Answers to all your questions about boondocking, solar, and 12V technology

Way is the recognized industry leader in 12V technology and a leading provider of solar power solutions for the RV industry. Together these products help make boondocking happen. Read below to get answers to some frequently asked questions about boondocking, solar power and 12V. If you have a question that is not addressed here, drop us a line and we'll get it answered for you. You can also check out our YouTube page for more insights.

Frequently Asked Questions

WHAT IS BOONDOCKING?

Boondocking is taking your RV to a campsite or another location at which you will not be able to connect to shore power to power your vehicle. Other names that mean the same or similar things to boondocking are dry camping or dispersed camping.

WHAT IS SHORE POWER?

Shore power (or city power) is when your RV is plugged into an external power source at a campsite or a house which is responsible for powering your vehicle's appliances and electronics.

IS BOONDOCKING A POPULAR THING TO DO IN AN RV?

Yes, boondocking has become very popular among RVers looking to find alternatives to busy campsites.

WHERE IS A GOOD PLACE TO BOONDOCK?

Public lands including national and state parks, wildlife management areas, and more make for great boondocking locations. There are many apps and websites that can help find available, free public campsites that are good for boondocking. Be sure to follow all local regulations regarding length of stay, waste removal, and safety guidelines.

HOW LONG CAN I BOONDOCK?

The amount of time you can spend boondocking is based on the amount of supplies (water and food) you're able to bring with you and the amount of power you have to keep your necessary appliances running. See some of our other questions and answers below to help you on your boondocking power needs.

WHAT DO I NEED TO BRING WITH ME TO BOONDOCK?

Depending on where you are boondocking, your specific needs may vary, but at a minimum, you should bring a paper map and/or directions; drinking water; enough food and drinks for as long as you plan to be camping; basic safety equipment such as flashlight, flares, first aid kit, etc.; repair tools; and your sense of adventure.

WHAT SHOULD I DO TO PREPARE MY VEHICLE FOR A BOONDOCKING TRIP?

Before setting out, you should charge your battery bank, fill your propane, fill your freshwater tanks, empty your black and gray water tanks, do a thorough check of all your wiring and equipment mounts are secure, and stock your fridge and pantry.

HOW DO I POWER MY APPLIANCES AND ELECTRONICS WHILE BOONDOCKING?

The two primary ways of powering appliances and electronics without access to shore power are using solar panels or an external generator. Generators have historically been the most commonly-used and reliable power source for boondocking, though solar power is becoming more and more common as technology improves and panel costs go down. One drawback to a generator is not environmentally-friendly, requiring you to bring and use more propane or gasoline to power. Generators are also noisy which can defeat the purpose of boondocking to get away to somewhere quiet and peaceful. Solar power on the other hand is quiet, endlessly renewable, and good for the environment. And once you have the solar panels installed, it is free! There is no charge for capturing the sunlight.

DO I HAVE ENOUGH SOLAR POWER TO BOONDOCK?

The amount of solar power needed to boondock will vary based on what appliances you are looking to power, how many batteries your vehicle has, how long you are going to be off grid, and what the external conditions, such as temperature, will be. In order to power basic lighting and a 12V refrigerator you'll need a minimum of 120 watts of solar capacity. As you increase your demand, you'll need more solar panels to supply more power.

DO I HAVE ENOUGH BATTERIES FOR BOONDOCKING?

The quantity of batteries is also dependent on what you need to power and for how long. To power an essential appliance like a 12V fridge, you'll need at least one series 27 battery. To be able to continuously run a 12V fridge, you'll need at least two deep cycle batteries and 120W of solar power. As your power demand increases, your need for additional batteries will also increase.

WHAT KINDS OF APPLIANCES ARE GOOD FOR BOONDOCKING?

Generally, DC appliances and electronics are more efficient than AC when boondocking.

CAN YOU USE 12V FRIDGES WHILE BOONDOCKING OR DRY CAMPING?

Yes. 12V fridges are a perfect appliance for boondocking. These DC appliances work very efficiently with the solar panels and batteries you will rely on for boondocking.

HOW DO YOU POWER A 12V FRIDGE WHILE BOONDOCKING?

In our lab tests, the Everchill 11 Cubic Foot 12V Refrigerator ran for over 40 hours on a single battery which is enough to keep your food cold for almost two days. Once paired with at least 120 watts of solar panels and two deep-cycle batteries, the fridge will run indefinitely.

HOW DO 12V COMPARE TO 110V FRIDGES WHILE BOONDOCKING?

12V fridges, such as the Everchill 11 cubic foot fridge will cool down faster and stay cool longer than 110V fridges. See our side-by-side cool-down comparison video.

HOW DOES SOLAR POWER WORK?

Solar panels capture particles of light - photons - that free electrons which generates an electric current through the panel. Metal plates in the panel collect these electrons and route them into wires as a DC battery charging output.

Read more from actual scientists on how this all works.

HOW DOES SOLAR POWER WORK FOR AN RV?

The DC output is routed through the charge controller to the RV batteries, recharging them as power is consumed during camping.

DOES IT HAVE TO BE SUNNY TO BE ABLE TO USE SOLAR PANELS?

No. While full, direct sunlight will help you charge faster, most of today's solar panel technology is optimized to work even in overcast or scattered sunlight conditions.

IS MY RV SOLAR-PREPPED?

Many RVs come with a 50W solar panel and roof port already installed. To check to see if you're solar-prepped, look for a roof or sidewall port and/or a sticker from your vehicle manufacturer or dealer that indicates the vehicle is solar-prepped.

HOW MANY SOLAR PANELS CAN I PUT ON MY RV? HOW MANY PANELS DO I NEED?

You can install as many mounted solar panels as can fit on your vehicle and bring along any additional portable panels that you can store. Your need will depend on what you want to power and for how long you're looking to be able to boondock.

WHAT CAN I POWER WITH THE EXISTING 50W PANEL ON MY RV?

If your vehicle has an existing 50W panel, this will help maintain your vehicle's battery and can power your CO2 detector. A 50W panel is not enough solar capacity to power larger appliances or electronics and an expansion kit is recommended.

WHAT DO I NEED TO CONNECT A NEW SOLAR PANEL TO MY RV IF I ALREADY HAVE AN EXISTING PANEL?

You will need a Y-connector to connect your new panels into your existing installation. See our solar expansion kit installation video to understand these steps in more detail. This installation is recommended only for experienced or professional service technicians.

WHAT DO I NEED TO INSTALL A SOLAR PANEL ON MY RV IF I DON'T ALREADY HAVE ANY INSTALLED?

You will need to mount the new panels and install a roof or sidewall port to enable access to your battery and a charge controller.

WHAT IS A CHARGE CONTROLLER? HOW DO I KNOW IF I NEED A NEW ONE?

A charge controller helps regulate the amperage flowing from your solar panels into your battery bank. As you increase the number of watts of solar power you're collecting, you will need to upgrade your charge controller. A 10-amp charge controller can work with solar panels up to 150W; a 20-amp charge controller is needed up to 250W; and a 30-amp charge controller is needed for 250W and up.

WHAT KIND OF BATTERIES ARE NEEDED TO WORK WITH SOLAR PANELS?

Solar power can work with several types of batteries including Lithium Ion, Lead Acid or Absorbed Glass-Mat (AGM).

WHAT SOLAR PRODUCTS DOES WAY SELL?

Way has many solar panel options ranging from 50 to 190W watts in mounted or portable formats. Way also provides accessories such as Y connectors, mounting brackets, ports, connectors and more. Way has outstanding solar panels from our Elite line of products as well as being the exclusive provider of RV panels from Merlin Solar.