ADAPT-A-CAMP by JAElec

Instruction manual

PLEASE READ ALL INSTRUCTIONS BEFORE USE

Adapt-A-Camp is a multipurpose, multi-function hub for your activities away from mains power. Eg camping, fishing trips and field work. Adapt-A-Camp takes power from a 12v DC source and provides power outlets, USB outlets, on-board light and voltage monitoring.

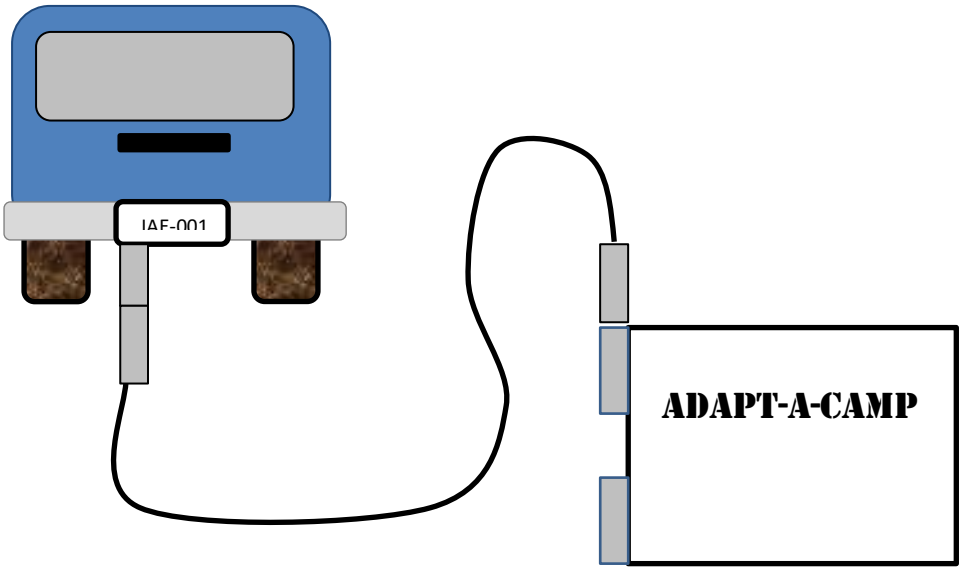
SYSTEM SETUPS

There are many ways in which Adapt-A-Camp can be connected to inputs and outputs. Here we will cover the basics of a couple of options. Whichever setup you use, always make sure the circuit is protected **at the source (battery/batteries)**, also check the polarity is correct with red to + positive and black to – negative.

Always make sure battery clips are not shorting to/touching the vehicle chassis/metal parts, especially take care if intending to close down the bonnet.

Run cables/extensions where they are not being crushed or cut on the vehicle or by other objects.

VEHICLE AUXILIARY BATTERY

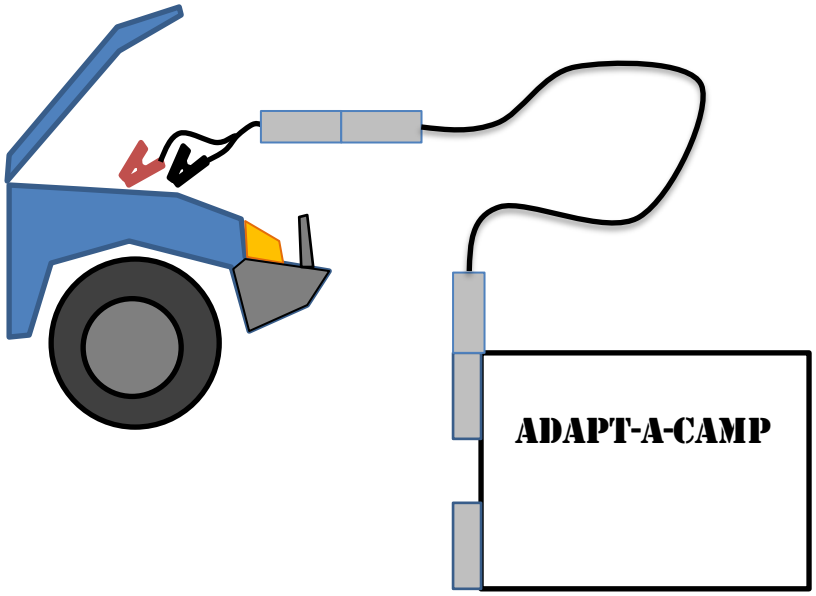


This set up is the preferred option for a few reasons.

