Application Note

Kill-A-Watt Power Meter

Monitoring Plug Loads

Figure 1: Kill-A-Watt meter monitoring energy use of an appliance

Overview

The model P4400 Kill-A-Watt power meter is a device used for power monitoring of 110 volt plug loads. The Kill-A-Watt power meter allows:

- measurement of real time line voltage (Volts), current (amps), power (Watts), apparent power (VA), frequency (Hz), and power factor (PF).
- calculation of total energy load over the monitoring period. Recording of cumulative energy consumption (kWh-kilowatt hours) and hours of monitoring for a study period. Unlike a power logger, this meter does not record changes in electrical parameters over time.
- instantaneous display of data on the LCD screen. This meter does not require a computer interface.

NOTE: Meter must be plugged into a receptacle to operate. Data is NOT stored on the device. Write down results before unplugging device.

Monitoring the energy use of an appliance

1. Plug the meter into an 110 Volt outlet. The meter must be plugged into a receptacle to operate and display values.
2. Plug appliance into the Kill-A-Watt meter receptacle on front of device.
3. Use buttons to display desired information (Figure 2).
   - (A) Press ***Volt*** button to display voltage.
   - (B) Press ***Amp*** button to display amperage.
   - (C) Press the ***Watt/VA*** button once to display wattage. Press again to display VA (apparent Power).
   - (D) Press ***Hz/PF*** button once to display Hertz (frequency). Press again to display PF (power factor).
   - (E) Press ***KWH/hour*** button once to display the cumulative power consumption since the device was plugged in (kiloWatt hours). Press again to display the cumulative time since monitoring began (hours/minutes).
4. Once the meter is plugged into an outlet, the internal clock begins accumulating the hours/minutes of the monitoring session, and will stop once the meter is removed from the outlet.

NOTE: All data must be collected prior to unplugging the device. To clear data and reset meter, simply unplug from power.

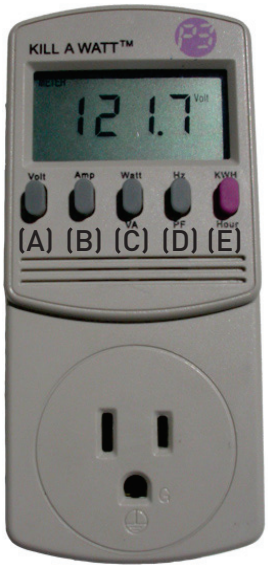

Figure 2: Kill-A-Watt meter displaying voltage information