times that the heaters store heat.

Some tariffs also provide a cheap period in the afternoon, to give the heaters a 'boost'. These are most common in Scotland. Look at your tariff to make sure you know when the cheap rate operates.

### Central heating with storage heaters

You may have full central heating or just one or two storage heaters. The most popular type of electric central heating uses a mixture of storage heaters in downstairs or living rooms and 'on peak' or panel heaters in the bedrooms.

This tends to be because people do not like to sleep in warm rooms, and when the heaters are storing overnight they still release residual heat, panel heaters can be turned off completely. Do not confuse these 2 types of heater as panel heaters use more expensive 'on peak' electricity.

### Storing the right amount of heat – this is what effects the bill!

The amount of heat being stored by a heater during the cheap hours is controlled by the 'Input' or 'Charge' control sometimes called 'Autoset'. Turn this up higher in very cold weather, to allow the heater to store the maximum level of heat.

### How long is the heat given out?

The speed at which the heat is given out by the storage heater is controlled by the 'Output' or 'Room Temperature' control. If the output knob is left on full, the heat will run out sooner than if it was left on a medium or low setting.

It is better to leave the output knob turned down to a low number and only turn it up later in the day if your rooms cool down.

There is no more heat until the heaters are charged up again, usually after the following night, unless you have daytime boost option.

Some automatic controls may be found on modern 'Thermostatically Controlled' storage heaters which control the heaters depending on the temperature of the room.

**Remember:** On Economy 7 all your electricity during the off-peak period is cheaper so you can save money by using other appliances during these cheap hours, for example running the dishwasher or washing machine after 12pm. Please consider your neighbours when doing so.

### Storage heaters troubleshooting

#### **Problem – Heater is cold by the end of the day:**

- Output control turned too high early in the day letting out all of the heat too soon
- Input control turned down too low the previous night
- The house is poorly insulated so heat is lost before the end of the day

#### **Problem – Heater is cold in the morning:**

- Heater has been switched off at the wall
- Heater was switched off or down to minimum the night before
- A power cut has caused the heater not to charge up
- The fuse to the heater has blown

#### **Problem – The heater never seems to keep the house warm enough:**

- The house is not very well insulated or draught proofed
- The heaters are not big enough for the room or area they should be heating
- The input is not high enough

#### **Problem – High use of 'On Peak' electricity:**

- Make sure you are aware of when you are using the expensive controls and features – the boost switches during the day for heating and hot water and 'on peak' panel heaters
- Check the time clock on the immersion heater to make sure it is only on in the 'off peak' hours

## Hot water on Economy 7

If your heating system was designed to run on Economy 7 electricity, you should have a timer on the immersion heater; so that a tank full of water heats up overnight when the electricity is cheaper and a 'boost' switch to top up the heated water during the day.

**Remember:** This is when the electricity is more expensive.

If your electricity was converted to Economy 7 because storage heaters were put in, make sure your immersion heater has a timer on it and the cylinder has a good insulation or an insulated jacket on it to keep the water hot for longer.

If the cylinder has a white jacket – replace it, these are old and inefficient; you should have a modern red jacket that holds a British Kite Mark.

If your tank has yellow, green or blue moulded foam or is encased within a box then this should be adequately insulated.

## Types of storage heater

### **Automatic storage heaters:**

These are easy to control allowing the user to preset the room temperature for each heater. Adjust the input or charge control for the first few days until your ideal room temperature is found.

### **Combination storage heaters:**

These have a built in convector heater that operates independently on the normal 'on peak' rate. This is useful to provide a 'top up' in very cold weather or at the beginning or end of the heating season when you only need a little heat and your storage heater element is switched off.

### **Fan-assisted storage heaters:**

These use a fan to control the heat output which blows warm air into the room from the bottom of the heater. Some models also have a built in convector heater that operates independently on the normal 'on peak' rate in the same way as the combination heater above.

All other controls are the same except some models which have 2 speed settings for the fan.

For further information on your storage heaters refer to the manufacturer's manual or speak to the manufacturer or retailer of the heaters.



Output/Room Temperature/Heat Boost



Input/Charge/Autoset

## Useful Numbers

Dimplex/Creda Hotline  
**0834 879 3588**

Elnur Technical  
**01942 265048**

Please note that these are not Freephone numbers and 0834 are charged at standard call rates.



**Ridgewater  
Energy**

Contact Ridgewater Energy as there may be funding towards replacing old or broken storage heaters or on-peak heaters.

Call: 01202 612726

Email: [info@ridgewaterenergy.co.uk](mailto:info@ridgewaterenergy.co.uk)

[www.ridgewaterenergy.co.uk](http://www.ridgewaterenergy.co.uk)