



Kill A Watt™ Electricity Usage Monitor

The Kill A Watt™ monitor allows users to measure and monitor the power consumption of any standard electrical device. You can obtain instantaneous readings of voltage (volts), current (amps), line frequency (Hz), and electrical power being used (watts). You can also obtain the actual amount of power consumed in kilowatt-hours (kWh) by any electrical device over a period of time from one minute to 9,999 hours. A kilowatt is 1,000 watts.

Operating Instructions

1. Plug the Kill A Watt™ monitor into any standard grounded outlet or extension cord.
2. Plug the electrical device or appliance to be tested into the AC Power Outlet Receptacle of the Kill A Watt™ monitor.
3. The LCD displays all meter readings. The unit will begin to accumulate data and powered duration time as soon as the power is applied.
4. Press the Volt button to display the voltage (volts) reading.
5. Press the Amp button to display the current (amps) reading.
6. The Watt and VA button is a toggle function key. Press the button once to display the Watt reading; press the button again to display the VA (volts x amps) reading. The Watt reading, not the VA reading, is the value used to calculate kWh consumption.
7. The Hz and PF button is a toggle function key. Press the button once to display the Frequency (Hz) reading; press the button again to display the Power Factor (PF) reading.
8. The KWH and Hour button is a toggle function key. Press the button once to display the cumulative energy consumption. Press the button again to display the cumulative time elapsed since power was applied.

What is Power Factor?

The formula **Volts x Amps = Watts** is used to find the energy consumption of an electrical device. Many AC devices, however, such as motors and magnetic ballasts, do not use all of the power provided to them. The Power Factor (PF) has a value equal to or less than one, and is used to account for this phenomenon. To determine the actual power consumed by an AC device, the following formula is used:

$$\text{Volts} \times \text{Amps} \times \text{PF} = \text{Watts Consumed}$$

