

HOW TO OBTAIN CHEAP ELECTRICITY:

Having installed one of these devices within my own home I was determined to see if I could notice a significant difference in the cost of my electricity bills.

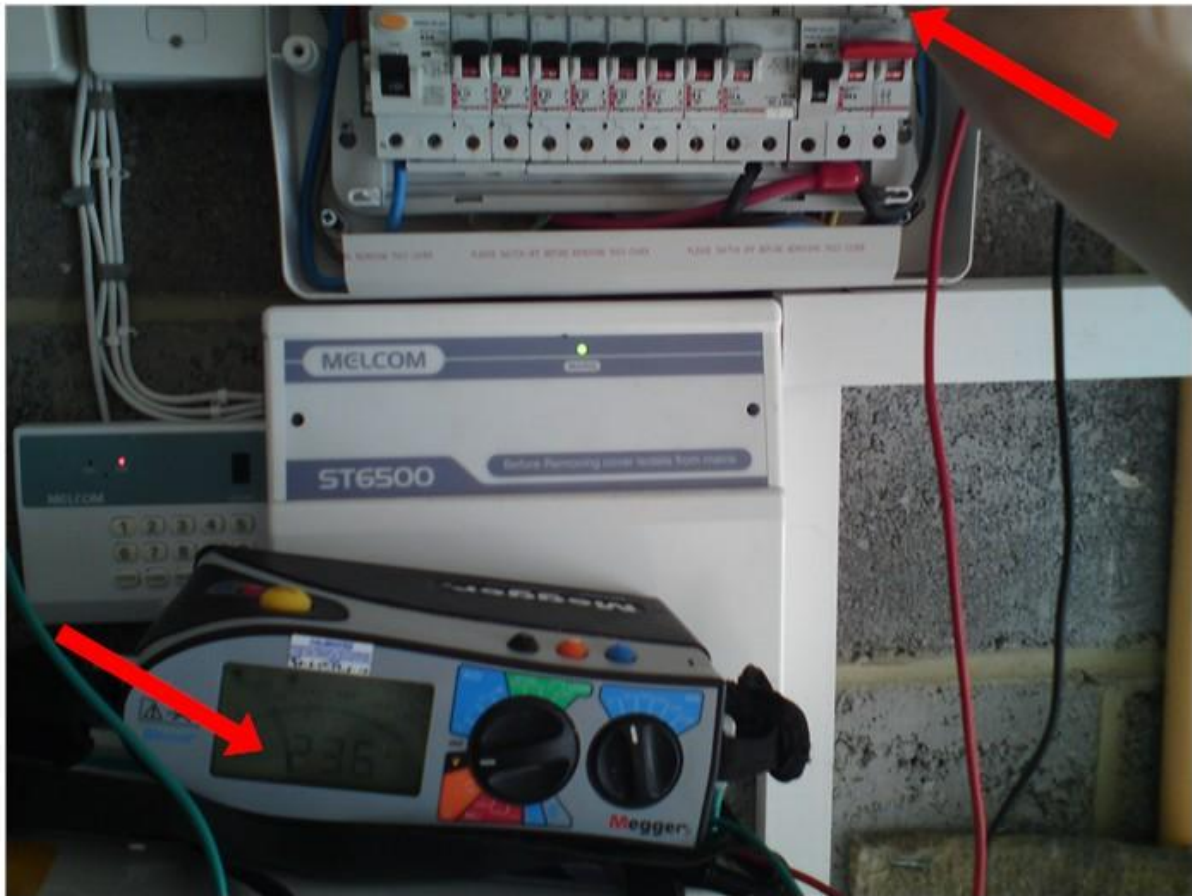
I pay my bills quarterly so once I installed the box I could not start the trial until I received my previous bill.

Once I received the bill I installed a wireless energy monitor upstream where the electricity supply enters the property (**see below**)



I then entered the cost of electricity per KWH that our Electricity supply provider charges us into the tariff parameters section contained within wireless energy monitor unit. This product uses current transformer sensing technology to detect and monitor a tiny magnetic field around the household electricity power cable. It measures the current (Amps) being used and, by reference to the system voltage, calculates the amount of power being used, and the cost per KWH. So now I was set up to calculate how much my electricity bill would cost me with my incoming supply determined by the electricity board at **236volts**.

