

# 1



## Battery safety warnings



- Working in the vicinity of a lead acid battery is dangerous. Batteries can generate explosive gases during operation. Never smoke or allow a spark or flame in the vicinity of a battery. Provide sufficient ventilation around the battery.
- Wear eye and clothing protection. Avoid touching eyes while working near batteries. Wash your hands when done.
- If battery acid contacts skin or clothing, wash them immediately with soap and water. If acid enters an eye, immediately flood the eye with running cold water for at least 15 minutes and get medical attention immediately.
- Be careful when using metal tools in the vicinity of batteries. Dropping a metal tool onto a battery might cause a short circuit and possibly an explosion.
- Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a battery. A battery can produce a short circuit current high enough to melt objects such as rings, causing severe burns.

# 2

## Introduction

- SmartShunt
- Two power cables
- The full manual is available online



SmartShunt manual:

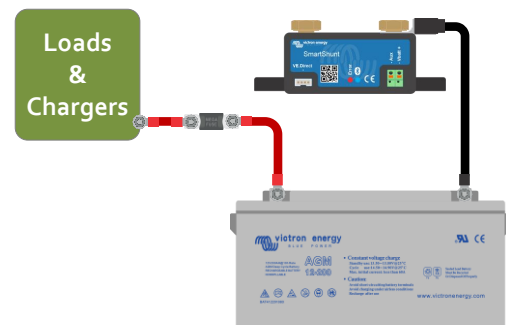


[www.victronenergy.com.au/battery-monitors/smart-battery-shunt](http://www.victronenergy.com.au/battery-monitors/smart-battery-shunt)

# 3

## Connect battery negative

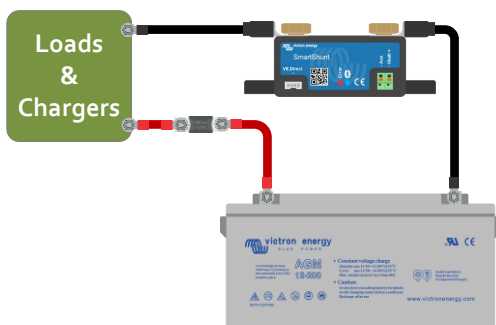
- Connect the negative battery terminal to the SmartShunt BATTERY MINUS terminal



# 4

## Connect DC load negative

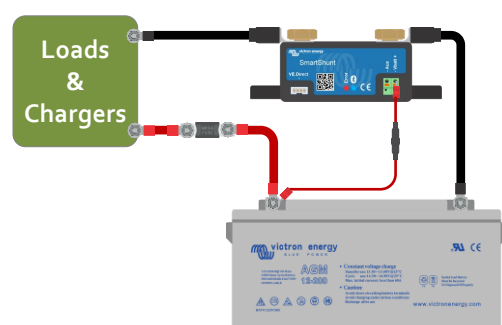
- Connect the negative DC electrical system terminal to the SmartShunt SYSTEM MINUS terminal



# 5

## Connect power cable

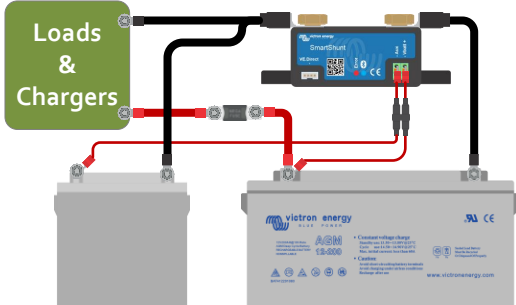
- Connect the power cable between the positive battery terminal and the SmartShunt Vbatt+ terminal



### 6

#### Monitoring voltage of a second battery

- Connect the power cable between the positive terminal of the second battery and the SmartShunt Aux terminal
- Connect the negative of the second battery to the SmartShunt SYSTEM MINUS terminal

