HUBBLE™ ENERGY

VICTRON INVERTER GUIDE

+ SETTINGS
+ COMMUNICATION
+ TROUBLESHOOTING

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HUBBLE ENERGY & VICTRON

The Victron range of inverters are fully compatible with the Hubble range of batteries including the essential Cloudlink Device required for communication. The following field guide will assist with the correct battery settings you should use.

For further detailed information ensure you read the manual of the supplied battery regarding setup and installation instructions.

https://www.hubbleenergy.com/ for the latest version of this manual.

WARNING

Working with high-voltage systems is dangerous. Do not attempt to modify your inverter and battery setup unless you are certain you understand the risk. Speak to a qualified electrician if you are unsure.

VICTRON SETUP

When installing a Victron system it is required to install a Hubble Cloudlink for communication between the inverter and the batteries.

The Cloudlink will enable the Victron Extended Protocol and can enable advanced settings like Dynamic Voltage charge control which is recommended on the Victron system. Without a Cloudlink the GX/Inverter/MPPT must be setup to use Voltage Control though static charge settings.

INVERTER SETTINGS

SETTINGS	X-101	AM-2	AM-4	AM-5	AM-10
Low Shut Down	43V	43V	23.15V	47V	47V
Low Restart	45V	45V	24.2V	52.5V	52.5V
Low Pre-Alarm	44V	44V	23.7V	51.5V	51.5V
Absorption	53.8V	53.8V	29V	55.2V	55.2V
Float	53.6V	53.6V	28.8V	54.0V	54.0V
Sustain	48V	48V	25.8V	50.00V	50.00V
Restart Offset	2V	2V	2V	2V	2V

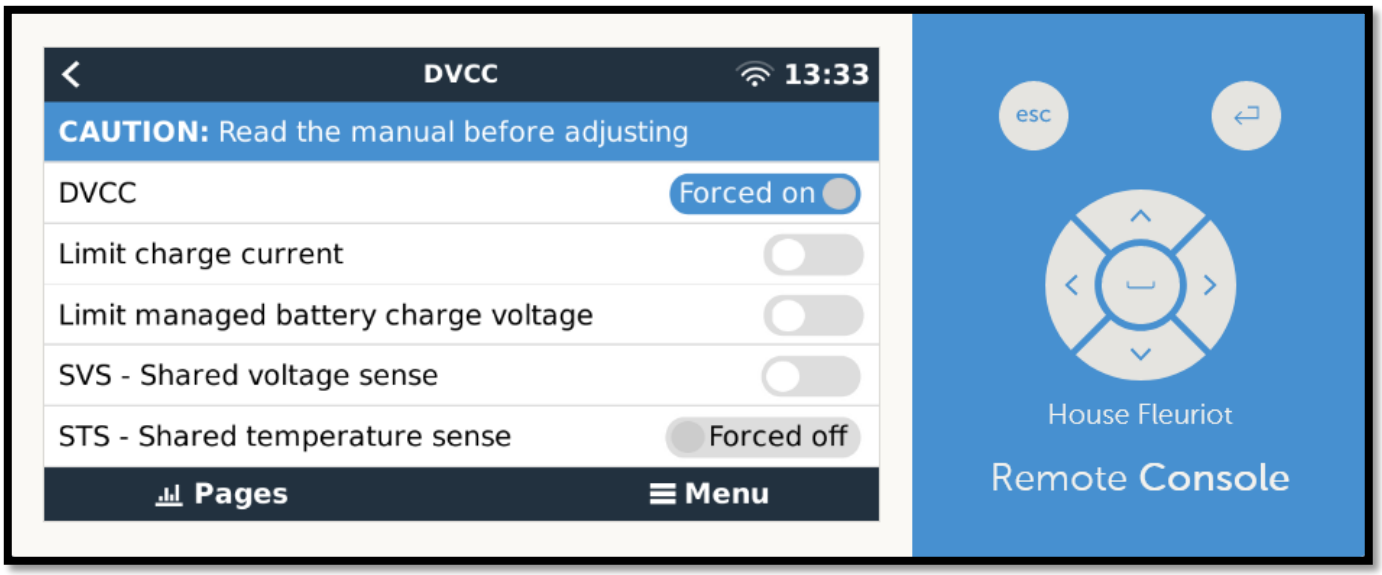
ESS SETUP (OPTIONAL)