- No lifting or lugging the battery, as it is mounted in the vehicle.
- The battery is charged every time you drive.
- You can't be left without vehicle starting power (providing the dual battery has been wired correctly).

Most dual battery set-ups will have been fitted to provide power for items such as a car fridge and canopy lights in the rear of the vehicle, or to feed through to a caravan or camper. All you will need to do is connect into this via the Anderson connector. If a spare Anderson connector is not available, get an extra one fitted by an auto electrician or you can use the BATT to AND adapter at the auxiliary battery.

VEHICLE (MAIN) BATTERY



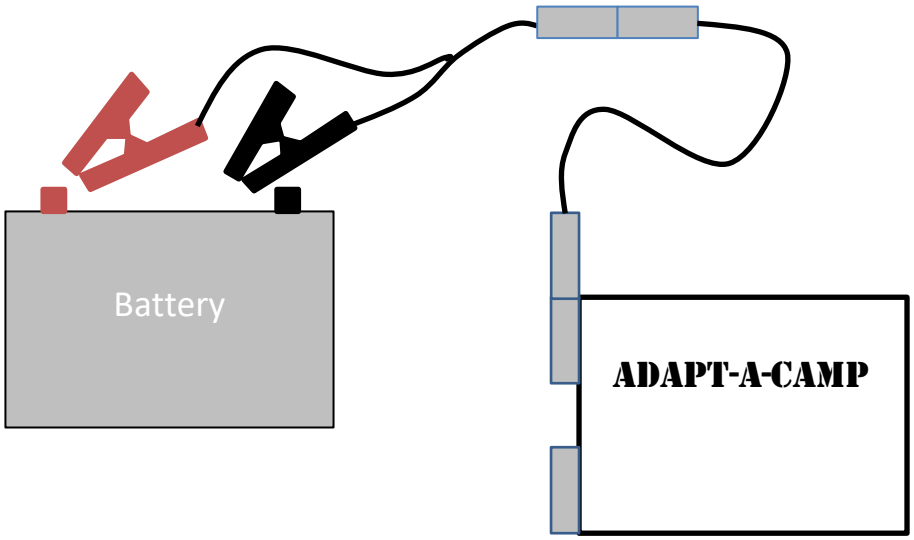
This set up is possible and usable, but care must be taken not to drain the vehicle battery to a point which it will not start your engine! Keep an eye on that voltmeter! There is no specific safe voltage reading, that we can specify as being able to still start your engine. There are many variables in this situation including

- Engine size
- Battery size (or CCA)
- Condition of battery
- Temperature of the day
- Condition of the starting system.

BUT – as a guide : - the voltage should initially be around 12.6v (fully charged battery), and then the voltage should not be taken below 12V. This is a **guideline** only and your “safe” voltage may be lower or even higher than this, ie your vehicle may only need 11.8V to Start or conversely could require 12.1V to start.

One way around this problem would be to periodically start your engine and run for a while to top up that battery charge, but be considerate of other campers, not everyone enjoys the sound and fumes from a running engine.

STAND ALONE BATTERY



In this system, the power source is a bare, stand-alone battery. (You could also choose to place it in a plastic battery box). There are a few benefits to this system

