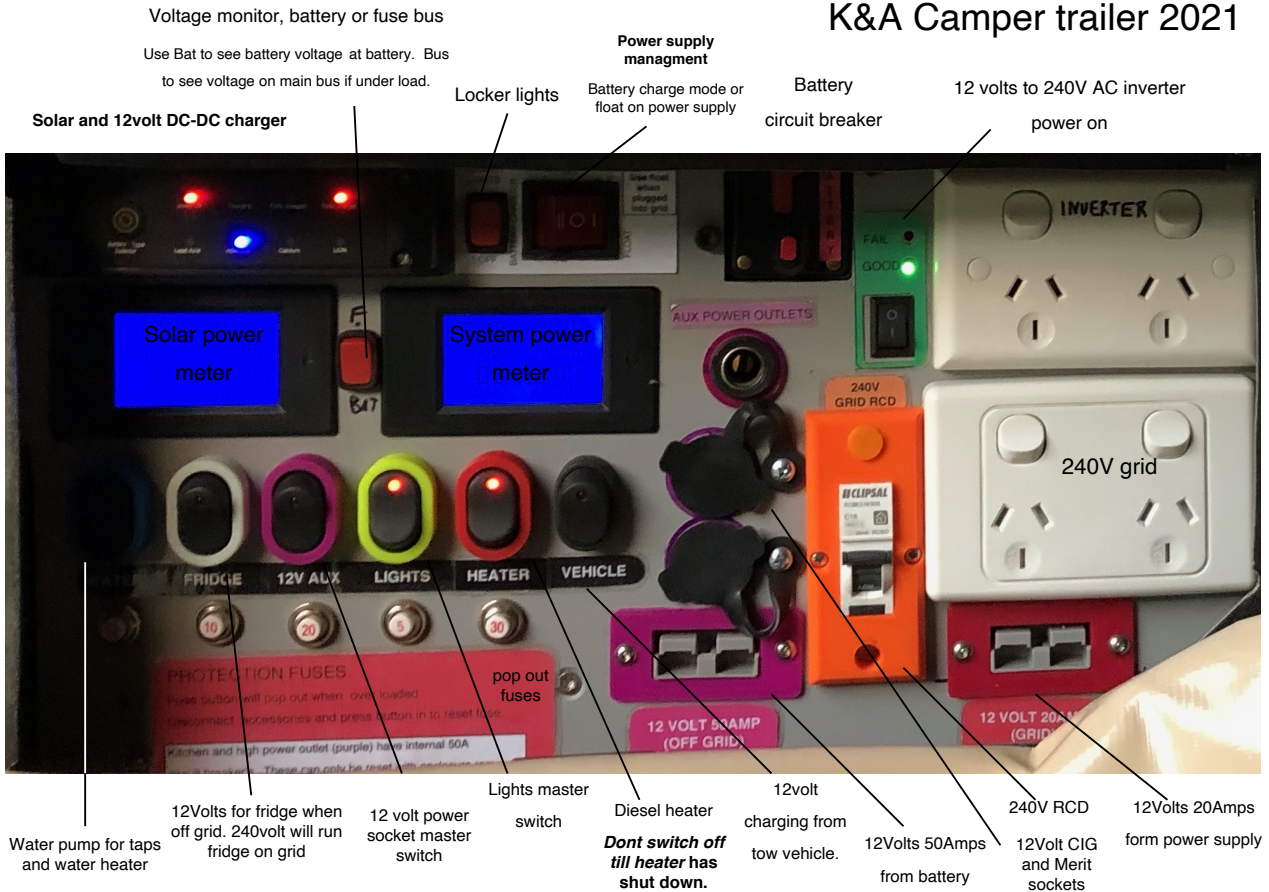


K&A Camper trailer 2021



Camper control panel

This is where power is controlled on the camper, starting from top left.

Solar and DC DC charger, this manages charging of the batteries using voltage from the inboard 12V power supply, solar and tow vehicle via the Anderson plug.

Locker lights, this is wired to the lights circuit, the tent side lockers have lights in them.

Power supply management switch, this selects how the inbuilt 240V to 12V 20A power supply is connected. The 12V power supply works when the camper is plugged into 240V. In battery charge mode the power supply is connected to the DC-DC charger. This will charge the battery. When at say a caravan part etc and 240V is available this switch is selected to float mode. Float mode will let the battery equalise with the power supply. What this means is once equal in voltage the power supply will do most of the work giving the battery a break, the battery is kept topped up. The centre position disconnects the power supply.

Battery circuit breaker, this is the main 150Amp fuse to the two sealed lead acid batteries. Press the red button to test and press the level in to reset.

Inverter Switch, this switches the 12V to 240V pure sine wave inverter. Plug into the double power point to use this power.

Solar power meter, this measures the voltage, current and total power made into the battery system via the DC-DC charger. The tool box also has a solar panel that will help the system.

Voltage Monitor Switch, This is to select where the voltage is measured, F for the switch board and Bat at the battery terminals. This was an experiment to determine voltage drop in the DC cabling system to the battery. **Leave it in F position.**

System Power meter, this measure battery voltage, current out of the battery and power used total

Merit socket, this is a type of DC power plug like a cigaret lighter socket but can carry more current reliably. Commonly used in camping fridges.

240V grid RCD, this is the main circuit breaker from the 240volt supply socket on the off side of the camper. This must be on (UP) to have 240volt supply to the camper. It is also a safety switch that will trip if there is an electrical fault.

240V power point, this is normal 240volts from the mains supply eg caravan park or home power point.

Water pump, power for the water pump. Switch this off if your not in attendance

Fridge, power on for the fridge sockets, A merit socket near the front of the fridge slide right and a cigaret socket at the rear of the fridge slide.

12V AUX, switches on 12volt accessories in the camper including the tent area, purple cigaret sockets and tool box.

Lights, switches one every light on the lights circuit including tent, lockers and payload area. The tent area has its own switch that is used when going to bed.

Heater, switches the diesel heater on. Its is very important the heater is not switch off using this switch till its has power down fully. **Read instructions about the diesel heater!!**

Vehicle, connects the tow vehicle 12volt system via the Anderson plug to the DC-DC charger, this charges the camper battery while driving and keeping the fridge going.

Circuit breakers, this pop out breakers are under the switch they protect. If the these pop out there was an over load. Make sure what every cause that to happen is isolated then press to reset.

12Volt 50Amp (off grid), this is a direct feed from the battery via a 50amp circuit breaker. This circuit breaker in under the annex pole floor to reset. This should never trip as 50A is a lot of current. Typical uses of the is a air compressor.

12Volt 20Amp (grid), this is a direct feed from the 240 to 12volt power supply built into the camper. This only works if the camper is connect to the grid (extension cord to caravan park).

USB lead, this is a USB extension cord that is tucked into the right hand side of the switch board. This always supplies 5 volt to charge devices.

Switch board night light, a light switch right of the power points is use to illuminated the switch board at night time. This light uses very little power and can be used as a night light in the tent area.