As you can see from the image below the incoming supply into our property is measured at 236 Volts at the consumer unit



The voltage optimisation box was then installed downstream on a designated circuit within the consumer unit which then served the circuits listed below:

UPSTAIRS LIGHTING

DOWNSTAIRS LIGHTING

UPSTAIRS SOCKET OUTLETS

DOWNSTAIRS SOCKET OUTLETS

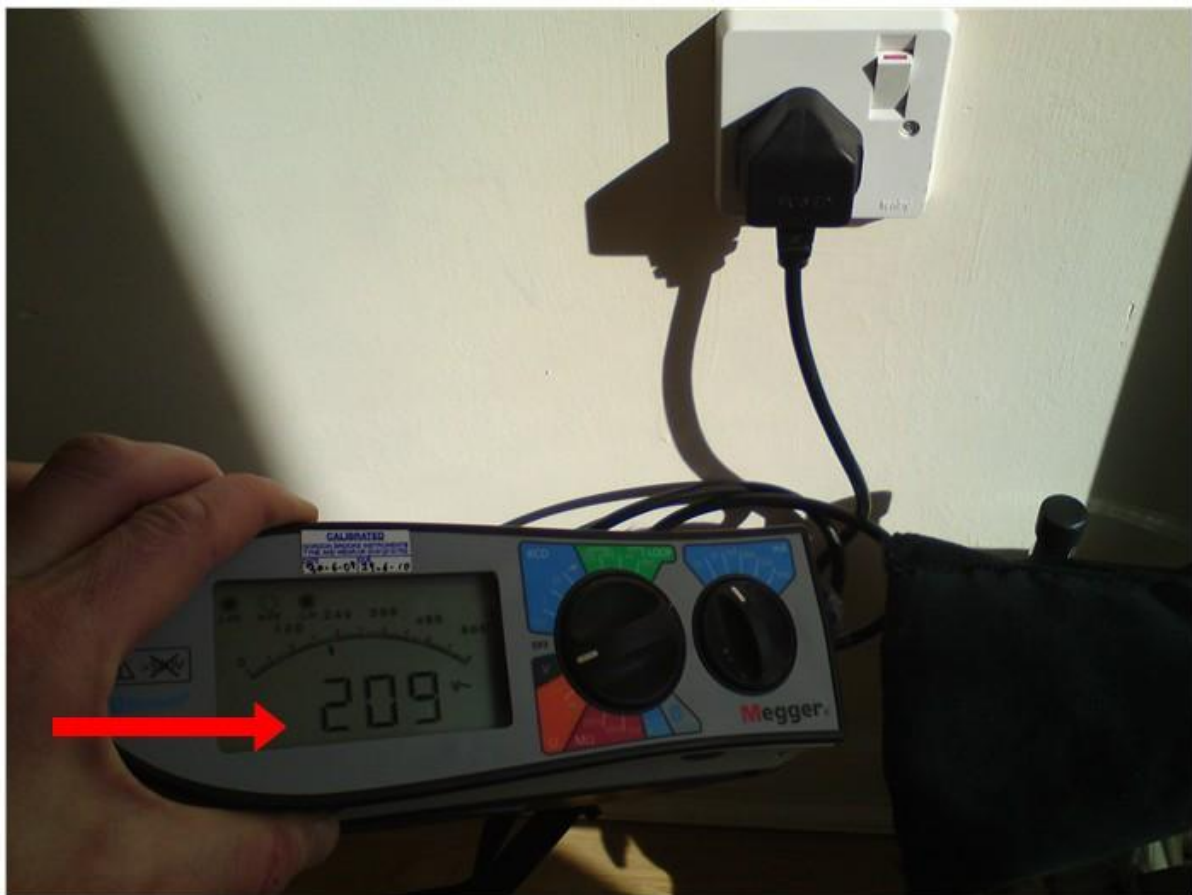
KITCHEN SOCKET OUTLETS

The goal was to use this electrical energy saving technique to reduce the voltage to the box's minimum setting to achieve maximum energy saving results while still retaining like for like use to all lighting, power and appliances contained within the home. I hoped that I may see a significant benefit of doing this contained within the next quarterly electricity bill.



THE VOLTAGE POWER OPTIMISATION UNIT INSTALLED ABOVE ALONGSIDE THE CONSUMER UNIT

As you can see in the image below, once optimised with the box installed in series with the mains supply (serving all the lighting and power circuits) the voltage was now regulated to 209volts.





Take a look at the energy monitor. You may see that measuring the power consumption using the incoming **236volts** as the supply parameter, I've racked up £238.12 as of 10/04/10.

Now all I needed was the current electricity bill to compare the difference between the optimised 210v now feeding the lighting and power side of the consumer unit and the wireless energy monitor set up to measure the cost of my electricity consumption at my original supply parameters determined by the electricity board at 236v. This would then determine if there was any noticeable difference between the two defined voltage levels.

Take a look below:



(Yes the bill's only dated until 6/6/10 but I don't think my consumption of energy has been that intense in four days)

The difference between the two ; non-optimised and optimised is **£49.83**

You may now see that voltage optimisation technology gives the end-user the ability to optimise their supply locally, correcting power quality problems from the grid, and is designed to do so very efficiently. In the UK and Europe, voltage optimisation units fitted have achieved average energy savings of around 17% over the last five years, making this one of the fastest-growing energy saving techniques on the market today. Major businesses (including Tesco, Asda, RBS and Hilton Hotels, and Public Sector organisations such as Defra and the Land Registry have adopted Voltage Optimisation as a front-line energy saving measure, and with energy prices only continuing to rise, many homeowners now have the opportunity to use this electrical energy saving technique to combat high electricity bills today!