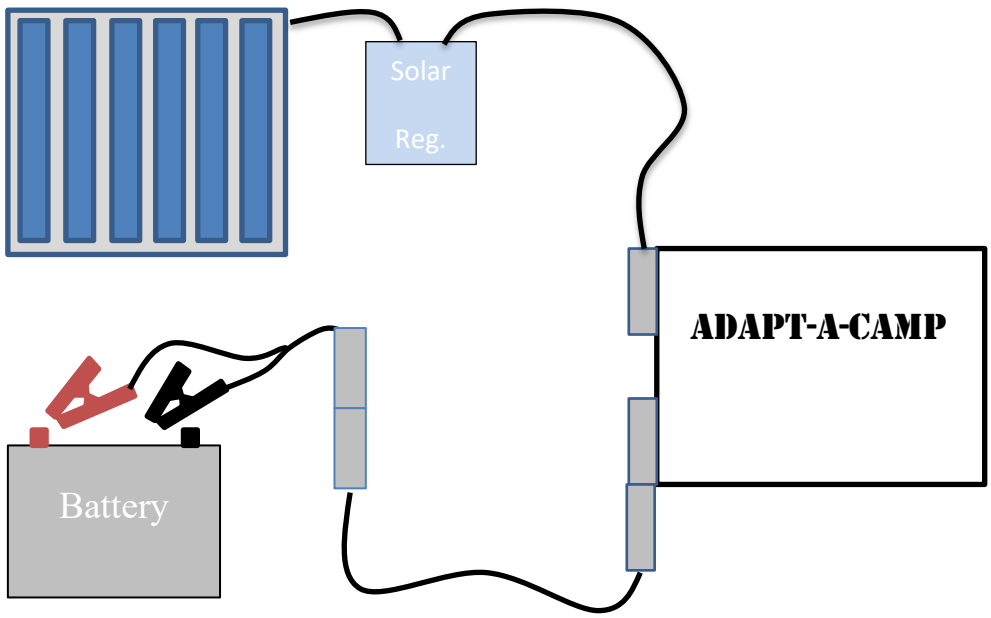
- The battery can be as big or small as you want
- The system can be detached from the vehicle.
- Vehicle operation is not affected

OTHER CONNECTIONS

This product is called Adapt-a-Camp for a reason! There are many options and additions possible with adapt-a-camp, some of which will be outlined and others we possibly have not even thought of! Feel free to set up your system to fit your needs, but always take notice of the polarity and make sure circuits are protected **at the source/es.**

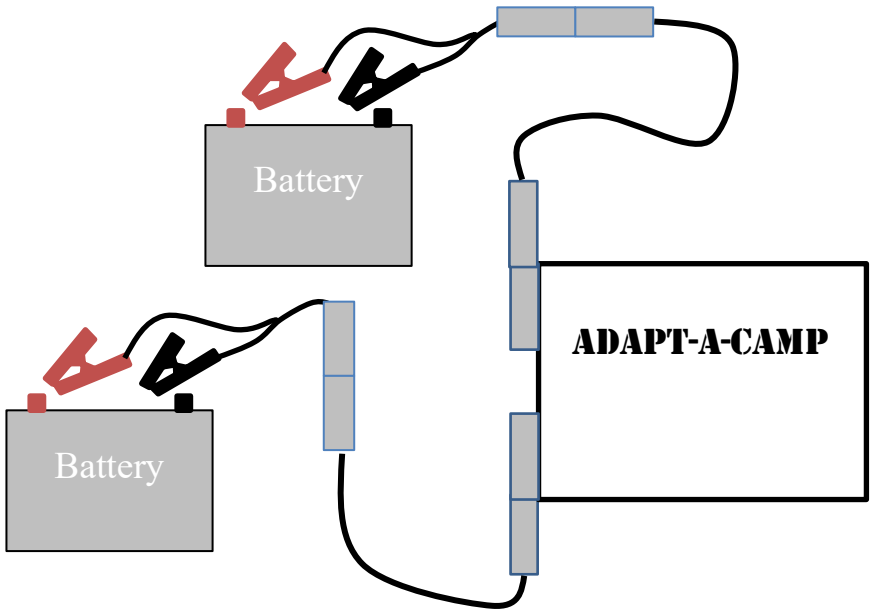
SOLAR CHARGING

For longer or continuous run time, you can use adapt-a-camp to charge through to your power source with a solar panel and regulator.



