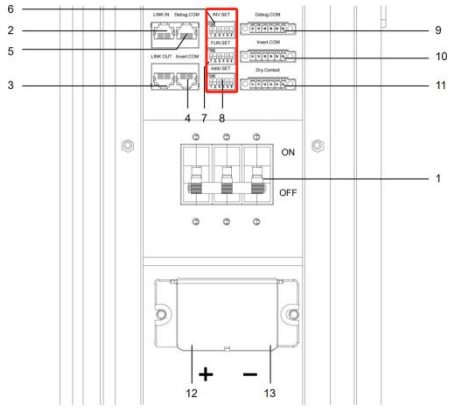
Xcellent plus with Victron inverter

1、Battery dial setting



Battery switch position

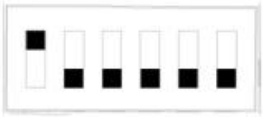
1) Inverter dial

7		Victron_color control	victron energy

When batteries are in parallel, only need to set the master battery to the above dip switch, and the slave batteries do not need to be moved.

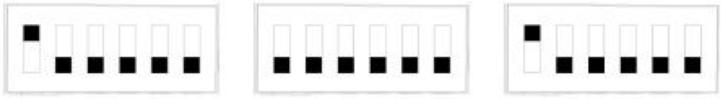
2) Function dial

Single Xcellent plus battery



Single device	#1	#2	#3	#4	#5	#6
Device FUN.SET dial code	1	0	0	0	0	0

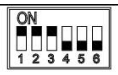
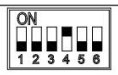
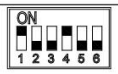
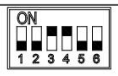
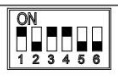
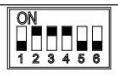
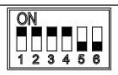
Three Xcellent plus batteries for reference:



When 3 devices in parallel	#1	#2	#3	#4	#5	#6
The first device	1	0	0	0	0	0
The second device	0	0	0	0	0	0
The third device	1	0	0	0	0	0

The Function dip of the master and last slave battery should be set as 100000, and the other slave batteries are set to 000000.

3) Address dial

Code	Dial Switch Position	Definition
1		Set as battery 1 (communicate with inverter by this battery)
2		Set as battery 2
3		Set as battery 3
4		Set as battery 4
5		Set as battery 5
6		Set as battery 6
7		Set as battery 7
8		Set as battery 8
9		Set as battery 9
10		Set as battery 10
11		Set as battery 11
12		Set as battery 12
13		Set as battery 13
14		Set as battery 14
15		Set as battery 15

Similarly, dial the codes according to the battery sequence when paralleling, up to 15 units.

Example：DIP switch for three batteries in parallel (Master as first one，slave 1 as second one， slave 2 as third one， and so on).

Master:

ADD INV FUN

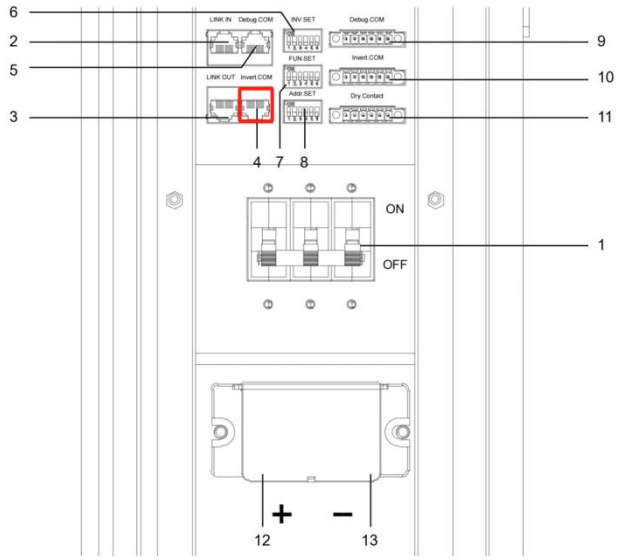
Slave1:

