

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.

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-II inverter/charger: digitally via the GX Device, DVCC feature.
2. Solar charger: digitally via the GX Device, DVCC feature.
3. Orion Tr ATC with control: using the switched positive wire from the engine ignition through the ATC contacts on the BMS and from there towards each Orion Tr.
4. DC Loads: via SmartBattery Protect 220.
5. AC Loads: controlled together with the MultiPlus-II Inverter/Charger.

There are several configuration options possible. Read the Orion-Tr manual carefully and choose the one fitting your installation.

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

IMPORTANT INFORMATION!
Recommended AC Out-1 cable/breaker size MultiPlus-II
With Power assist the MultiPlus-II can add 3KW to the output load when needed. Together with the adjustable 50A input this all adds up to the max sum of input and output current of 32A+50A. 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 In cable/breaker size MultiPlus-II
AC In must be protected by a circuit breaker rated at 32A 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.

IMPORTANT INFORMATION!
Recommended DC cable/fuse size MultiPlus-II
0.5 m cable length: 4 x 50SQmm, 5.10 m cable length: 4 x 70SQmm. When used in closed conduits, cable size should double. Cable length stands for the distance between the battery and the MultiPlus-II 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.

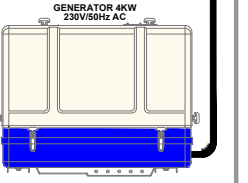
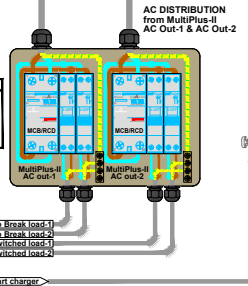
IMPORTANT INFORMATION!
The primary Case ground connection from an inverter charger like a Multi or a Quattro, must be connected to the Central Negative Busbar of the DC system. Size of this cable must be identical to connected DC negative.

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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.

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



Lynx Smart BMS Enlarged connections

