

Night storage heaters

A simple guide

Night storage heaters can be a good option for households who use electricity to heat their home

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, and storing it 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's cheap, and give out their heat many hours later.

As a consequence they work best if the household is on an **Economy 7 tariff**. This is an arrangement with an energy supplier by which the electricity that a household uses at night is much cheaper than that used during the day – typically about a third of the price.

The hours of cheap electricity are normally from 12 midnight until 07.00 in winter, and from 01.00 to 08.00 in summer, although this can vary. For more information about Economy 7, please see our other leaflet.

Every storage heater has a set of simple controls. An **input** setting allows you to regulate the amount of heat that the heater stores during the night. This is important because, even though night-rate electricity is cheap, there's no point paying for more than you need. If it's not particularly cold, or you'll be out of the house for most of



All storage heaters have input and output controls

the day, you don't need to set the input to maximum because there's no point storing so much heat. Most storage heaters will **only** charge up at night, so there is no danger of using expensive day-rate electricity.

The controls also have an **output** setting that allows you to regulate the amount of heat that the storage heater gives off. It means you don't have to use up all the stored heat at once, but can let it out gradually, saving some for the evening if you want to.

Some storage heaters have a timer that gives you even more control over the output. It allows you, for example, to programme your heater to come on at a time that suits you, for example when you get up in the morning or just before you get back from work. Others include a control that regulates the amount of charge the heater draws at night, depending on the temperature.

Some storage heaters have a 'boost' setting. This doesn't use 'cheap-rate' stored heat, but uses 'peak-rate' electricity directly from the mains, so it should only be used if the stored heat has run out.



Storage-heater controls vary from model to model. If you have a question about yours, give us a call.

Jack and Gwen's storage heater

Jack and Gwen are a retired couple living in a rural area. They are off the mains gas network and use electricity for their heating and hot water. They have **storage heaters** to take advantage of the Economy 7 tariff that they have chosen.

In winter, they are in for most of the day. This means they want the storage heater to charge fully at night, so they set the **input** to '6' and the **output** to '1' or 'off'. In the morning, to warm the house up, they turn the **output** to '4'. Once the house is warm, they turn it down to 2, and in the evening when it becomes chillier, they turn it up to 5 or 6 to use up the remaining stored heat.



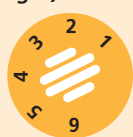
Output ▲
(night)



Output ▲
(early AM)



Output ▲
(mid AM)



Output ▲
(evening)



Input ▲
(night)

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Storage heater tips for lower bills

The output setting of your storage heater should be turned off at night and also turned off when you are out of the room or out of the house

Don't use the boost setting except when you really need the extra heat

Avoid using supplementary plug-in heaters. It's better to turn up the **input** on your storage heater and store more heat

And a dozen general tips for keeping your energy bills low ...

1) Keep the oven door shut as much as possible; every time you open it, nearly a quarter of the heat escapes.



2) Tumble driers are expensive to run, especially if you're on a high day-rate with Economy 7. So why not dry your clothes in the sun on the line outdoors?

3) Put your fridge in a good spot. Somewhere the air can circulate behind it, but not next to a cooker or radiator.

4) Don't leave your phone on charge all night. It only needs a couple of hours.

5) Be a friend to your freezer. Defrost it regularly to help it run more efficiently.

6) Buying a new TV, washing machine or dishwasher? Look out for the Energy Saving Trust Recommended logo.



7) Catch 'em young. Encourage your children to switch off electric toys and lights that they're not using. They'll soon get the hang of saving energy.

8) Dodge the draught! Fit draught-excluders to your front door, letter box and key hole, and draw your curtains at dusk to keep the heat in.

9) When boiling water, only fill the kettle with as much as you'll actually use (but make sure you cover the metal element at the base).

10) Sleep tight. Make sure all the lights are turned off when you go to bed, or use a low-wattage night light if you do need to leave one on.



11) If you're on Economy 7 consider investing in a 'slow cooker'. And think about whether you could run other appliances at night to take advantage of cheap-rate electricity.

12) Wait until you have a full load before putting on a wash. Two half-loads use more energy (and water) than one full load.

For free domestic energy advice, call **0800 512 012**
or go to **www.cse.org.uk/advice**



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We are a national charity that shares our knowledge and experience to help people change the way they think and act on energy.



More energy advice at
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