

Storage heaters run on electricity; at night they heat up special blocks during times when electricity is cheap, then cool down letting the heat out the following day.

Central heating with storage heaters

The most popular type of electric central heating uses a mixture of storage heaters in downstairs or living rooms and 'on peak' panel or convector heaters in the bedrooms.

It is important not to confuse the two. Panel heaters are only intended for short periods so if they are turned on during the day they will run on more expensive electricity.

When do storage heaters heat up?

The times at which storage heaters heat up are set by the electricity company to use electricity at 'off peak' times, when it is approximately a third of the price of 'on peak' electricity.

This is generally for seven (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' when they may be getting cool. Look at your tariff to make sure you know when the cheap rate operates.

How hot?

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 to Max or the highest number for maximum heat in cold weather

How long is the heat on for?

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 turned lower. **It is better to leave the 'Output' or 'Room Temperature' knob turned to a low number as the heat will be more likely to last throughout the day.**

There is no more heat until the heaters are charged up again, usually after the following night. Some automatic controls may be found on modern storage heaters which control the heaters depending on the temperature of the room, but these are not very common.

REMEMBER - on Economy 7 ALL your electricity during the off-peak period is cheaper so you can save money by using other appliances during those cheap hours.

Storage Heaters work by

- Storing heat at night when electricity is cheap
- Cool down, releasing the heat the following day

Storage Heater Controls

- Input / Charge: Controls the amount of heat stored by the heater
- Output / Room Temperature: Controls the amount of heat given out by the heater

Off-Peak 'Economy 7'

- Approximately a third of the price of 'on peak' electricity
- Usually for 7 hours overnight (check your tariff to see when the cheap rate operates)

Hot Water on Economy 7

- Check the time clock on your immersion heater is set to off-peak hours
- Ensure the cylinder is well insulated to keep the water hot

What to check if storage heaters don't seem to be working properly

Problem - Heaters cold or cool by the end of the day:

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

Problem - Heater is cold in the morning:

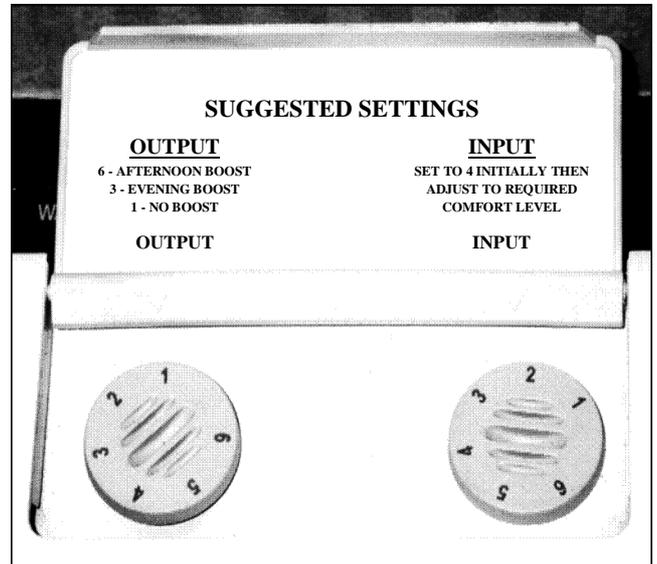
- Heater has been switched off at the wall
- Heater was switched off or down to minimum the night before
- Power cut has caused the heater not to charge up
- The fuse to the heater has blown

Problem - Heaters never seem to keep the house warm enough:

- The house is not very well insulated or draught proofed
- The heaters are not big enough

Problem - High use of 'on peak' electricity:

- Make sure you know when you are using expensive appliances - the boost switches during the day for heating and hot water and panel heaters
- Check the timeclock on the immersion heater to make sure it is only on in 'off peak' hours



Storage Heater - Input and Output controls

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 the water up 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 that the cylinder has a good insulation jacket on it to keep the water hot.



FREE is a rural energy advisory programme, aimed at off-grid communities across England, and targeted at helping people in fuel poverty. The programme brings practical independent advice and information to residents regarding fuel choices, energy efficient technologies, and carbon reduction measures. It helps individual households to focus on reducing their fuel consumption and fuel costs, and also encourages local communities to work together to promote best practice in energy efficiency and carbon reduction.

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For more information please contact us at Cheshire Community Action on Tel: 01606 350042 or visit our website: www.cheshireaction.org.uk

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