How to Power Your Camping Fridge

You've just bought your new 12V camping fridge, now how on earth do you keep the power running so your food (and beer) stay icy cold?

You have a few options, but like everything in life, there are pros and cons to all of them.

Using your Starting Battery
Please Note: We do not recommend this type of setup.

Your Starting Battery's sole purpose is to start your car, as these batteries deliver a big burst of energy for only a few seconds. You can run a cable from the starting battery to your fridge and voilà, you have power. However, starting batteries are not designed for powering a fridge where a low output is required for an extended period.

Using the cigarette socket that comes standard in most cars from factory is an option, but it will only provide power when the car is running. You could get an extra outlet installed that will provide power to the fridge when the car is turned off however you'll probably end up with a flat starting battery.

Most 12 volt camping fridges these days have a low battery cut-out feature. The theory is if you go to bed with your fridge running from your starting battery, the low battery cut-out will turn the fridge off when the battery gets to a certain voltage. This should ensure there is sufficient power in your starting battery to start the vehicle the next day.

Let's just say, relying on the low battery cut-out is a risky move. If a light is left on in the car or you leave the door open for a few minutes you run the risk that the car won't start. Not ideal, especially if you are heading somewhere remote

Dual Battery System
The best way to ensure your fridge will stay cold overnight and your car will start in the morning is with a Dual Battery System.

As the name suggests, a dual battery system means you will have two batteries in your vehicle. The original starting battery and a 2nd auxiliary battery which can be used to power your fridge and other 12 volt accessories.

We generally recommend a deep cycle battery, they are designed to consistently deliver small amounts of power, for much longer and to allow a much deeper discharge, reducing damage.

The type of dual battery system you choose will depend on numerous things.

- How much you want to spend
- Where you are installing it (Under Bonnet, in cab or in tray or in caravan/camper trailer)
- How long you need to run the fridge and other accessories
- How long you can go in between charges

Like everything in life, there are lots of options when it comes to the type of system you can install.

Standalone Battery Box
The Fridge will plug directly into a stand-alone auxiliary battery box. The battery needs to be connected to 240 volt to charge, you can do this before you leave home or if you are staying at a powered camp ground. Depending on battery size, you will generally get about 2 days run time from the fridge.

Vehicle Charge via Isolator
You can also have a standalone battery or a battery installed into your car. Power is fed from the car's alternator to the starting battery via an isolator then to the auxiliary battery. The auxiliary battery gets charged while the vehicle is running. When the vehicle is off the isolator stops charge being fed from the starting battery to the auxiliary battery to ensure the starter battery is always charged. Generally, requires about a day of full driving to recharge the auxiliary battery and generally will only charge to a max of 80%.

DC-DC Charger
Power is fed from the car's alternator to the starting battery via a DC-DC Charger then to the Auxiliary battery. The auxiliary battery is charged while the vehicle is running. When the vehicle is off, the DC-DC Charger stops the charge feed to ensure the starter battery is always charged. The DC-DC Charger is configured with the chemistry of the auxiliary battery to ensure it charges to 100%. Most DC-DC Chargers also have a solar input option so you can charge the battery via solar.