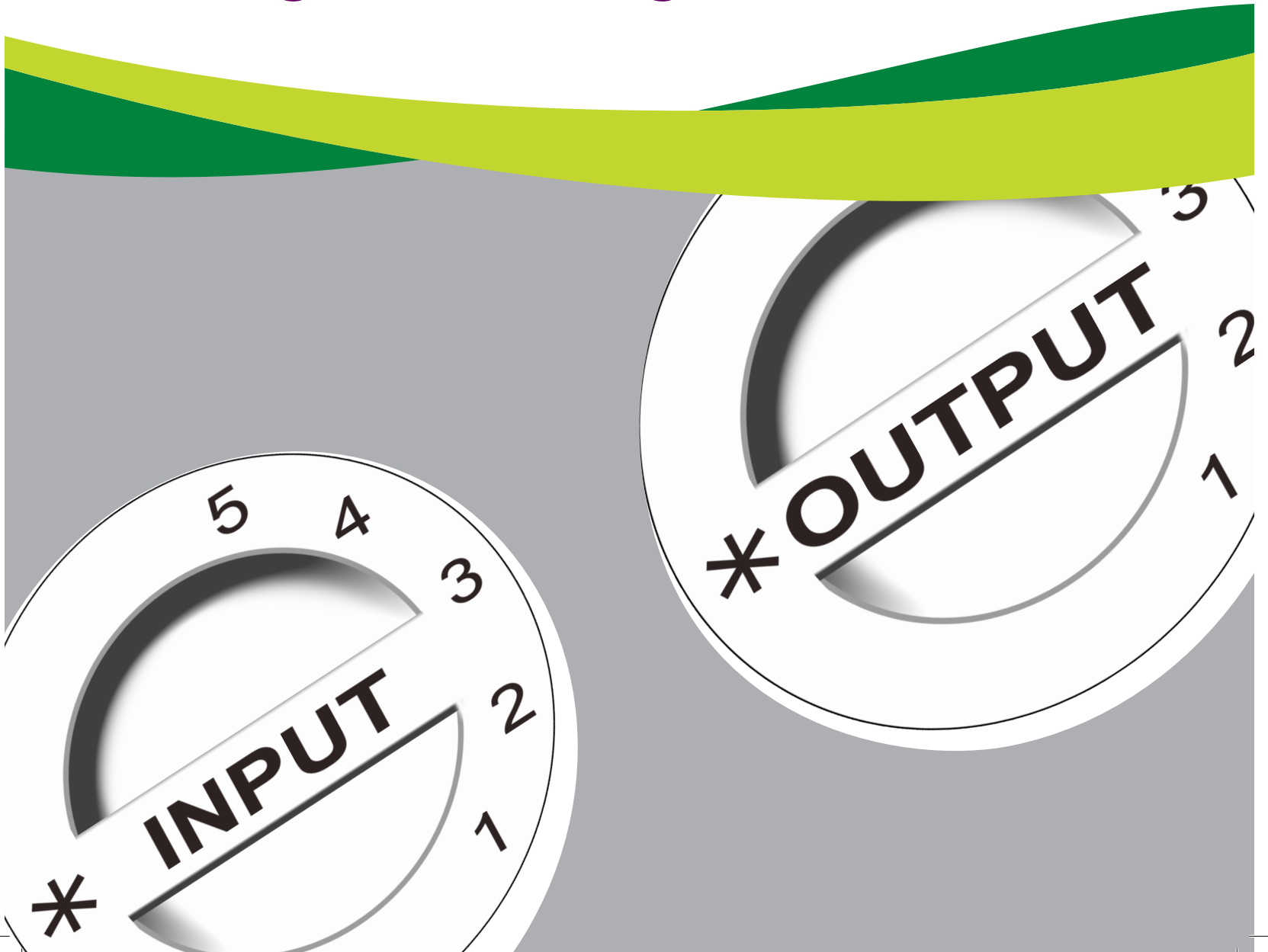


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# Storage Heater guide



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# Storage Heater guide

## Economy 7

Economy 7 is an electricity tariff which charges two different rates for the day and night.

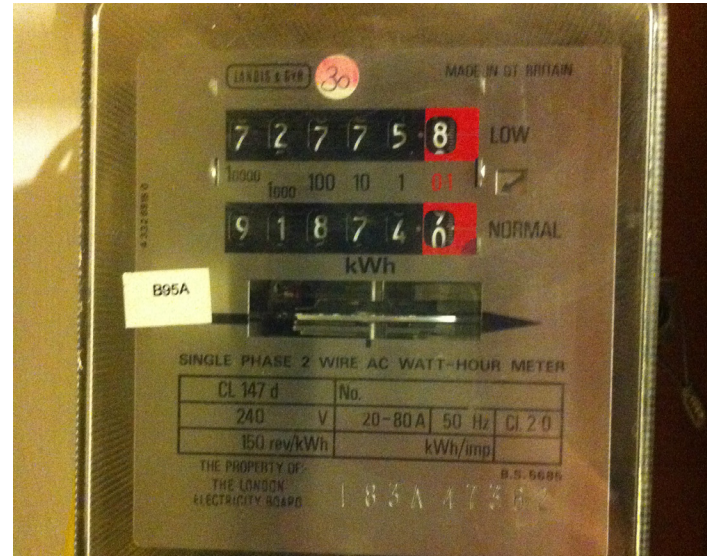
- Night rates are 'off-peak' lasting for 7 hours, and are much cheaper than 'on-peak' day rates. It is usually about one third of the cost.
- The night rate is usually charged between 23:30 - 06:30.

