

Kill-A-Watt™ energy detector units are available at the Wolfeboro Public Library. You can check out the detector just like you would check out a library book.



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 page two 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 page two to find out what these devices cost you each month.**
 - C. To monitor a **device you use only once or twice a 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 page two 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
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 of 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 \$0.1564* = \$ _____ per month.

Example: Refrigerator (enter values in **red**):

.3 kWh (1 Hour Readout) x 720 hours in a month = 216 kWh x \$0.1564* = \$33.78 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 \$0.1564* = \$ _____ 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 \$0.1564* = \$2.25 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 \$0.1564* = \$.65 day x 30 days = \$19.50 per month.

- C. **For sporadically used devices** (e.g. toaster oven, hair dryer), multiply as follows:
kWh Readout for One Use x estimated use per day x 30 x \$0.1564* = \$ _____ 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 \$0.1564* = \$.05 day x 30 days = \$1.50 per month.

* \$0.1564 is the Wolfeboro residential cost per kWh effective January 1, 2009, including generation cost and delivery cost. Please verify your rate to make certain it has not changed since this publishing, if so 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.