

# Take control



of your  
electricity bill

## **A big thank you**

For taking the decision to reduce the energy you use, your electricity bill and the impact you have on the environment.

Making a difference starts with each and every one of us doing something positive to reduce the energy we use.

That's where this power meter will help. It won't cut down your electricity bills on its own, but it can show you how much energy and money you might be wasting. It can help change the way you use electrical appliances and highlight everyday ways to become more energy efficient.

## **Introduction to power bills, energy audits, and power meters**

This service has been provided to you to help you take control over your electricity bill at home. You can do this by doing a quick 'energy audit' of your electronics and appliances.

This guide shows you a very basic method for auditing the electricity use of your appliances.

# What you can do with the power meter

The power meter allows you to see how much electricity (and therefore money) an appliance is using. The meter has the ability to show in real-time what that appliance is costing you, or using our EASY calculation, you can work it out yourself. You can plug it into fridges, TVs, washing machines, heaters, microwaves, toasters, phone chargers, computers, stereos, lamps, playstations... the list goes on.

You can test how much energy the appliance is using when it is on, in standby, or off but still running that little clock on the front. This shows you how much electricity and money you can save by switching these appliances completely off.

This meter cannot be used with anything that is hardwired such as ceiling lights, ovens and hot water cylinders.

## Definitions

**Watt** – A Watt (w) is the unit of power. This is the power being drawn by an appliance at a single point in time

**KwH** – A Kilowatt hour is commonly used by electricity companies for billing purposes. It is the product of the appliances wattage use and the number of hours used for.

# The Energy Audit

An energy audit is a way to see how much electricity you are using and saving.

Ideally, you would like to have a baseline of electricity use. You can do this by checking your power meter, writing down the reading, and then checking it again in a few days. Subtract the new reading from the old reading, and that will show you how much electricity you used over that time. It is important that you use the same time period every time that you do this check.

Identify the appliances you want to audit. It is best to include appliances that are on all the time, and don't really need to be.

## Using the power meter is easy!

### Meter instructions

The instructions below show you how to set the clock and values for the cost per Kilowatt hour. For more detail refer to the laminated sheet in the lending bag.

#### 1. Setting The Clock

Press the **FUNC** button until the clock displays in the screen.

Press the **SET** button once, **WEEKDAY** will flash.

Press the **UP** button to set the day.

Press **SET** to accept this and move to setting the hour.

Follow this process to set each part of the clock.

## Setting the Cost per Kilowatt hour

Press and hold the **FUNC** button for 5 seconds when the meter is displaying voltage, current or power.

Press **SET** once and release, press **UP** to set each digit, and press **SET** to move to the next digit.

The meter will then display **ON TIME**, which the times that the cost is being charged.

This is useful if you have on-peak and off-peak rates.

Press **UP** to set each digit then **SET** to move to the next digit.

After setting Price 1, press the **FUNC** button to set Price 2 using the process above.

- 2. Choose which appliance you want to know the electricity use of.**
- 3. Switch off your appliance at the wall, and plug the power meter in.**

Plug the appliance into the power meter.

Switch the wall switch back on, and turn the appliance on to the setting you want to check.

For example, you can check your TVs electricity use when it is on, and while it is off (on standby).

- 4. We have preset the meter with common electricity prices of 19c per Kilowatt hour, and 22c per Kilowatt hour. You can change these by following the instructions attached.**

To check how much power the appliance is drawing at this particular moment in time, press the **FUNC** button until you see **WATT** in the top right part of the screen.

This is how much spot power is going into the appliance, and this can change in appliances like toasters and microwaves.

### 5. To check an appliance like a fridge, spot power is not always accurate.

This is because the appliance switches on and off, so is not always running. What you can do is plug the meter into the fridge (see step 2), and leave it overnight. Press **FUNC** until you see kWh in the top right part of the screen. This records the cumulative Kilowatt hour use of the appliance. This shows you how much power the appliance, say a fridge, is using over a set time period. To clear the cumulative kWh tally, press and hold **FUNC** for 5 seconds between testing appliances.

You can use the included list like this one, so you can compare the costs of the appliances and see which ones are costing the most, or being used for longer than you think.

For example, if you leave your TV on standby, then you should include the electricity use for both standby and the TV being on.

Appliance	Wattage	Normal time of use per day (Hours)	Cost (Daily)
Eg. Heater	Eg. 1020w	4	89c
TV (standby)	Eg. 14w	22	6c
TV (on)	Eg. 180w	2	8c

# Easy Calculation

Our easy calculation below allows you to see the cost from a one off check.

Cost= wattage (w)/1000 x time of use (hours) x Cost (KwH)

Example using a 100w appliance used for 2 hours a day, electricity being charged at 22c/ kilowatt hour:

100w x 2hours x 22cents

0.1Kw x 2hours x 22cents

= 4.4 cents per day.

The meter displays wattage (w). For this calculation it needs to be in Kilowatts (kW), so that means that the reading on the meter needs to be divided by 1000.

1w= 0.001Kw

10w=0.01Kw

100w=0.1Kw

1000w=1.0Kw

## What next

The power meter will have shown you how much electricity your appliances are using. Some of these you might not be able to do much about, like your fridge. There might be some things you can change, like switching your TV off at the wall instead of having it on standby. The power meter gives you the information you need so you know where to target your actions; the rest is up to you!



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