Victron Energy and BlueNova LiFePo4 Batteries

The BlueNova (www.bluenova.co.za) range of Lithium Iron Phosphate batteries is compatible with Victron products in various systems.

1.1 Product and System Compatibility

Victron + BlueNova can be used for the following systems

1. Off Grid
2. Backup
3. Energy Storage

1.2 Colour Control GX is required

When used with BlueNova Batteries the minimum firmware version for the Colour Control is v2.02. It is recommended to always use the latest Firmware version for the Colour Control.

1.3 All 48V Multi's, MultiPlus, Multigrids and Quattros are compatible

When the BlueNova battery is installed in a Victron ESS installation, which is the best solution for Energy Storage Systems, there is no need for additional control wiring. For other systems, such as off-grid systems and backup systems, the internal BMS controls will control deep discharge and overcharge conditions. Please contact BlueNova for more information. For more Victron-related settings see the VEConfigure section below

1.4 48V BlueSolar MPPT Chargers are compatible

The Orion BMS BlueNova Batteries can control the VE.Direct MPPT MPPTs with a VE.Direct port. These are controlled via the Color Control GX. Make sure the CCGX runs v2.02 or later, and also update the MPPTs to the latest available version. To test operation, try disconnecting the CCGX from the MPPT. After a time-out, the MPPT will stop charging and flash an error code on its LEDs. The error code is error #67: no BMS.

2. BlueNova product range

The BlueNova range is supplied with a BMS as standard for the 4kWh and larger batteries. See the BlueNova product page for more details on the various options.

3. Wiring of Can.Bus cable between BlueNova and CCGX.



An RJ45 cable is supplied with each BlueNova battery.

Plug the CCGX side of that cable into one of the VE.Can sockets on the back of the CCGX. Plug the other end into the battery. Then, plug a VE.Can terminator in the other VE.Can socket on the CCGX. Two VE.Can terminators are included with the package of the CCGX as an accessory – only one is used. Keep the other one as a spare. Without properly connecting this cable, the battery will stop charging/discharging after several minutes. Also, the battery will not show up on the display of the CCGX.

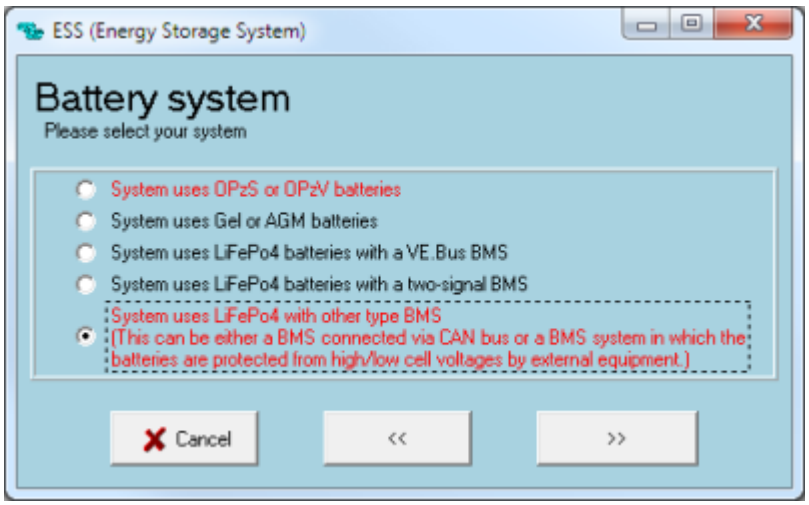
4. VEConfigure settings

4.1 Charge parameters

Parameter	Setting
Battery type	Lithium
Charge curve	Fixed
Absorption voltage	56.2 V
Float voltage	55.6 V
Absorption time	1 Hr

