INTRODUCTION

The 19 inch cabinet kit has been developed to streamline the installation of Victron hardware allowing for a fast, neat, compact and compliant installation.



MOUNTING RAILS

Mounting rails should be installed to suit the required layout. Due to variation in cabinets, the mounting holes may need to be drilled out to allow for more adjustment.





BATTERY MOUNTING SHELVES

Clip battery shelves into position using the punched out tabs. Some slight misalignment may occur due to variations in cabinet brands. Rails can be left loose until shelves are clipped in then tightened once everything is in position.



RECESS BRACKETS

Recess brackets can be installed to push the unit deeper into the cabinet allowing for a flush install with the batteries. The recess brackets have been made to be as universal as possible as distances vary from cabinet to cabinet. Cage nuts and socket head cap screws are supplied to ensure a tight fit.





RECESS BRACKET SPACING

Measure the spacing of brackets based on where the backing panel is to sit in its final location. Screw all offset brackets into position using the supplied cage nuts and socket head cap screws. Place cage nuts into the offset brackets ready for mounting of the backing panel.



MOUNTING OF BACKING PANEL

A return is built into the top of the backing panel. This allows a single person to hook the return over the top offset brackets so mounting screws can easily be installed without the need to hold the weight of the unit.



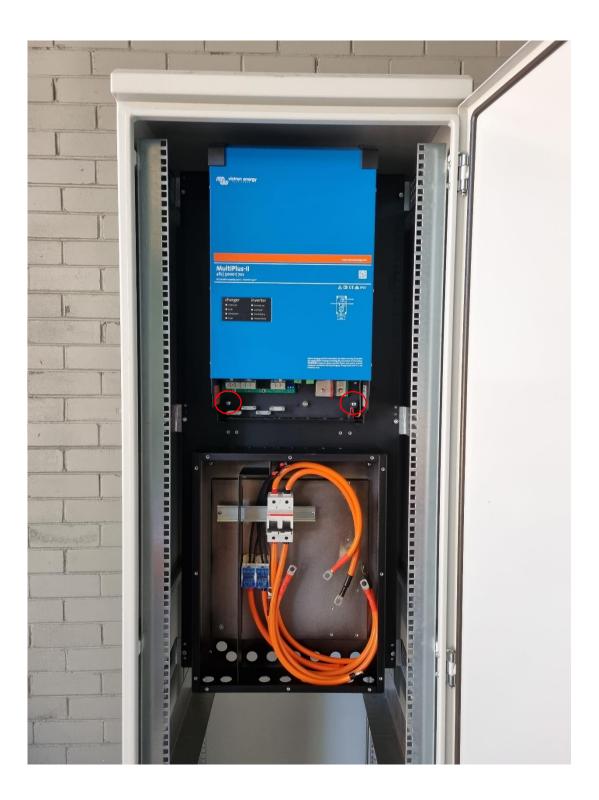
MOUNTING OF INVERTER

Mount the inverter mounting bracket to the backing plate using the supplied M5 x 16mm screws. The upper holes are for the Multiplus-II 5000. The lower holes are for the Multiplus-II 3000



MOUNTING OF INVERTER CONTINUED

Install inverter to mounting bracket and install the supplied M5 x 35 screws to fix the bottom of the inverter to the backing plate.



BATTERY MAIN SWITCH

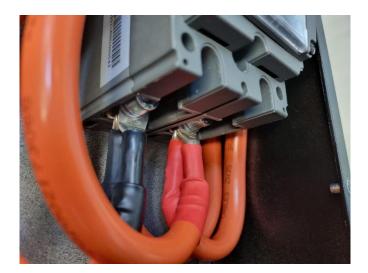
Using the supplied M4 socket head cap screws and washers, mount the MCCB to the gear tray.



DC CABLING

Terminate the supplied cabling to the inverter and MCCB. Lugs can be installed back to back on the underside of the MCCB.





BATTERY CABLING

Install battery cabling to the top of the MCCB





AC CABLING

Install circuit breakers to the ac section making sure segregation is kept. There are 3 x poles available for AC circuit breakers. Any additional switching can be done in a switchboard or loadcentre mounted external to the cabinet. An M6 earth screw is supplied for earthing inside the AC section.



PV cabling

Install suitable PV isolation devices into the DC section. Noark DC MCB's have been used in this case. There are 6 poles available for DC switching. Combiner blocks are supplied to gang together the PV strings. There may be cases where only the positive needs to be isolated such as DVC-B installations. This would allow up to 6 strings to be switched saving the need for external combiner boxes.



CABLE COVER

Install the supplied cable cover to the underside of the inverter using the supplied M4 x 12mm screws. The electrical segregation tabs shall line up to ensure correct segregation.

There are 2 cover options. One for the Multiplus-II 3000 and one for the Multiplus-II 5000



INVERTER COVER SCREWS

Socket head cap screws are supplied to replace the standard screws, allowing the use of an Allen key in the confined space.



BLANKING UNUSED HOLES

25MM push in blanks are supplied to blank off any unused holes.



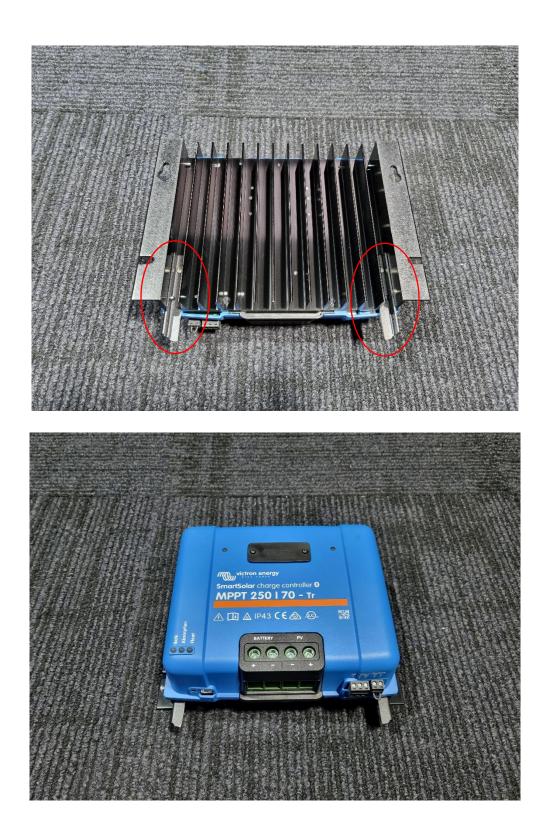
WIRE GUARD

To install a standard Victron wire guard the Victron supplied bracket needs to be cut on the lines marked. An angle grinder or hack saw can be used for this purpose with the sharp edged filed down.



WIRE GUARD CONTINUED

Install the bracket pieces to the back of the MPPT using the Victron supplied screws



MPPT MOUNTING

Mount the MPPT to the front panel using the supplied M6 x 16 screws and star washers. Mountings for the 100A down to 35A MPPT's are supplied.



FRONT PANEL

Mount the front panel to the kit using the M4 x 12 screws. Pole fillers may need to be removed depending on the number of breakers installed.

Terminate the MPPT cabling to the MPPT



FINISH OFF

Installation is now finished. Labelling, commissioning and testing can be completed

