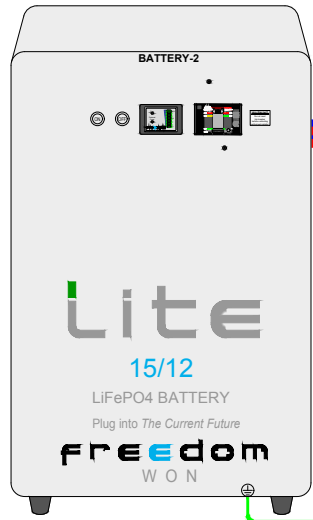
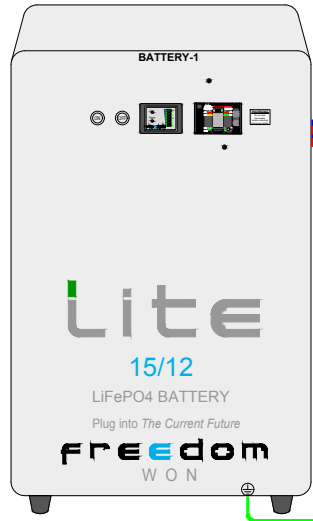
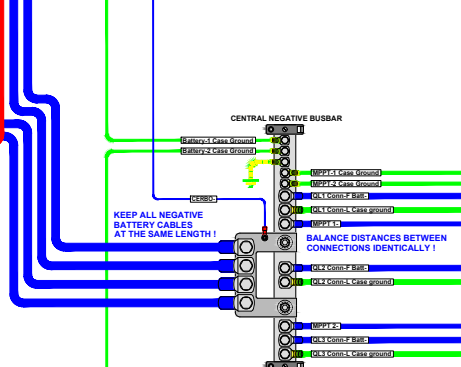
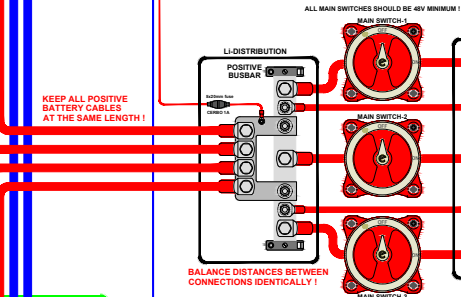


2 x Freedom Lite 15/12 batteries  
3 pole 160 Amp breaker build inside each battery

