

# USER'S MANUAL

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Dongle Connection

## VOLTHIUM MONITOR - BLUETOOTH APPLICATION

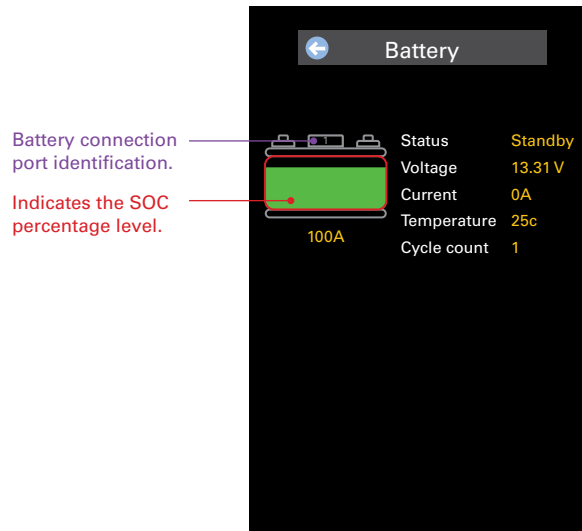
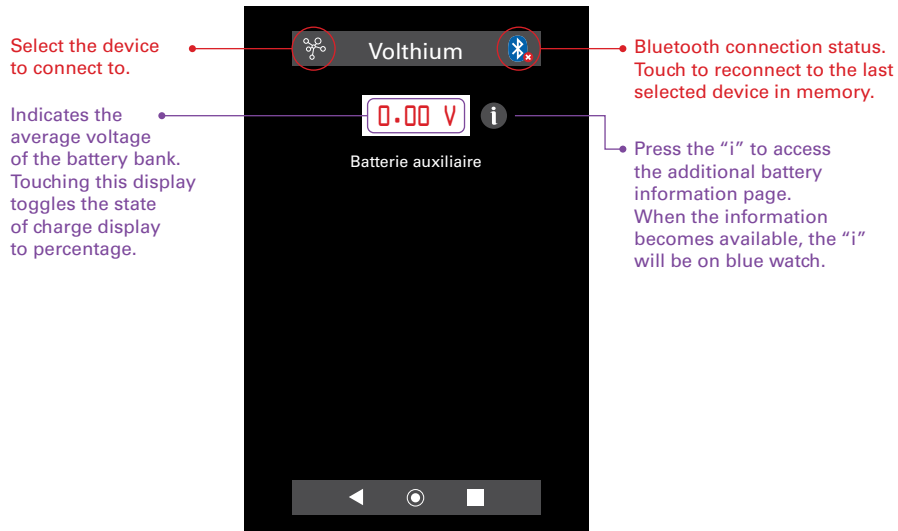
**Volthium Monitor** is the new generation application for your Volthium communication modules. Entirely made in Montréal (Québec), Canada. Download the application here:

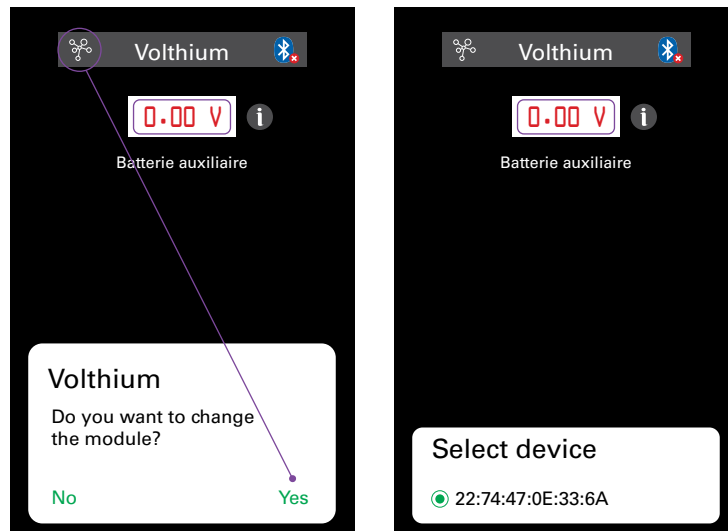


(available soon)