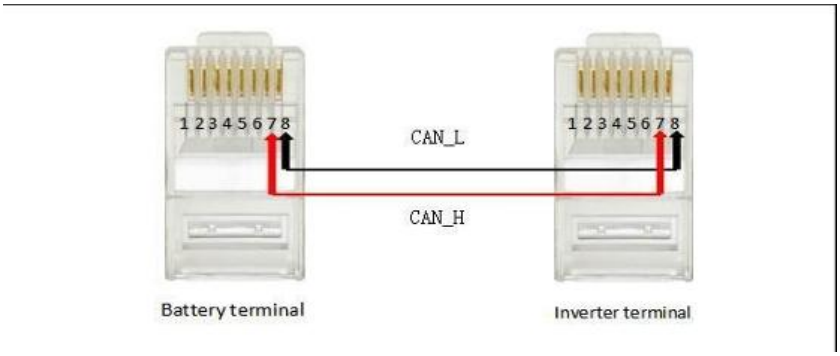
ADD INV FUN

Slave2:

ADD INV FUN

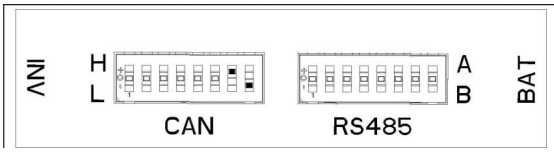
2、Battery and inverter communication line settings





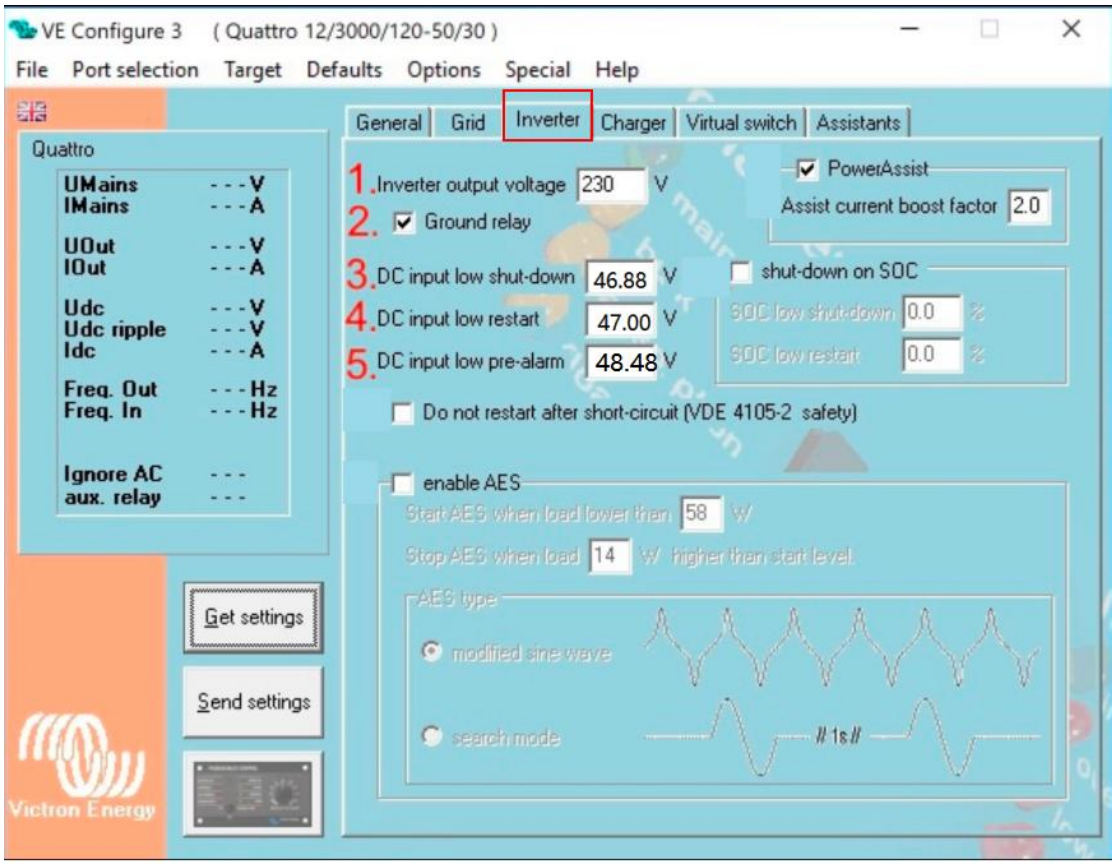
The wiring sequence of the battery and inverter ends.

If you choose this box to connect battery and inverter, please dial the following.

