



IMPORTANT INFORMATION!
 The SmartBatteryProtect must be programmed for Li-Ion mode-C and 12 Volt either through programming on the device itself or with a Bluetooth enabled smartphone or tablet. Connect the load or charge disconnect output of the VE Bus to Remote II terminal.

IMPORTANT INFORMATION!
 Be advised that the CAN Bus cable between the Lynx Smart BMS and the WS500 needs to be a **CROSS OVER** cable !!

IMPORTANT INFORMATION!
 The WS500 needs to be configured for use with the Victron Lynx Smart BMS and Victron Li batteries. Download the configuration utility guide, the latest Lynx Smart BMS configuration as well as the latest WS500 firmware from the website and update it!

SMART BATTERY PROTECT 220
 Loads 1 till 8
 SBP 220 IN

The GX Touch 50 and the CERBO GX are enlarged visible in this drawing.

IMPORTANT INFORMATION!
 Victron Smart Lithium Batteries charge & discharge controlled by BMS & CERBO

In systems with Victron Smart Lithium Batteries, it's important that all charging devices as well as loads are controlled by the BMS. Here is how that is taken care of in this system:

- 1- MultiPlus inverter/charger: digitally via the GX Device, DVCC feature.
- 2- Solar charger: digitally via the GX Device, DVCC feature.
- 3- WS500 ATC: wire control: using the positive wire from the ATC contact of the BMS also running through its relay contacts and further towards the WS500 regulator "Feature In" connection forcing the regulator with alternator to stop charging completely when ATC power is switched off by the BMS.
- 4- DC Loads: via SmartBattery Protect 220.
- 5- AC Loads: controlled together with the MultiPlus Inverter/Charger.

IMPORTANT INFORMATION!
 Recommended AC Out-1 cable/breaker size MultiPlus
 With Power assist the MultiPlus can add 3kW to the output load when needed. Together with the adjustable 90A input this all adds up to the max sum of input and output current of 50-134kVA. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

IMPORTANT INFORMATION!
 Recommended AC Out-2 cable/breaker size MultiPlus
 AC Out-2 only is available when power is present on AC IN. During battery operation it will be disconnected. AC Out-2 supports up to 16A. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

IMPORTANT INFORMATION!
 Recommended DC cable/fuse size MultiPlus
 6 x m cable length: 4 x 600mm, 8-10 m cable length: 4 x 700mm. When used in closed conduits, cable size should double. Cable length stands for the distance between the battery and the MultiPlus connections !!! Recommendations are without other loads in the system and these also should be taken into account for proper main battery, main fuse & main switch cables !!! Fuse size should be 400A.

IMPORTANT INFORMATION!
 Recommended AC IN cable/breaker size MultiPlus
 AC IN must be protected by a circuit breaker rated at 50A max or less. This depends heavily on the size of the connected power source. The input current must be adjusted to fit the size of the connected power source. The breaker and cable size for AC IN should be adjusted accordingly.

WARNING
 230 VOLT AC IS EXTREMELY HAZARDOUS !!! DO NOT TOUCH ANY LIVE WIRED PARTS OF THE INSTALLATION !!! WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTRON DEALER !!!

- < 230V Switched load-1
- < 230V Switched load-2
- < 230V No Break load-1
- < 230V No Break load-2

IMPORTANT INFORMATION!
 The primary Case ground connection from a inverter charger like a Multi or Quattro, must be connected to the Central Negative Busbar of the DC system. Size of this cable must be identical to connected DC negative.

IMPORTANT INFORMATION!
 When operating in inverter mode, the Neutral output of a inverter/charger must be connected to ground to guarantee proper functioning of a GFCI or RCD device. In case of a split phase supply the Neutral also must be grounded.

KEEP NEGATIVE BATTERY CABLES ALL AS SHORT AS POSSIBLE AND ALL AT THE SAME LENGTH!

KEEP POSITIVE BATTERY CABLES ALL AS SHORT AS POSSIBLE AND ALL AT THE SAME LENGTH!

IMPORTANT INFORMATION!
 Attention: correct connection of LYNX SMART BMS
 The SBP will only work easily together with an alternator regulator whose primary V+ DC or up has been installed to support this. When select primary and with the latest firmware, one can select alternator ATC control Mode in the menu.

KEEP POSITIVE BATTERY CABLES ALL AS SHORT AS POSSIBLE AND ALL AT THE SAME LENGTH!

← Victron to Wakespeed Cross over cable !

CERBO Power+
 CERBO VE Can
 WS500 VE Can
 SBP H contact
 WS500 ATC +
 BTV CABLE
 BTV CABLE

BMS ON/OFF
 CERBO
 SBP
 WS500

For proper Dip switch configuration settings of the Lynx Distributors read the manual

LYNX DISTRIBUTORS WITH LYNX SMART BMS

LYNX SMART BMS

LYNX DISTRIBUTOR

Dip switch position-B

Dip switch position-A

Lynx Smart BMS Enlarged connections

Distributor

Distributor

CERBO Power+
 CERBO VE Can
 WS500 VE Can
 SBP H contact
 WS500 ATC +
 BTV CABLE
 BTV CABLE

BMS ON/OFF
 CERBO
 SBP
 WS500

Blue Smart charger