ESS SETTINGS	X-101	AM-2	AM-4	AM-5	AM-10
0.005C	44.2V	44.2V	23.8V	49V	49V
0.25C	43.55V	43.55V	23.45V	49V	49V
0.7C	42.25V	42.25V	22.9V	47.2V	47.2V
2C	42V	42V	22.6V	46.8V	46.8V

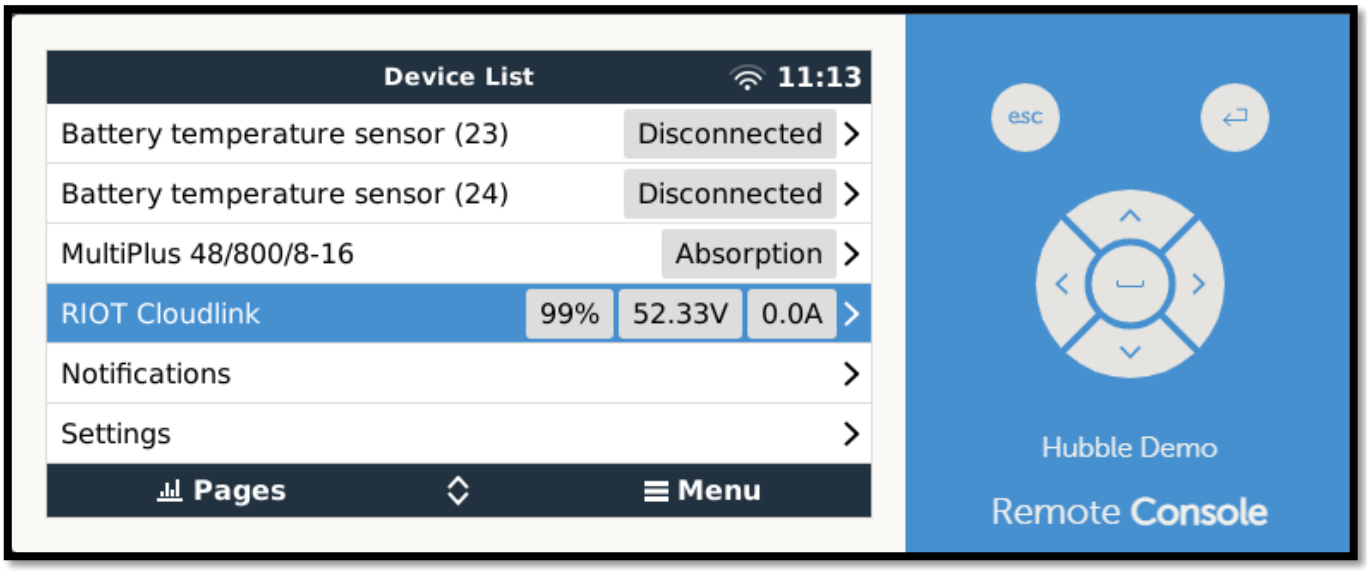
GX SETUP

Enable DVCC is preferred.

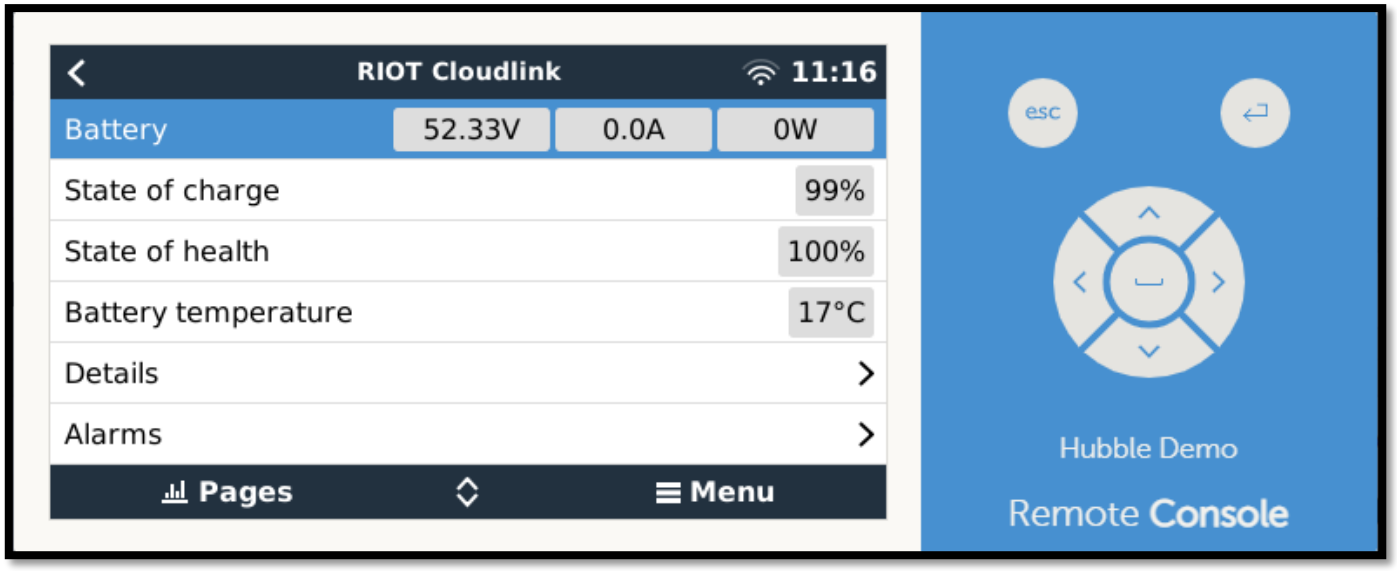
This will allow the Victron to listen to the Hubble battery charge voltage instructions when using a Cloudlink. All other settings can be disabled on this page.



