

# Chapter 3

# Power Usage Answers

**Understanding** your RV power usage is one of the biggest hurdles for most people.

## I Appliances

### Air Conditioner

A small 13,500 BTU air conditioner unit uses **1,500** watts when running. That's about **150** amps inverted from your batteries. Or **15** amps when plugged into shore power.

### Furnace

Because of propane, these only use about **5** amps on **12** volt plugged in.

### Hot Water Heater

Tank water heaters are constantly firing up in the background to hold temperature. If you're connected to shore power, it can use **15** amps. On battery power, they only use **2** amps.

Tankless on-demand water heaters are more efficient and only use **1.3** amps.

### Water Pump

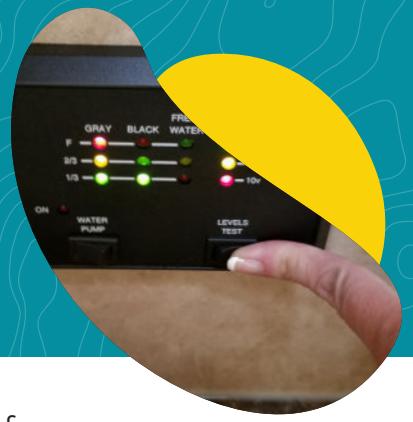
RV water pumps are pretty efficient, only using **5** amps when running on batteries. They automatically shut off when water isn't running anymore.

### Microwave or Convection Oven

These units can use up to **15** amps on shore power which means closer to **130** amps and **1,500** watts if running off your batteries.

### Stove and Oven

A propane based stove and oven should use **zero or no** power.



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## I Lights

A single LED bulb can use 1.5 amps or less, which is good because you probably have upwards of 30 bulbs in your rig.

Halogen or incandescent bulbs can use up to 3 amps each.

## I Fans

Standard fans run at 1.5 amps or less.

Larger Fan-Tastic or Maxxair fans can use up to 3 amps on 12-volt power.

## I Plugs

USB plugs run at 1.5 amps on 12 volt.

Household style outlets are limited by 30 or 50 amp service and your inverter size.

## I Jacks

A single tongue jack can easily use up to 30 amps, and a self-leveling system can use the same, but for each leg.