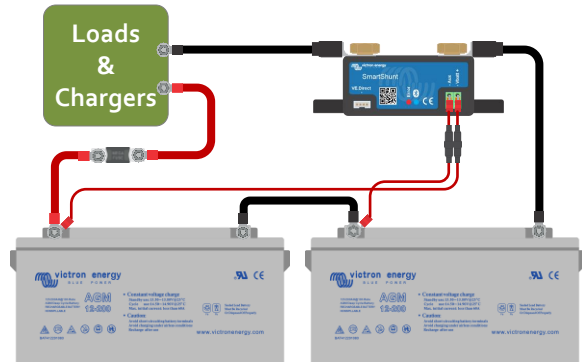


Optional

### 7

#### Monitoring midpoint of a battery bank

- Connect the power cable between the battery bank midpoint and the SmartShunt Aux terminal

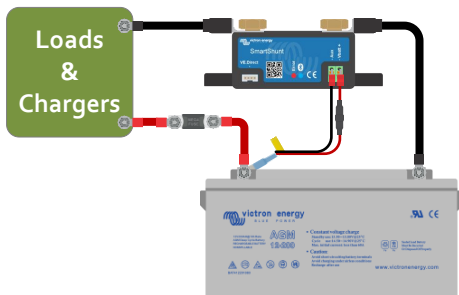


Optional

### 8

#### Monitoring battery temperature

- The red power cables (included) are not used.
- Connect the (not included) temperature sensor ASS00100000 to the positive battery terminal.
- Connect the temperature sensor red wire to the B1 terminal and the black wire to the B2 terminal.

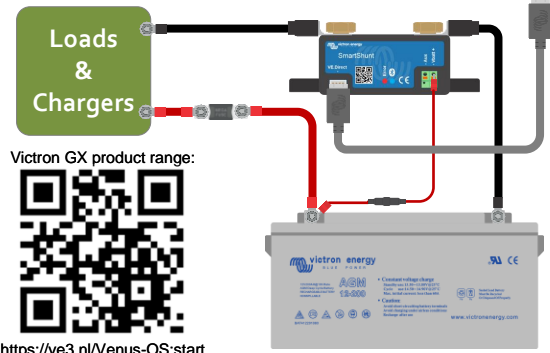


Optional

### 9

#### Connecting to a GX device

- Connect the (not included) VE.Direct cable ASS03053xxxx between the VE.Direct ports of the SmartShunt and the GX device



Victron GX product range:



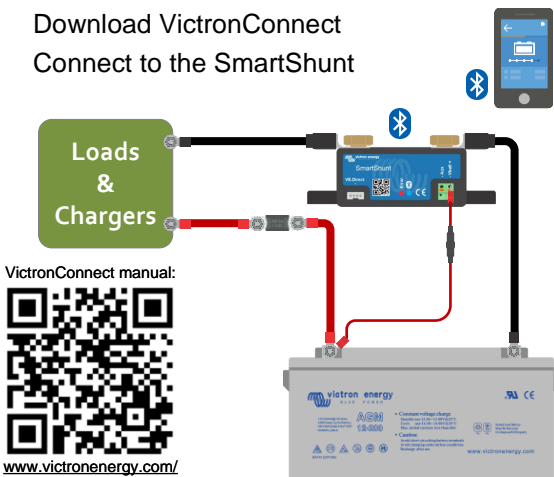
<https://ve3.nl/Venus-OS:start>

Optional

### 10

#### Download and connect VictronConnect

- Download VictronConnect
- Connect to the SmartShunt



VictronConnect manual:



[www.victronenergy.com/live/victronconnect:start](http://www.victronenergy.com/live/victronconnect:start)

### 11

#### Make essential VictronConnect settings

- Set the battery capacity
- Set the functionality of the auxiliary input (if used)
- Set the charged voltage parameter:

Nominal battery voltage	Charged voltage setting
12V	13.2V
24V	26.4V
36V	39.6V
48V	52.8V

#### Additional settings for lithium batteries:

- Set the charge efficiency at 99%
- Set the Peukert exponent at 1.05