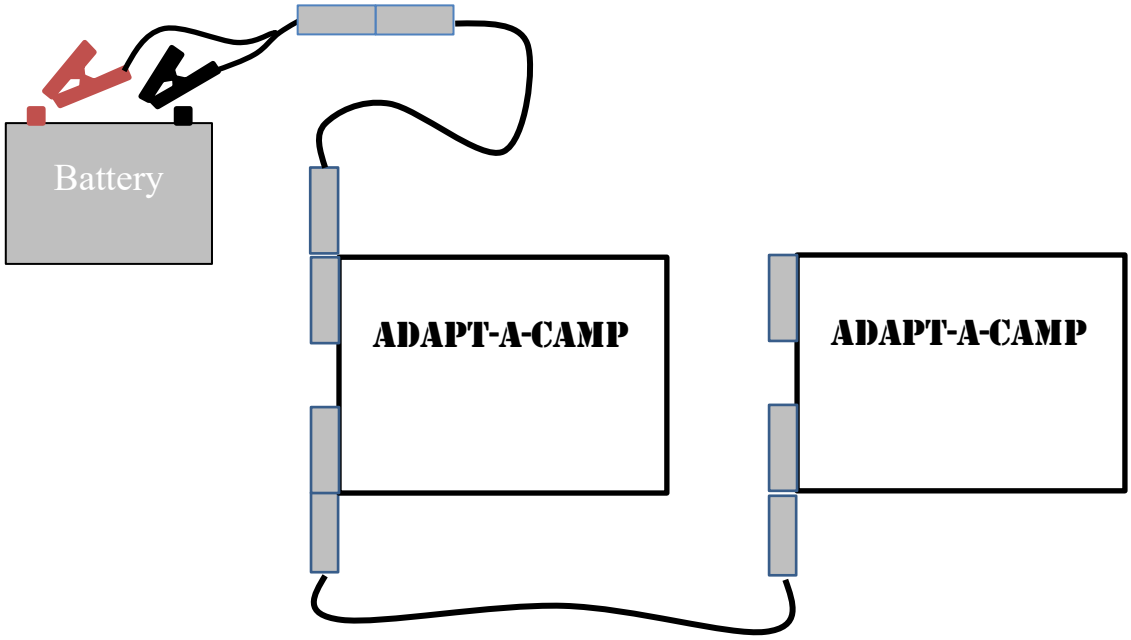
TWIN BATTERY

For longer run time.



MULTIPLE ADAPT-A-CAMP

For larger camps/ more utility.



ON BOARD FACILITIES

Camp light

On the rear of Adapt-A-Camp, you will find a small LED strip lamp. Turn it on and off using the toggle switch also found at the rear. This little fella won't illuminate the world, but is bright enough to be a handy table lamp. Often, Adapt-A-Camp may be placed on the folding table or ute tailboard in camp where food or drinks may be prepared and this light is enough to conduct those tasks, yet not annoyingly bright. Also, Adapt-A-Camp could be one of the first things grabbed out of the vehicle when you have reached camp after dark, so an on-board, ready to go lamp is going to be very handy-it may be the first light you have in camp.

USB outlet

Front centre, is a dual outlet USB charger. These are a high output design and are illuminated when active. There are heaps of uses for these.

Accessory sockets

There are two sockets provided on Adapt-A-Camp, one front left and the other on the right end. There is internal illumination to confirm power supply. These are good for around 10 amps of current and are limited/protected by the circuit breakers.

Anderson connectors

Two of these are fitted to the left end of Adapt-A-camp. They are wired parallel and as such, either can be used for input or output. These are **not protected** by the on board circuit breakers, but by the **supply protection**. You must ALWAYS supply Adapt-A-Camp from a protected source, such as our Battery to Anderson adapter or other protected Anderson outlet.

On board circuit protection

On the rear of Adapt-A-Camp, you will find two soft, clear domes. These are the reset points for the circuit breakers, they are fitted to reduce the chance of circuit overload and subsequent wiring/device damage or fire/personal injury/death. The unit is divided between the two circuit breakers, with each powering an accessory socket and either the USB or voltmeter. If you are using a device/accessory and it stops working, check the circuit breaker through the clear cover. If it has tripped, you will see the black button has popped out. Simply push down on the clear cover to reset. If it keeps tripping, **stop using your device** and unplug it from Adapt-A-Camp as it is faulty.

Voltmeter

To keep watch on your power source. Displays system voltage accurate to one decimal place. If you are noticing your camp lights going dull or accessories not working properly, check the system voltage. Some devices have a low voltage cut out and will cease to operate at a low voltage level. Other devices will malfunction at low voltages. We suggest not running accessories at voltages of below approximately 11.4volts, as damage may occur to their circuitry. However only you know your equipment, so you make the call on lower limit.

Use the voltmeter to evaluate your system set up. If you are camping out for an extended period and are using a solar panel or other input to keep your system charged, the volts should be kept up around 12.5v. If your voltage is constantly dropping, this is a sign that you need to reduce your usage of the system or increase the power of your charging.