

Change your view in a campervan

# HOW TO GUIDE . . . .

## Tips on Installing Your PMS3 into a Campervan

### TOOLS REQUIRED:

- Set of Screwdrivers
- Voltmeter
- Jigsaw
- Drill
- 55mm Hollow Hole Cutter (for vent holes)

### COMPONENTS REQUIRED:

- Horizontal or Vertical PMS3
- 5m x 65 Strand 12v Cable (EL-WR-65R-5)
- 1m-5m x Artic Flex 240v Cable (EL-WR-44R-1)
- 2 x Air Vents (GS-VT-GY-Q2)
- 2 x In-line Fuse Holders (EL-FH-S)
- 2 x 20amp Mini Fuses

The PMS3 unit is a compact power management solution ideal for self-builders. It is termed a “Plug-in system” as most of the connections and wiring for the RCD/MCB and 240v battery charger have been factory fitted. Each PMS3 is bench tested at the factory. The PMS3 is perfect for campervans due to its space saving size. Other power management systems take up much more space as they have individual modular parts to the 240v charger, consumer unit and 12v fuse box. The PMS3 combines all of these facilities into one unit.

The PMS3 comes with wiring instructions and a comprehensive wiring diagram. **We recommend you read and understand the instructions prior to fitting.** However, when fitting into a campervan, and connecting the PMS3 to a 12v compressor fridge you may find the bullet points below helpful.



# TIPS

- 1) Locate your PMS3 in a position that is easy to access both in regard to wiring installation and end use of the front panel. Avoid extending wiring looms to appliances any longer than required.
- 2) Ensure there is adequate ventilation to the back of your PMS3, if the unit is being enclosed in a confined space use vents to allow for air movement over the fan. (50mm circular vents are ideal for this)
- 3) When connecting the PMS3 to the wiring looms that run to appliance it's much easier to have an excess 150mm of extra cable length on each cable connection as it enters the PMS3, this allows the PMS3 to be pulled forward out of its surround should any maintenance/checking be required after installation.
- 4) Though not obvious in the boxed instructions an earth cable is required from the (-) of the D/C block on the back of the PMS3 run to earth on the chassis of the van. This should be the same size and diameter as the cable run to the leisure battery from the PMS3. (We recommend a cable size of approx. 4-6mm cross section. 0.3mm, 65mm strand is suitable for this.
- 5) **Fridge connection- we get a lot of questions about this!** The wiring diagram shown in the boxed instructions is relevant for a 3 way fridge only and shouldn't be followed if you plan to install a 12v compressor fridge. If you do follow the wiring diagram that comes with the PMS3 you will find the fridge will only work when the engine is running.
- 6) **12v Compressor fridge connections.** There are two options for this;
  - The (+) cable of the fridge can be taken to AUX1 or AUX2, with the (-) cable that comes out of the back of the fridge run to earth on the van chassis or taken to the Earth block on the back of the PMS3.
  - Alternatively, the Fridge (+) cable can be taken directly to the leisure battery and fused separately with a 20 amp fuse, the (-) cable from the back of the fridge is run to earth on the van chassis or can also be taken back to the (-) of the leisure battery.
  - A cable size of 3-6mm cross section is recommended when wiring your fridge to avoid any voltage drop. Most compressor fridges have a low voltage cut out that will turn the fridge off when the voltage drops below 11.8 volts. We use 0.3mm, 44 strand cable, and sell this by the meter,
- 7) Make sure you have good earth connections. A loose earth connection can cause all sorts of problems and faults and can mean hours wasted, head scratching and searching for the cause of the appliances not working properly.
- 8) To connect the 240v socket to the PMS3 we use 2.5mm artic flex, make sure this is well protected if it runs through any holes or panels. Split conduit can be used to protect the run of cable.
- 9) As a side note, the split charge wiring loom often fitted with a leisure battery is run separately from main battery to leisure battery and does not interact with the PMS3.

**We highly recommend that the PMS3 is only installed by qualified persons or checked and signed off by a qualified electrician.**

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