This means:

- You need to use about half of your energy at night for Economy 7 to be cheaper.
- The day rate is more expensive than a standard one rate tariff.

Economy 7 is most suitable for households with storage heaters. It is useful as the heaters charge up overnight meaning you can take advantage of the cheaper rates of electricity.

## Economy 7 meters



To get Economy 7 you need a special kind of electricity meter that can tell you the electricity used during the day and night separately. These usually fall into two kinds:

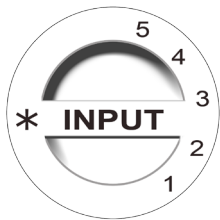
- meters with two meter readings- one for day, sometimes called 'normal' and one for night or 'low'.
- meters with a screen and a button to press which switches from a day reading to a night reading.

If you are using storage heaters but do not think you have an Economy 7 tariff, contact your energy supplier to be put on an Economy 7 rate.

## Storage Heaters

Electric storage heaters are used where households use electricity to heat their home, with an Economy 7 tariff. Storage heaters are filled with bricks which are heated up overnight. The heat is stored and released the following day. This takes advantage of the cheaper electricity as they charge up on the off-peak rate.

### What do the controls mean?



#### Input

This controls how much electricity goes into the heater overnight, so how much heat is stored. The higher the input is set, the greater the amount of heat stored. The input control should reflect the weather. If tomorrow is going to be a very cold day the input should be set high. If it is likely to be mild or you will be out for the day, set the input lower.

#### Output

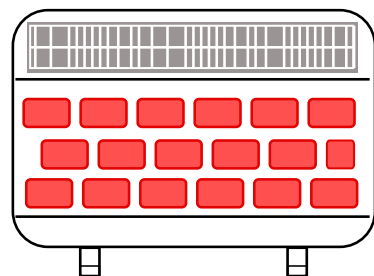
This controls the amount of heat the storage heater releases during the day. It decides how warm your home is.

Remember the heat available to use the next day and evening depends on how much heat you stored the previous night with the input control. Therefore it makes sense not to turn your heat up too high if you don't need it or you are not cold.

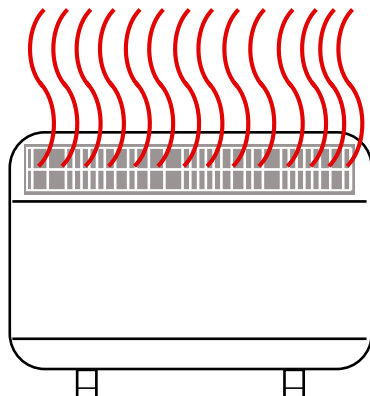
If you find your heater runs out of heat in the evening while you still need it, you will need to turn the input dial up to increase the heat stored for the next day.

If the weather improves or you always have more heat than needed by the evening, you can turn the input dial down which will help you save money. Turn the Output dial to zero before you go to bed or go out, so you're not using up the heat when you don't need it.

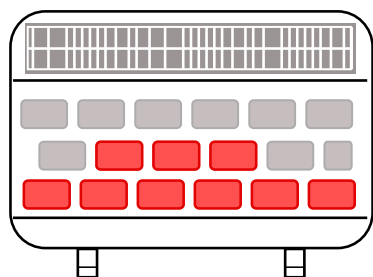
During summer when you do not need the heaters, turn them off at the wall. You will need to turn them on again the day before you want the heating to come back on.



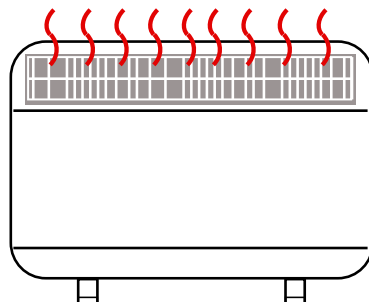
**Input: 6**



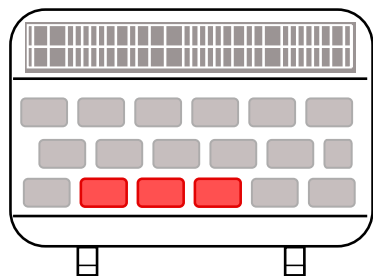
**Output: 6**



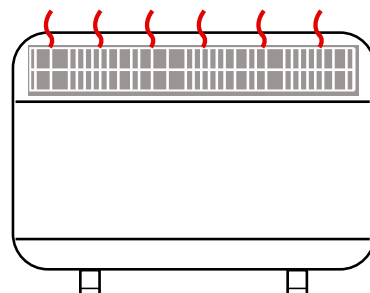
**Input: 3**



**Output: 3**



**Input: 1**



**Output: 1**

The diagrams on the left show the amount of the heaters that will be heated up depending on the level the input is set at. The diagrams on the right show the amount of heat given out according to the output level setting.