	Victron	CAN

INVERTER SETTING CATALOG

Part 1 Parameter setting of DC Input for Inverter



1、When you want to configure Victron inverter setting for Renon battery please set the **key DC input value** like below (other settings please refer to Victron inverter user manual) :

1) **DC input low shut-down: set to** 46.88V

2) **DC input low restart:** set to 47.00V

3) **DC input low pre-alarm:** set to 48.48V

2、Definition:

2.1 To set output voltage of inverter - This is normally 230 Vac.

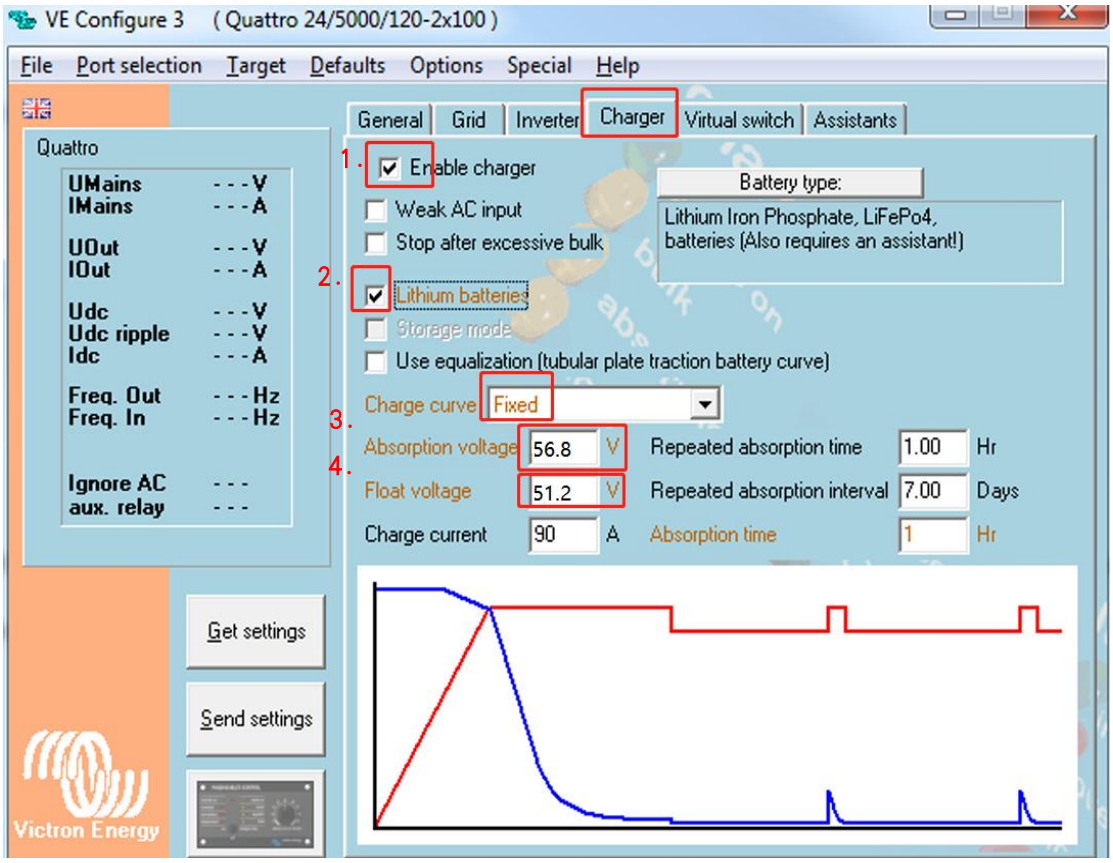
2.2 Used to enable/disable the internal ground relay functionality. Connection between N and PE during inverter operation. – The ground relay is useful when an earth–leakage circuit–breaker is part of the installation. When the internal transfer switch is open (inverter mode) the Neutral of the inverter is connected to PE. When the transfer switch closes (AC input is transferred to the output) the Neutral is first disconnected from PE. Warning: Disabling the ground relay on "120/240V" models (split phase models) will disconnect the L2 output from the inverter.

2.3 To set the low battery voltage level at which the inverter shuts off – To ensure long battery life, this value should be set according to your battery manufacturer specification.

