

Watching the sun go down is one of the simple pleasures in life, especially while camping. However, as the sun drops, so does the visibility of your setup!

Tired of trying to cook dinner by the dim light of your camping lantern? You may have considered investing in a 12V lighting setup instead. Camping should be comfortable, so if you are finding that your lack of lighting solutions are taking away from that, this article will help you to be better prepared.

Be that adding lights to your tent, caravan, vehicle, annex, or awning – once you're across the basics, it's super simple to add illumination to your outdoor apparatus!

Read on for the features of 12V lighting, what you need to know, and the most frequently asked questions.

In this video, our gear guru Ben explains the basics of how to choose 12V camp lighting for beginners.

Power Options for 12V Lighting

Today, lighting for camping is more affordable, durable, brighter, easier to use, and more compact than ever before. Batteries have also improved, along with the introduction of LEDs and the advancement of solar power technology. Remember the old dolphin torches you'd lug around? Now, you can buy a torch that supersedes them in both battery life and light output, at a quarter of the size and weight. For more on personal and portable lighting options, check out [Episode 67 of The Snowys Camping Show](#):

If you have a 4WD or vehicle set up with decent 12V power, your options for camp lights are endless. Whether it's an LED flood light, strip lighting, or compact lights – being able to connect to 12V power allows huge potential.

There are a few choices for powering your 12V lighting and other devices when camping.

Some factors to consider are:

- Whether the power source can store a charge as well as recharge
- The power output
- The weight and portability
- Whether it has enough outlets for your use

1. Dual Battery

If you already use a portable [12V fridge](#), [fan](#), or other appliance whilst camping, it's likely that you already have a dual battery setup.

A second battery can be wired into your vehicle, so that it's separate from your main battery and will charge while the engine is running (ideally while you're driving). This enables you to run 12V gear such as fridges, lights, fans, and other equipment without the risk of flattening your battery.

Snowys' blogger Aaron Schubert runs a dual battery system in the back of his Land Cruiser, so using power for lighting is not an issue. A flood light is used on the back of the 4WD, along with LED strip lighting on the top tailgate and upgraded LED globes for the two interior lights.



A dual battery system is a reliable way to power your gear off the grid. Image: Aaron Schubert

2. 12V Socket

If you don't have a dual battery and you want to power from your car, you can power your

lighting and other gear into the factory-fitted 12V socket of your vehicle. This is generally not an issue with smaller devices such as lanterns, your phone, or smaller tech items. However, if you want to run lights, you might want to consider an alternative or you run the risk of flattening your vehicle's starter battery within a day.

There's only so much power you can draw from a single 12V outlet though. If you find the sum of all your ratings is pushing the limits (see below for more detail on this), you're best to consult an auto electrician to upgrade the cables in your car.

An even better solution is a dual battery system as touched on above, with heavy-duty wiring, cables, and plugs.

3. Power Pack or Power Station

A portable power pack or station is also an option to power your 12V lights. Depending on the product you choose, charge it up from your mains power before you leave, top it up via solar panels, or charge from your vehicle whilst on the road.

To shed more light on 12V lighting, Ben and Lauren also spoke with Hard Korr in Episode 29 of The Snowys Camping Show:

Power Draw

The number of lights you can run from one cigarette socket can get a bit technical, so let's cover the basics in layman's terms. A factory fitted cig socket is rated to about 120W or 10A, and the sum of all the ratings of the light bars (for example) you run from the battery can't go over this.

You may think that this means you can run 20 x 0.48A light bars from a 10A socket ($20 \times 0.48 = 9.6A$), but this is not the case. If you push power consumption to the limit of the plug, this will cause things to heat up which could become dangerous or damage your gear.

Features to Look For in 12V Lighting

With more options on the market today than you could ever need, it's becoming important to buy a camping light that is going to do what *you* need it to do. There's no point buying a flood light if you can't connect it to 12V power. Likewise, if you want a light to read a book with in your tent, perhaps a top-of-the-range tactical torch is a little much.

Power Consumption

Check out the specs to ensure the lights have a low power consumption. The more power you use, the faster your batteries need charging. Look for something that is bright enough to do what you need, and no more – or it will chew through your battery supply. Ideally, you want lights with high light output and higher-quality LEDs so they last longer.

If you're only setting up strip lighting on your car or around your boat, the lumens can be lower given you won't need as high visibility. This will also help to conserve precious battery power.

Quality and Durability

They say a poor man buys twice! Three dollar lights are worth just that, so don't waste your money – you'll go through several of them. It's also important to consider durability. If your lights are semi-permanently mounted onto your vehicle, they will need to be able to handle the vibrations of your 4WD without becoming damaged.

Remote Control Compatibility

For lights that are mounted somewhere, a remote control is a fantastic option. Dimmers are often included too; turn it on, and dim the light down without having to walk through the dark!



High-quality lights are more durable, brighter and last longer on your adventures. Image: Aaron Schubert

Lighting Options:

LED Strip Lights

The benefits of LED strip lighting are that it's super easy to install and, considering their low weight, the power output is excellent. They're also cool to the touch in low applications, have a long life given they don't require globe replacements, and boast an efficient power draw.