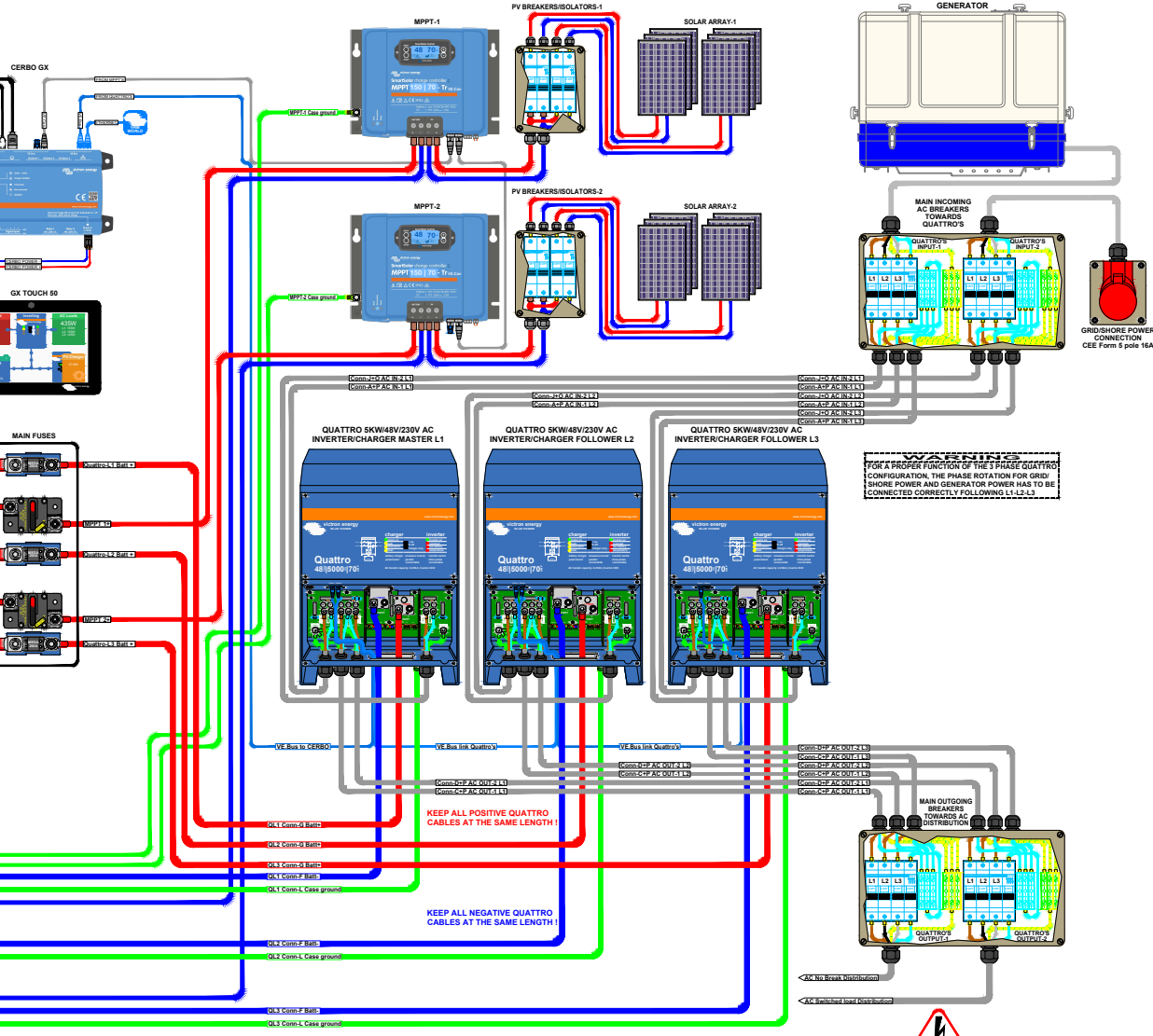


**IMPORTANT INFORMATION!**  
VEConfigure default settings for Freedom Lite 15/12  
It is important to set default values for the Freedom Lite 15/12 batteries with VEConfigure software in case communication with the batteries is interrupted. All LiFePO4 settings for this are available in the Victron Freedom Lite user manual. Confirm the Boost Voltage after completing the installation of any Victron equipment and if necessary reset the float voltage to 13.6V.  
Low Shut-Down: 47.20V  
Low Return: 62.50V  
Low Pre-Alarm: 54.50V  
Absorption voltage: 58.80V  
Float voltage: 58.80V  
Absorption time: 1 Hr

**IMPORTANT INFORMATION!**  
Labels information from the manufacturers  
Always check with Freedom Wire and Victron Energy about the latest available firmware versions and manual updates during commissioning. It is necessary to make such simple manual updates. When in doubt, always contact Freedom Wire and Victron Energy for the latest available information.



**IMPORTANT INFORMATION!**  
When operating in inverter mode, the Neutral output of an 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.  
The primary Case ground connection from a 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.



**IMPORTANT INFORMATION!**  
The 3 phase setup programming has to be completed with Victron's VE Bus Guard Configure before the BESS assistant is installed into each Quattro.  
The BESS assistant has to be added to each Quattro with Victron's VEConfigure after completion of the 3 phase setup.

**IMPORTANT INFORMATION!**  
With Power Assist each Quattro can add 50% to the total rated per phase without needed. Together with the adjustable 100A input this all adds up to the total rated of input and output current of 100+2+12A per phase. 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!**  
AC Out-2 only is available when power is present on AC In-1 or AC In-2.  
AC Out-2 exports up to 50A per phase.  
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 conductor size 400 Quattros  
5-6 m cable length: 2 x 750Dmm 5-10 m cable length: 2 x 750Dmm. When used in closed cable trays, cable size should double. DC cable length stands for the distance between the battery connections and the Quattro 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!!!  
Cable size should be 200A per Quattro.

**IMPORTANT INFORMATION!**  
Recommended AC conductor size 400 Quattros  
AC In-1 & AC In-2 must be protected by a circuit breaker rated at 100A per phase or less. This depends heavily on the size of the connected power source. The input currents must be adjusted to fit the breaker and cable size for both AC In-1 & AC In-2 should be adjusted accordingly.

**WARNING!**  
220VDC VOLT IS EXTREMELY HAZARDOUS DO NOT TOUCH UNCOVERED PARTS OF THE INSTALLATION!!! WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTRON DEALER!!!

Drawing BJE-283A Rev-A