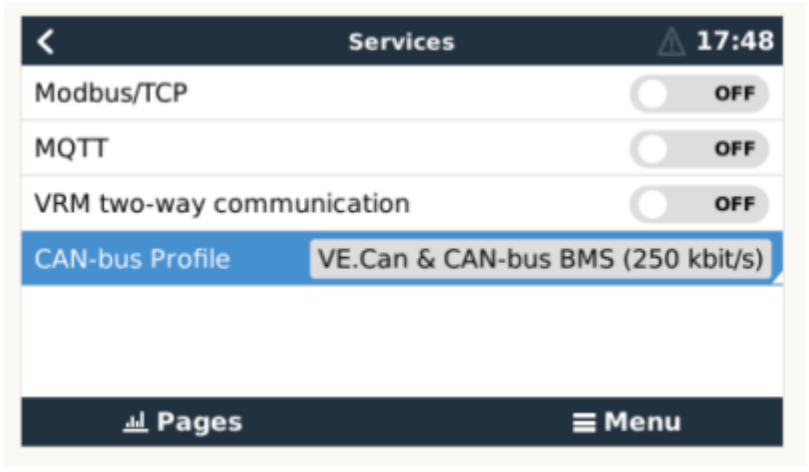
4.2 ESS Assistant

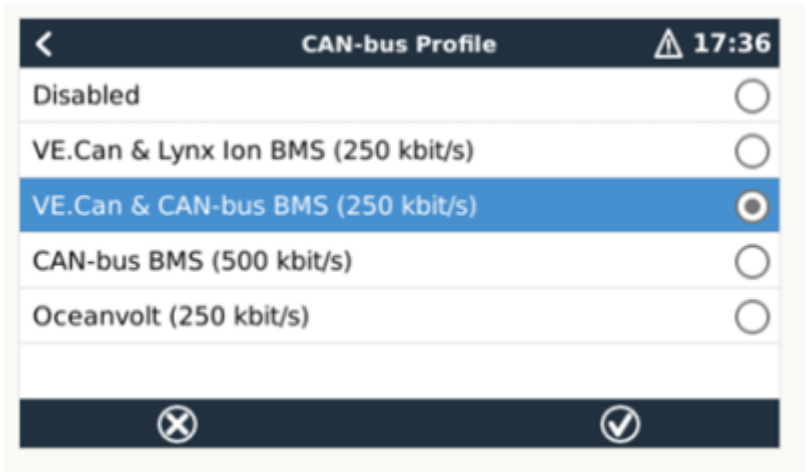
Select the fourth battery type:



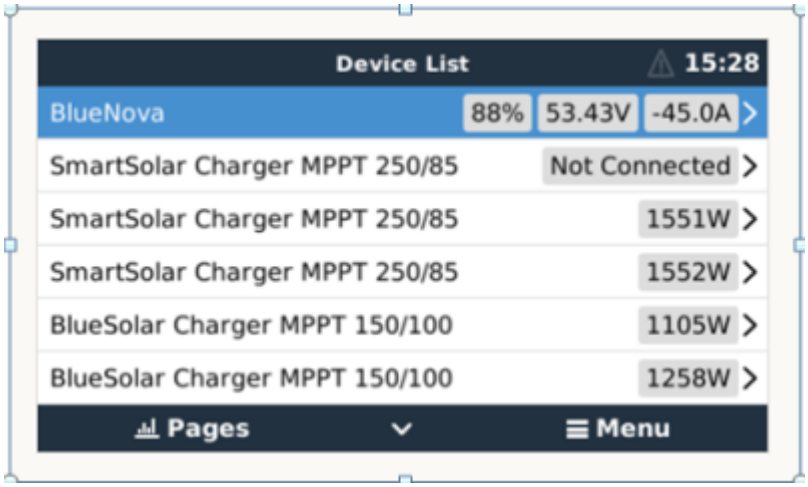
5. Color Control GX Configuration

Select the *VE.Can & CAN-bus BMS (250 kbaud)* CAN-profile in the CCGX. Menu path: *Settings* → *Services* → *CAN-profile*. Note that this changes the function of a VE.Can port: it is not possible to connect both VE.Can products and a Bluenova battery together.





After properly wiring and setting up, the BlueNova will be visible as a battery in the device list:



If you have multiple batteries, a single entry will show up, which represents all batteries. The parameters option within the battery page shows the actual battery charge and discharge limits.

6. Configure MPPT

1. Disable Autodetect voltage
2. Set Battery voltage to 48V.

It is recommended to make these settings using the VictronConnect App and Bluetooth.

From:
https://www.victronenergy.com/live/ - **Victron Energy**

Permanent link:
https://www.victronenergy.com/live/battery_compatibility:bluenova?rev=1548063523

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