## Ways to save energy and money

- Households must plan for how much heat they think they will need the next day so check the weather before setting the input level at night.
- Some heaters have a 'boost' setting. Avoid using this unless you really need to as it uses the more expensive day rate electricity.
- Avoid the use of extra plug in heaters if possible as these use expensive day rate peak electricity. It is better to turn up the input dial on your heater instead of using extra heaters.
- Output dial should be turned off at night or if you are out of the house.
- Make sure children don't play with the set controls.

## Water heaters

Water heaters powered by electricity should normally be run on an Economy 7 tariff. To take advantage of the benefit of cheaper electricity on the night time rate, the water heater should be set to heat up overnight during those seven hours. The water heater will have a timer that will allow you to make sure that it is using the electricity when it is cheaper.

Economy 7 water heaters have an immersion heater at the bottom of the cylinder. This works like the element in a kettle to heat up the water. This is set by a timer to heat the whole tank during the night in off-peak hours when the rates are cheaper. The water cylinder contains a thermostat which sets the temperature the water heats up to, usually around 60°C (140°F). It will switch off when it reaches this temperature for safety. There should then be a full tank of water heated ready in the morning. Most Economy 7 water heaters then have a second immersion two thirds of the way up. This is activated by the boost switch.

## Boost switch



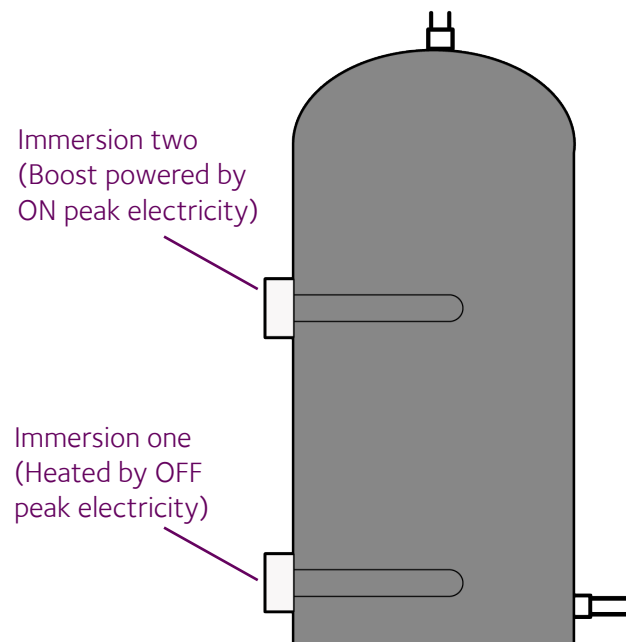
The 'boost' switch activates the second immersion, two thirds of the way up the tank, heating a small amount of water in the tank if you run out during the day.

When the boost is used, it is using the much more expensive day rate electricity and so should only be used if it is needed.

If the boost does not switch off automatically, don't forget to switch it off when you have enough hot water, as this will cost a lot of money if left on.

## Ways to save

- Check the time clock on the immersion is set to heat water in off peak hours -23:30-6:30
- Insulate your water cylinder with a cylinder jacket
- Remember to adjust the time clock to allow for British summer time



## Using appliances on Economy 7

There are ways you can save electricity and money on Economy 7.

Electricity is cheaper during the 'off-peak' hours so using as many of your appliances as possible at night is a way to save.

Using plug-in or built in timers on appliances so that they come on during off-peak hours is helpful, for example washing machines and tumble dryers. Also charging appliances on the off peak electricity.

Please be considerate of neighbours if you are using appliances at night which may be especially noisy.


## Other energy saving tips:


- Avoid use of plug in heaters.
- Use a microwave instead of electric hob where possible.
- Make sure furniture is not blocking storage heaters.
- Fit energy saving light bulbs.
- When buying new appliances choose products with high energy efficiency ratings.
- Defrost your freezer regularly to make it more efficient.
- Make sure your fridge is not too close to the wall, to allow heat to escape. Avoid putting hot food in there and don't leave it too empty.
- Only boil as much water as you need when filling kettles.
- Wash your clothes at a lower temperature, such as 30°C. Also make sure you always have a full load.
- Turn off lights and appliances that aren't being used.


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