



Leading the Way to a Brighter Future

A program of the Maine Public Utilities Commission

Kill-A-Watt™ Energy Detector INSTRUCTIONS

How to catch the culprits behind your high electric bills

A kilowatt hour (kWh) is the measure of electricity usage that your utility uses in calculating your bills. It represents 1,000 watts per hour – or the amount of electricity that ten 100-watt light bulbs would use in one hour. **To measure the electricity used by an appliance or other device in your home or office, follow these easy steps:**

1. Plug the Kill-A-Watt™ energy detector into the nearest outlet. **WARNING: Do not exceed maximum ratings detailed on label.**
2. Plug your appliance into the Kill-A-Watt. (See list below for suggested appliances to test.) You may want to use a plug strip or a grounded extension cord for ease of use.
3. When you're done monitoring the appliance, press the purple button at the far right labeled "KWH/Hour", and read the number displayed before unplugging. This is the number of kilowatt hours used. Press the same button again, and read the time elapsed.

There are three types of usage you can monitor. Here's how:

- A. To monitor a **device that runs all the time**, such as a refrigerator, cordless telephone or "phantom load"—the power used by certain devices even when they're not being used—leave it plugged in for an hour. **See example A on reverse to find out what these devices cost you each month.**
 - B. To monitor a **device you use only for a few hours each day**, such as a lamp or space heater, plug it into the Kill-A-Watt just before turning it on, and leave it plugged in for an hour. Keep track of how many hours per day you use the item. **See example B on reverse to find out what these devices cost you each month.**
 - C. To monitor a **device you use only once or twice each day**, such as a coffee maker, hair dryer or toaster, plug it into the Kill-A-Watt, turn the appliance on, and read out the kilowatt hours after the appliance shuts off. **See example C on reverse to find out what these devices cost you each month.**
4. To reset the Kill-A-Watt before testing another appliance, unplug it from the wall for 10 seconds.

Note: *By pressing the other three buttons, you can also use the Kill-A-Watt to measure Volts, Amps, Watts and Hertz.*

Suggested Appliances to Test

These are some of the biggest "energy hogs" in a typical home:

Refrigerator	Coffee Maker	Lamps	Computer
Toaster or Toaster Oven	Videogame System	TV/Cable Box/DVR	Hair Dryer
Computer	Space Heater	Microwave Oven	Air Conditioner

It's a good idea to check out the Kill-A-Watt energy detector in varying months to test seasonal appliances like air conditioners and space heaters and to re-test appliances like refrigerators that use more power in the summer months.

Calculating the Impact on Your Bills

A. For continuously run devices (refrigerator, clock radio, cordless telephone, cable box), multiply as follows:

kWh readout for 1 hour X 720 hours in a month X .17* = \$ ____ per month

Example Refrigerator (enter values in red):

.3 kWh (1 Hour Readout) X 720 hours in a month = 216 kWh X \$.17 = \$36.72 per month

B. For devices used a few hours a day (e.g., toaster oven, space heater, lamp, computer), multiply as follows:

kWh readout for 1 hour X Estimated hours per day X 30 days X .17* = \$ ____ per month

Example 1 Laptop computer charger used for 6 hours per day (enter values in red):

.08 kWh (1 Hour Readout) X 6 Hours per day X 30 X \$.17 = \$2.45 per month

Example 2 A 1,400 watt electric heater used for 3 hours per day (enter values in red):

1.4 kWh (1 Hour Readout) X 3 hours per day = 4.2 kWh X \$.17 = \$.71 day X 30 days = \$21.30 per month

C. For sporadically used devices (e.g., toaster oven, hair dryer), multiply as follows:

kWh Readout For One Use X Estimated Uses per Day X 30 X .17* = \$ ____ per month

Example A 1,300-watt microwave oven used 3 minutes 5 times a day (enter values in red):

.065 kWh (one use readout) X 5 uses per day = .33 kWh X .17 = \$.56 day X 30 days = \$1.66 per month

*17¢ is the Maine average cost per kWh, including generation cost and delivery cost. If your rate is different, please substitute your rate.

Once you've measured, how do you save?

- Lighting: switch to CFLs, which use less than 25% as much power.
- For some appliances, such as refrigerators, get a more efficient, Energy Star-rated model.
- You can use many devices more efficiently: for example, open the refrigerator door less often, let your hair or clothing partly air dry, turn down your space heater.

To see how your appliance stacks up against the average in its category, and for more great tips on saving energy, visit efficiencymaine.com.