ELECTRICITY MONITOR
INSTRUCTIONS

FOR DEVICES WITH CONSTANT POWER DEMAND
(lamps, computers, computer accessories, TVs, TV accessories, gaming stations, space heaters without thermostats, heat tape on pipes and gutters, holiday lights, chargers, fans, etc.)

1. Plug the meter into an outlet.
2. Plug your device into the meter and turn on device.
3. Press the “Watt / VA” button until the word “Watt” appears and record the wattage displayed.
4. Use the following formula to calculate the annual cost to run this device:

\[
\text{Annual Cost} = \frac{\text{Watts} \times 24 \times 365}{1,000} \times 0.23 *\n\]

FOR DEVICES THAT CYCLE
(refrigerators, freezers, humidifiers, dehumidifiers, air conditioners, fish tank heaters, space heaters with thermostats, clothes washers, sump pumps, etc.)

1. Plug the meter into an outlet.
2. Plug your device into the meter and turn it on if it isn’t already running.
3. Keep the device plugged into the meter long enough for it to cycle on and off multiple times (e.g., a day for a fridge or dehumidifier — the longer the time period, the more accurate the result).
4. Press the “KWH / Hour” button until the “kWh” icon shows and note the KWH number.
5. Press the “KWH / Hour” button again until “clock” is displayed and record this number. This is the time monitored in hours and minutes (HH:MM).
6. Convert the time to decimal hours (e.g. 2 hours and 30 minutes = 2.5 hours).
7. Calculate annual cost using this formula:

\[
\text{Annual Cost} = \frac{\text{kWH} \times 24 \times 365 \times 0.23 *}{\text{HRS TESTED} \times \text{HRS/DAY} \times \text{DAYS/YEAR}}\]

**TIP:** You may want to use an extension cord to make it easier to see the meter.

**TIP:** Try testing devices both when they’re turned on and when they’re turned off. This will show you which have a “phantom load” that consume power even when they’re turned off. (Note: It costs $2/yr for every continuous watt so a TV with a 48-watt phantom load costs $96/yr – even if it's never turned on.)

For tips on saving energy, visit efficiencymaine.com.

* These calculations assume $.23/kWh.
Once you’ve measured the energy used by your devices, how do you save on energy costs?

**Avoid Phantom Loads**

1. Unplug items that consume phantom loads when not in use.
2. If unplugging devices with phantom loads isn’t convenient, consider plugging them into a power strip and switching it off when not in use.
3. If it’s not practical to use a regular power strip, try a smart power strip for entertainment centers and computers. It won’t avoid the phantom load of the TV or computer, but will automatically stop the phantom load from the accessories (DVR, DVD, VCR, printer, display, speaker, etc.).

**Upgrade your lighting**

Switch to LEDs, which are more than 70% more efficient than incandescent bulbs and last for many years. Some will pay for themselves in as little as one week.

**Buy ENERGY-STAR®-rated appliances**

When it comes time to replace old appliances or add new appliances to your home, consider ENERGY STAR®-rated units. They are designed to save you energy over time.

For more tips on saving energy, visit www.efficiencymaine.com/at-home/energy-money-savings-tips