NFIGURATION OF WS500/WS500-Pro TANK LEVEL SENSORS V BREAKER/ISOLATOR EXTRA 24V HIGH POWER ALTERNATOR SMART MPPT SOLAR ARRAY WS 500 Regulator MPPT 100 | 50 8 GX TOUCH 70 24V-110A VE.Direct MPPT IMPORTANT INFORMATION ! The SmartBatteryProtects must be programmed for Li-lon mode-C and 24 Volt either through programming on the device itself or with a Bluetooth enabled smartphone or tablet. <u>^</u>An&(€ 1243 & CANbus CANbus SMART BATTERY PROTECT-1/220 The Cerbo tank level ports can be configured to work with eith European (0-180 Ohm), or US tank senders (240-30 Ohm). Or one can configure a custom Ohm resistance range between BATTERY PV 0 Or one can configure a custom Ohm resistance range betw Ohm and 300 Ohm. This requires firmware v2.80 or higher. Be advised that the CAN Bus cable between the Lynx Smart BMS Ni and WS500-Pro need to be a CAN CROSS OVER cable. Reference "Wakespeed Victron GX Setup guide at www.wakespeed.com/learn/ For proper Dip switch read the manual! LYNX DISTRIBUTORS VE.Can terminator WITH LYNX SMART BMS NEGATIVE BUSBAR SMART BATTERY PROTECT-2/220 STANDARD 12V ALTERNATOR MAIN SWITCH-ingle Circuit Charger 12V-5A IGNITION 0 The GX Touch 70 and the CERBO GX FUSE XX AMP. FUSE XX AMP. 30 (15) Engine harness Alternator Fuse STARTER-MOTOR Load 5 -0 Starter Battery Simple Control of CERBO GX ALTERNATOR 12V-120A 12V-125Ah Alternator -Load 6 -SBP-2 220 IN+ oad 7 -IMPORTANT INFORMATION ! Load 9 -Victron Lithium NG Batteries charge & discharge controlled by BMS NG & CERBO Victron Lithium NG Batteries charge & discharge controlled by BMS NG & CERB(
In systems with Victron Lithium NG Batteries, it's important that all charging
devices as well as loads are controlled by the Lynx Smart BMS NG and also
in parallel configuration. Here is how that is taken care of in this system:
1 - MultiPlus Inverter/charger: digitally via the GX Device, DVCC feature.
2 - SmartSolar charge controllers: digitally via the GX Device, DVCC feature.
3 - WS500/WS500 Pro alternator regulators: digitally via CAN connecting to
the Lynx Smart BMS NG.
4 - WS500/WS500 Pro alternator regulators: Optionally connecting the ATC
wire to the Wakespeed "Feature In" wire to enable a get home capability
in case of a CAN bus failure. See the Wakespeed Application selecting
either: Lynx NG BMS or Lynx NG BMS (Simple) CAN Bus Only.
5 - DC Loads: via ATD power towards SmartBattery Protect 220 one & two.
6 - AC Loads: controlled together with the MultiPlus Inverter/Charger. Load 10 -MultiPlus Case Gr. 0 0 [MPPT & Spare MAIN SWITCH-1 POSITIVE MultiPlus Batt -MultiPlus Batt + MEGA (O) Load 1 + MS-1 Common READ ME FIRST! MultiPlus Batt -Wakespeed now supports 2 Victron configuration setups. (O): MESA: (O) Load 2 + With CAN Bus only called Simple.
 With a build in Get-home-mode capability. (O) Setup - 2 needs CAN Bus and the extra White Wire comin from the Lynx Smart BMS NG ATC (Allow To Charge) Load 3 + MultiPlus Batt through its relay to connect to the Feature In wire of the WS500/500-Pro. See detailed info in this drawing. MEGA (O) MultiPlus Batt -Read all about this in the Victron Lynx configuration guid from within the App on the battery Tab. MEGA: When adding this extra battery and when extra loads are connected to the Distributors, update MultiPlus 5kVA/24V/230V AC INVERTER/CHARGER the Lynx Smart BMS NG to the 1000A model. (O): MESA: (O) WARNING $\langle \bigcirc \rangle$ $\langle \bigcirc \rangle$ (C) 230 Volt AC is extremely HAZARDOUS! Do not touch any LIVE WIRED parts of the installation. When in doubt, always consult your Victron dealer for advice! Alternator regulator controlled by Can Bus/ATC MEGA: MultiPlus AC IN AC DISTRIBUTION TOWARDS MultiPlus AC In MultiPlus AC OUT-1 O MESA MultiPlus AC OUT-2 AC DISTRIBUTION FROM MultiPlus AC Out-1 & AC Out-2 MEGA: POSITIVE BUSBAR **KEEP POSITIVE BATTERY** CABLES ALL AS SHORT AS POSSIBLE AND ALL AT THE 0000 Lithium Drawing BJE-359A Rev-A KEEP NEGATIVE BATTERY CABLES ALL AS SHORT AS POSSIBLE AND ALL AT THE KEEP NEGATIVE MultiPlus CABLES ALL AS SHORT AS KEEP POSITIVE MultiPlus CABLES ALL AS SHORT AS BATTERY-1 -MultiPlus AC OUT-1 POSSIBLE AND ALL AT THE SAME LENGTH! POSSIBLE AND ALL AT THE SAME LENGTH! MultiPlus AC OUT-2 Blue Smart charger MultiPlus Batt -Conn-F Batt-MultiPlus Batt -Conn-F Batt-IMPORTANT INFORMATION ! IMPORTANT INFORMATION! IMPORTANT INFORMATION! Recommended AC Out-1 cable/breaker size MultiPlus commended AC In cable/breaker size MultiPlus 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. With Power assist the MultiPlus can add 5KW to the output load when needed. Together with the adjustable 100A input this all adds up to the max sum of input and output current of 100+21=121A. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly. AC in must be protected by a circuit breaker rated at 100A 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 accordinally. 3 x Lithium 25.6V-200Ah BTV CABLE **NG LiFePO4 Batteries** BTV CABLE IMPORTANT INFORMATION!
Recommended AC Out-2 cable/breaker size MultiPlus IMPORTANT INFORMATION!
Recommended DC cable/fuse size MultiPlus IMPORTANT INFORMATION! ON/OFF The primary Case ground connection from a inverter charger like a MultiPlus, must be connected to the Central Negative Busbar of the DC system. Size of this cable must be identical to connected DC negative. Recommended DC cableffuse size MultiPlus 0-5m cable length: 4 x 50SQmm 5-10m cable length: 4 x 95SQmm. When used in closed conduits, cable size should double. Cable length stands for the distance between the battery and the MultiPlus. 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 1 x 400A. Recommended AC Out-Z cable/breaker size MultiPli 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 50A. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly. CERBO □ 1A □ SBP 0.5A WS500 0.5A

Lynx Smart BMS NG Enlarged connections