LED Strip and Flexible Tape Lighting

One of the most common lights you'll see these days when camping is LED strip lighting: a length of LEDs that are mounted inside a waterproof film. You can find flexible tape options that are cut to fit, with adhesive tape on the back and connectors on each end. These are usually low-powered, so not super bright like other lighting options – though this means they use up very little energy.

They are low-cost, and can be installed by virtually anyone. You can cut them every 10 or so centimetres, join them easily, and attach them to pretty much anything. Some stores sell pre-wired LED strip lighting with a cigarette lighter plug on one end, or you can make up your own. LED strip lighting is a great option to add on your awning, or on your 4WD. Keep in mind though that it will stick firm to your chosen surface, so not removed as easily. This is also an advantage, as you won't need to move it around.

Other forms of LED strip lighting are attached to a strip of canvas, which has Velcro on the back for mounting. This is a little more versatile, as you can set it up quickly and move it where you want to. However, the trade-off is that it's not flush fitting and can catch on moving items, such as camper trailer frames, gazebos, and awnings. For a more permanent lighting option, flexible tape lighting would be your best bet.

If you think that you'd prefer something more portable, consider either strip lighting with Velcro on the back instead, or a light bar kit setup.



Enjoy the space under your awning more in the evenings by attaching some tape lighting.

Image: Korr Lighting

LED Camping Light Bars & Kits

Individual bars or a light kit usually come with all the necessary parts you will need to set them up yourself – including a cigarette plug to connect it into your vehicle, extension leads, and a dimmer switch for manual adjustment.

The benefits of light bar kits are that they offer a higher number of lumens and are flexible in offering various mounting options. In hot conditions, they also perform better in comparison to flexible tape lighting.



Adding some quality lights to your vehicle is a great way to illuminate your area at night.

Image: Aaron Schubert.

Solar and Wind-Up Lights

Something that can be a right pain, regardless of which path you go down, is changing batteries. There are a heap of torches and lanterns on the market today that don't require the changing of batteries. Some require you to wind a handle around to generate power, and others charge via inbuilt or separate solar panels. Of course, every option brings its own inconsistencies – but used for the right purpose, solar and wind-up lights are fantastic. The wind-up lights in particular are great if your light dims; simply wind it up a little, and you are good to go again. For the lanterns with lower light output (like those used in a tent), the solar lights are a great option providing you remember to leave them out in the sun on a clear day. Keep in mind that if you're camping in cloudy or rainy weather, you may need a backup!

Flood Lights

A flood light easily generates enough output to light up a whole camping area – fantastic when you arrive at camp in the dark!



You won't need to wear your headtorch around camp if you set up lighting around your tent.

Image: Korr Lighting

Frequently Asked Questions

How Many Light Bars do I Need for a Campsite?

Light bars come in many sizes, starting at 25cm – equivalent to the light you would find in a lantern. The largest is 100cm in length, which is enough to light up a gazebo or tent awning from one direction.

A light bar kit includes up to 5 bars, which is more than enough for an entire campsite. This is well within standard 12V socket ratings and provides 1-3 days of continuous lighting from a deep cycle auxiliary battery (as mentioned above). While you could run this from your regular car battery, it's not recommended; it could flatten your battery after a day of use, or if you accidentally leave them on.

You can also use extension leads to create bigger gaps so that you can set up the bars all around the tent/shelter or campsite. The benefit of choosing a kit is that it comes equipped with different-sized leads, having it easy to customise to your specifications.

A single bar kit won't allow you those options, as you will need to separately purchase leads in order to use it with the rest of your gear. So, this is more so an option if you're looking to add more illumination to your current setup.



Illuminating your whole campsite will be fairly easy with one light bar kit. Image: Korr Lighting

Mounting Light Bars to Your Tent or Awning Pole

Purchase pole clamps, which will connect onto the rear channel of the light bar. This accessory provides you with some extra versatility to move your lighting around to suit your needs at any given time. Or, use Velcro strips or cable ties for a more permanent application.

White or Orange Lights?

Colour temperature is a feature to pay attention to. You can find everything from cool white to yellow or red. Bright white or cool, blue-coloured lights can attract bugs, so colour is something to factor into your decision. While white light will provide better visibility, orange will significantly reduce the presence of insects.

If you choose to use white LEDs, avoid hanging them above cleaning/washing or food areas. This will draw bugs to the area, which can become messy and unsanitary while preparing meals. To be on the safe side, choose both white and orange lights. Keep in mind that if you want to extend your dual colour lighting system, you will need to use dimmers and cable kits that are compatible with dual orange/white light bars and other products.



You have the option of white or orange coloured LEDs. Image: Korr Lighting

Extending My Light Kit/Lighting Setup

This will depend on what brand of lighting you have. Some brands design their kits so that you don't have to solder anything. Instead, you can purchase extra leads to extend and customise it as you like. Just make sure they're compatible.

Can I run my 12V camping lights from a 240 power point?

Yes, but you will need a transformer/plug pack that can handle the power draw of your lights.

Are light kits compatible across different brands?

The only way to know if parts are compatible across various ranges is to check if the connectors fit. However, it is recommended to stick with the same manufacturer. These plugs are made to be water resistant, so ensure to use compatible brand components to form a tight seal.

Do you have any other queries about 12V lighting? Let us know in the comments below.