2.4 To set the voltage at which the inverter restarts after low voltage shut-down.–To prevent rapid fluctuation between shut–down and start up, it is recommended that this value be set at least one volt higher than the low battery shut–down voltage.

2.5 To set the voltage at which the inverter triggers a warning light and signal before shutdown. – DC input low pre–alarm With this setting one can determine the level at which the Low batter pre–alarm indication starts. Note that in fact the parameter which is changed is an offset voltage relative to the DC input low restart level which in its turn is relative to the DC input low shut–down level. The result of this is that, when changing either one of DC input low restart and DC input low shut–down, this "DC input low pre–alarm" level changes also

Part 2 Parameter setting of Charger



1、After invert part settings done, please set the **key** **Charger value** like below (other settings please refer to Victron inverter user manual):

1) **Select**: "Enable charger"

2) Choose："Lithium batteries"

3) Absorption voltage：set to 56.8V

4) Float Voltage：set to 51.2V

2、Definition:

2.1 To set the charger function on/off – The inverter and assist functions of the Multi will continue to operate, but it will no longer charge; the charging current is therefore zero!

2.2 Lithium Battery (will trigger battery wizard) – This setting will trigger the lithium battery options and wizard, depending on configuration of your lithium battery and manufacturers advice you may need adjust additional settings as well.

2.3 Manual settings for battery charging – Use this setting to specify the Absorption voltage. Absorption is the charge phase where the battery is held at continuous target voltage with variable current.

2.4 Float Voltage – Use this setting to specify the Float voltage. Float stage is reduced voltage from absorption, used to trickle in current to finish battery charge without creating excess heat or gassing.

Part 3 Parameter setting of Aassistants

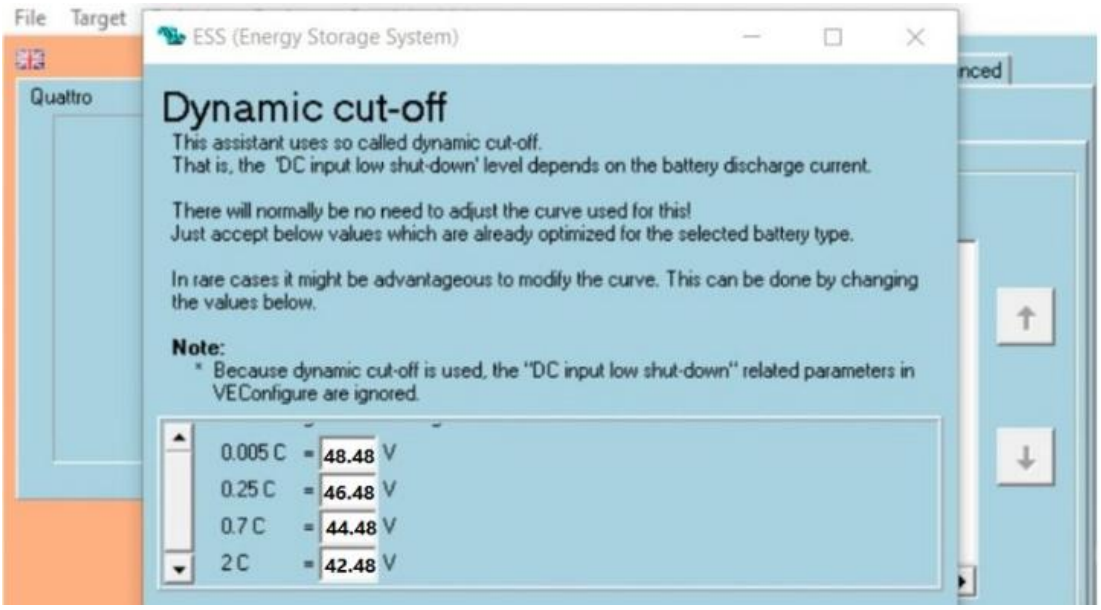
1、After invert part settings done, please set the **key Dynamic cut—off value** like below (other settings please refer to Victron inverter user manual)：

1) 0.005C：set to"48.48"V

2) 0.25C：set to"46.48"V

3) 0.7C：set to "44.48"V

4) 2.0C：set to "42.48"V



2、After invert part settings done, please set the **key Sustain voltage value** like below (other settings please refer to Victron inverter user manual):

1) **sustain voltage**: set to"56.0"V