

Kill A Watt Challenge

Electric Nameplates

Knowing how to read an Electric Nameplate is an important skill to have. It enables you to quickly compare the energy usage of multiple appliances. The electric nameplate includes the following energy information:

- Maximum watts used,
- Voltage needed, and
- Maximum Amps consumed

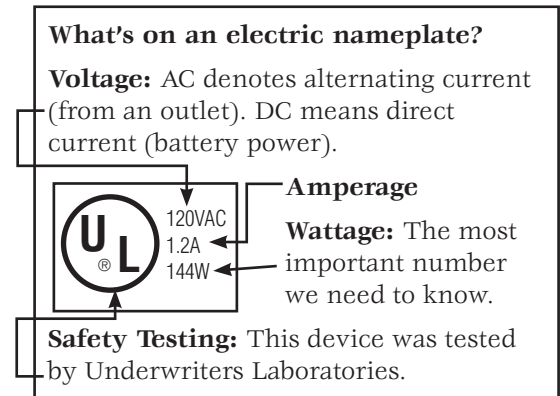
Not all nameplates include all three of these pieces of information. If you're missing something, you can figure it out using this equation:

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

Take the nameplate at right for example.

$$1.2\text{A} \times 120\text{V} = 144\text{W}$$

If we didn't already know the wattage, we could easily figure it out!



Kill a Watt Meter

The Kill A Watt meter is a tool that tells you the same energy information you can learn from reading an electric nameplate, but it can also tell you whether or not a device has a parasitic load. A parasitic load is the energy a device uses when you think it's turned "off". Computers, TVs and some stereos have parasitic loads. You can search for parasitic loads by plugging devices into the Kill A Watt meter and seeing if they use any Watts or Amps while they are turned off. The Kill A Watt meter has buttons for Amps, Volts, Watts, and Kilowatt-Hours. If you plug an appliance into the meter for an extended period of time, it will keep track of how many Kwh the device used for that time period. You can then calculate how much money it costs you to run that machine!



Energy Star

The US Environmental Protection Agency recognizes the most efficient devices with the Energy Star label. Do any of your appliances have this distinction?



How Much Energy do your Appliances Use?

Now it's time for you to learn more about your electronic devices and appliances. Which ones use the most energy? Which ones use the least? Do any of them have parasitic loads? Use the table on the following page to track energy consumption of your appliances.