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# Power Meter Fact Sheet



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## Measuring your power use at home

Power meters can be used to measure how much electricity (or power) your appliances are using whilst they are operating. This is done by plugging the power meter into the mains power socket, then plugging the appliance into the power meter.

- Measure the daily power usage or operating cost of an appliance
- Measure the per-run power usage of an appliance (good for dishwashers, washing machines, etc)
- Compare power usage for different operating modes of an appliance (for example different settings on a washing machine)
- Compare power usage of different appliances that have the same use
- Check for power used by an appliance in standby mode (for example a TV in standby mode)
- Measure the amount of Greenhouse gas your appliance is generating.

### Instructions

Plug the power meter into the mains power then plug the appliance into the power meter. Press the **FUNC** key to toggle through the settings.



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## Settings on the Power Meter LCD display

- Volt AC simply shows the Voltage currently being supplied. The unit can handle from 200V to 276V.
- Amp show the current being drawn at that instant. It can handle up to 10A of current.
- Watts shows the power being drawn by device you have plugged in at any given moment. This is the setting you can use to create the spreadsheet below
- Watts max is a register which shows the maximum power drawn at any instant since you last reset that register. Press and hold the FUNC key while in the Watts max function, to reset the register to zero.
- kWh is a register which shows the total accumulated energy consumed since you last reset the register. Press and hold the FUNC key within the kWh function, to reset the register to zero.
- Setting the Price which is described as “On time Price”, multiplies the kWh consumed by the Price 1 or Price 2 tariffs depending on the time of day and day of week the power is drawn.

Suppose you are paying a cheaper tariff at night from 10pm-6am, you might set Price 1 to be Monday through Sunday 6am - 10pm, and Price 2 to be Monday through Sunday 10pm - 6am. What you cannot do with this unit, is apply a rate based on consumption

Households tend to have only one tariff. You will find this information on your energy bill, or example 18c/kWh, so you won't need to enter different prices.

- To set the Clock press FUNC then press SET. The days of the week should be flashing. Repeatedly press UP to cycle through the days, then press SET to move onto setting the hours, and so on. Press FUNC when finished.
- Power Factor is the percentage of time the appliance is running over a given period of time – ignore this for our purposes.

## Taking measurements

Example of spreadsheet that you could create at home if you have only one tariff.

Cost \$/kWh \$0.18

Appliance	State	Power (Watts)	Hrs day used	kWhrs per day	Cost per day \$	Cost per year \$
	<i>On/off/stdby</i>	<i>measured</i>	<i>estimate</i>	<i>W x Hours</i>	<i>kWhrs/day x 0.18</i>	<i>Cost per day x 365</i>
		A	B	$C = A \times B \div 1000$	$D = C \times 0.18$	$D \times 365$
TV	On	125	2	$125 \times 2 \div 1000 = 0.25$	\$0.045	\$16.43
TV	Standby	7	22	$7 \times 22 \div 1000 = 0.154$	\$0.028	\$10.11
Microwave	On					
Microwave	Standby					
<b>Total</b>						<b>\$26.54</b>



For more information call The North East Neighbourhood House Network on 9457 7900, or Jika Jika Community Centre 9482 5100

Greener Houses Growing Greener Neighbourhoods is transforming five Neighbourhood Houses into ecoliving demonstration centres. It is a unique collaboration involving community volunteers, six Neighbourhood Houses, five local Governments, and tertiary institutions. The project is supported by the Victorian Government Sustainability Fund, managed by Sustainability Victoria and two Charitable Trusts.