## DESCRIPTION OF THE FEATURES AND CONNECTION





## DESCRIPTION OF THE DIFFERENT MODULES

### 1. Bluetooth dongle:

Has a total of 3x RJ45 female ports and a DC input port:

- The DC port (green) is used for the power supply. The accepted voltage is in the range of 10V to 59V.
- The RJ45 port, on the same side as the DC connector, is used in case only one battery is to be monitored with the Bluetooth module.  
Do not connect a battery to this port if the Bluetooth module is used with the "Communication HUB" module.
- Series of 2 RJ45 ports (Daisy-Chain CAN)
  - They are used to interconnect Volthium boxes on the CAN network.  
For example; The "Communication HUB" box, which would be used to connect a battery bank (energy bank).
  - Could also be used to connect the "Closing Loop", which is a small black RJ45 connector.

### 2. Communication HUB:

Has a total of 6 RJ45 female ports:

- Series of 4x RJ45 female ports on one side:
  - For battery reading only.
- - Series of 2 RJ45 ports (Daisy-Chain CAN)
  - They are used to interconnect Volthium boxes on the CAN network
  - For example; The "Bluetooth Dongle" box, or the "Power Supply" box.
  - They are also used to connect to an external device on the CAN bus, such as Victron VE.CAN
  - Used to connect the "Closing Loop", which is a small black RJ45 connector.

### 3. Power Supply Module

Has a total of 2x RJ45 female ports and a DC input port.

- The DC port is used for the power supply. The accepted voltage is in the range of 10V to 59V.
- Series of 2 RJ45 ports (Daisy-Chain CAN)
  - They are used to interconnect Volthium boxes on the CAN network  
For example; The "Communication HUB" box, or the "Bluetooth Dongle" box.
  - Use to connect the "Closing Loop", which is a small black RJ45 connector.

## GENERAL NOTE

We call a "Network", the set of Volthium modules interconnected between them.

In a network of Volthium modules, a Closing Loop terminator RJ45 must be installed in one of the CAN ports ("Daisy-Chain"). The selection of the port is not important, in fact any CAN port of any module can be used to receive the RJ45 Closing Loop Terminator.

## EXAMPLE OF BLUETOOTH CONNECTION: 2X VOLTHIUM BATTERIES 12V100AH.

You will need to order the combo: Bluetooth Module & HUB.

In addition, you will need to order 1 XLR-RJ45 cable (male) in EXTRA on the website.

In the delivery you will get:

1. Bluetooth dongle module, including
  - Bluetooth module
  - DC cable
  - 1x 6-inch flat RJ45 cable
  - 1x XLR - RJ45 male cable
2. Communication HUB module
  - HUB Module
  - 1x 6-inch flat RJ45 cable
  - RJ45 VE.CAN 6 feet cable
  - Closing Loop terminator

## BLUETOOTH CONNECTION: 2X VOLTHIUM 12V100AH BATTERIES

### Instructions

1. Connect the 2 batteries, from their XLR connector to the HUB module, for each battery. Make sure to plug them into ports 1-2 of the HUB module.
2. Interconnect, via the CAN Daisy-CHAIN port, the HUB module box to the CAN Daisy-CHAIN port of the Bluetooth module using the flat black RJ45 cable.
3. Connect the closing loop terminator to one of the CAN ports (this can be on the HUB module, or on the Bluetooth module).
4. Connect the power supply with the DC cable from the batteries to the Bluetooth module.
5. Download the application for your mobile: **Volthium Monitor**

## BLUETOOTH CONNECTION: 1X VOLTHIUM BATTERY 12V 200AH YELLOW

### Instructions

1. Connect the battery via its RJ45 port (any of the 2, not important) to the HUB module using a standard RJ45 cable (you can use the flat black 6" cable provided with the Bluetooth module).
2. Connect the power supply with the DC cable from the batteries to the Bluetooth module.
3. Download the application for your mobile:

