GX TOUCH 50

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

CERBO GX

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 Lithium NG Batteries charge & discharge controlled by BMS & GX Device

In systems with Victron Lithium NG Batteries, it's important that all charging devices as well as loads are controlled by the BMS and GX Device. 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 - Orion XS: digitally via the GX Device DVCC feature, and one can use the switched positive wire from the engine ignition towards the H contact of the Orion XS to stop charging when the engine is off (if needed).
4 - DC Loads: via SmartBattery Protect 220 and ATD signal from the BMS.
5 - AC Loads: controlled together with the MultiPlus Inverter/Charger.

SMART MPPT

PV BREAKER/ISOLATOR

SOLAR ARRAY

ORION-XS 12/12-50A

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

Main Fuse Orion-XS Input as close to Main Switch-3 as possible !

SMART BATTERY PROTECT 220 (SBP)

MAIN SWITCH-2

Dual Circuit

MAIN SWITCH-1

Single Circuit Dual Output

NEGATIVE BUSBAR

POSITIVE BUSBAR

POSITIVE BUSBAR

Drawing BJE-286A Rev-B

ALTERNATOR

STARTER-MOTOR

MAIN SWITCH-3

Starter Battery

Blue Smart Charger 12V-5A

LYNX DISTRIBUTOR M10

CLASS-T POWER IN M10

LYNX SMART BMS NG

For proper Dip switch configuration settings of the Lynx Distributor read the manual.

2 x Lithium12.8V-200Ah NG-LifePO4

MultiPlus / 3kVA /12V/230V-50Hz AC INVERTER/CHARGER

SHORE POWER CONNECTION 230V/50Hz AC

MAIN INCOMING AC BREAKERS TOWARDS MultiPlus

AC DISTRIBUTION from MultiPlus AC Out-1 & AC Out-2

GENERATOR 4KW 230V/50Hz AC

Lynx Smart BMS NG Enlarged connections

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 !

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.

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 should be one size smaller compared to its total connected DC negatives per device (ABYC).

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 50A input this all adds up to the max sum of input and output current of 50+13=63A. 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 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.

IMPORTANT INFORMATION !

Recommended DC cable/fuse size MultiPlus

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 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.

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 !!!