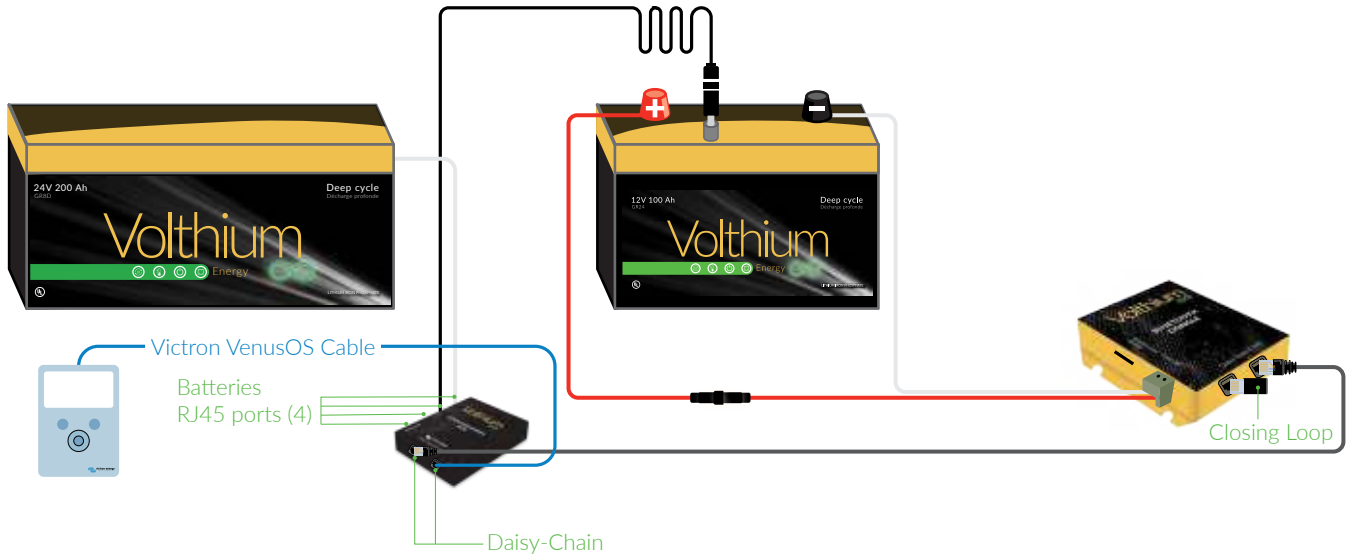


## BLUETOOTH CONNECTION + VICTRON: 2X VOLTHIUM 12V100AH BATTERIES.

### Instructions

1. Connect the 2 batteries from their XLR connector to the HUB module using the XLR-RJ45 cable for each battery. Make sure to plug them into ports 1-2 of the HUB module.
2. Interconnect, via the CAN Daisy-CHAIN port, the HUB module box to the CAN Daisy-CHAIN port of the Bluetooth module using the flat black RJ45 cable.
3. Connect the closing loop terminator to one of the CAN ports (this can be on the HUB module, or on the Bluetooth module).
4. Connect the power supply with the DC cable from the batteries to the Bluetooth module.
5. Use the 6' RJ45 CAN cable to connect one of the CAN ports, either from the Bluetooth box or from the HUB box, to the BMS-CAN (or VE.CAN port set to 500kb/s) of your Victron hardware.
  - Also make sure to close the victron CAN bus circuit with the blue RJ45 connector provided by Victron.
  - Note that the 6 foot RJ45 CAN flat cable has an identification. It just works in the direction expressed by the identification.
6. Download the application for your mobile:
  - **Volthium Monitor**

## DATA SHOWN IN VENUSOS



Device List		16:45	
HUB-RS485	99%	13.03V	16.4A >
Inverter-12V3000W	Inverting		>
SmartSolar Charger MPPT 75/15	56W		>
SmartSolar MPPT VE.Can 250/85 rev2	564W		>
Notifications	>		
Settings	>		
Menu			

victron energy

Be sure to set the CAN port in VenusOS to "BMS-CAN" 500kb/s