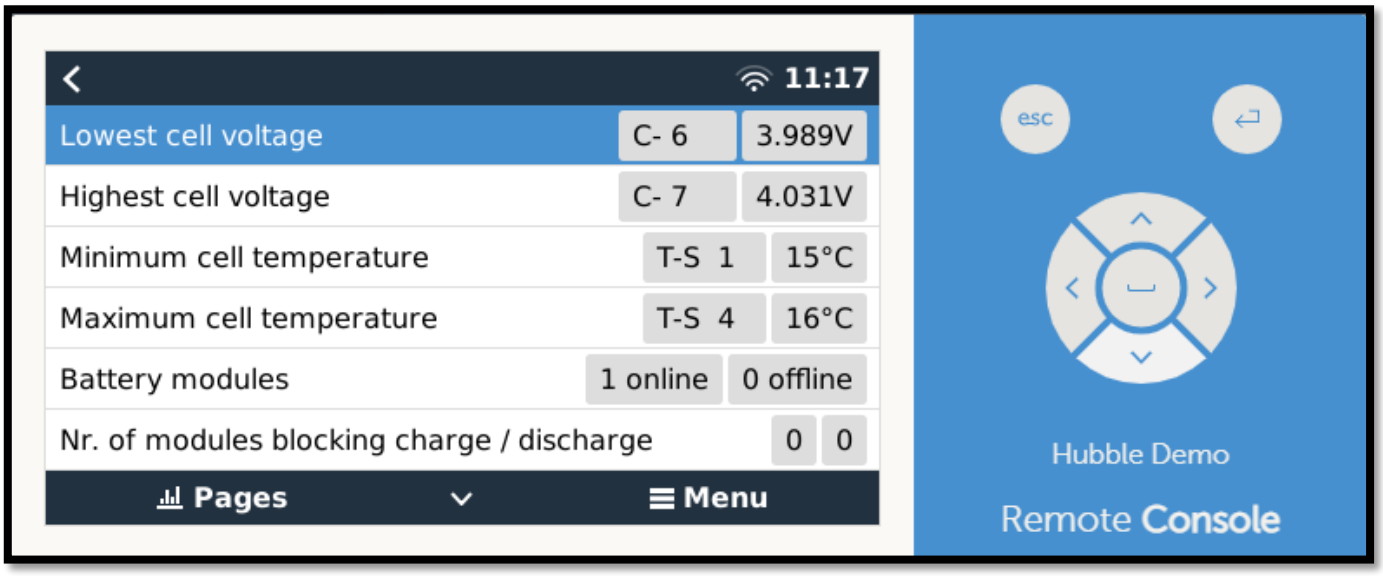
When using the Hubble Cloudlink, you will see the below screen Hubble Cloudlink (RIOT Cloudlink for older models) appear.



More details are displayed when going into the battery device.



The Cloudlink runs the Victron Extended Protocol and will enable the "Details" page for more information about the battery systems that are connected.



PIN LAYOUTS & CLOUDLINK

For the Victron inverters to communicate with the Hubble Energy range of batteries you will require a Victron Type B cable and a Cloudlink.

CLOUDLINK

The Cloudlink will enable the Victron Extended Protocol, remote monitoring, and extended battery BMS monitoring.

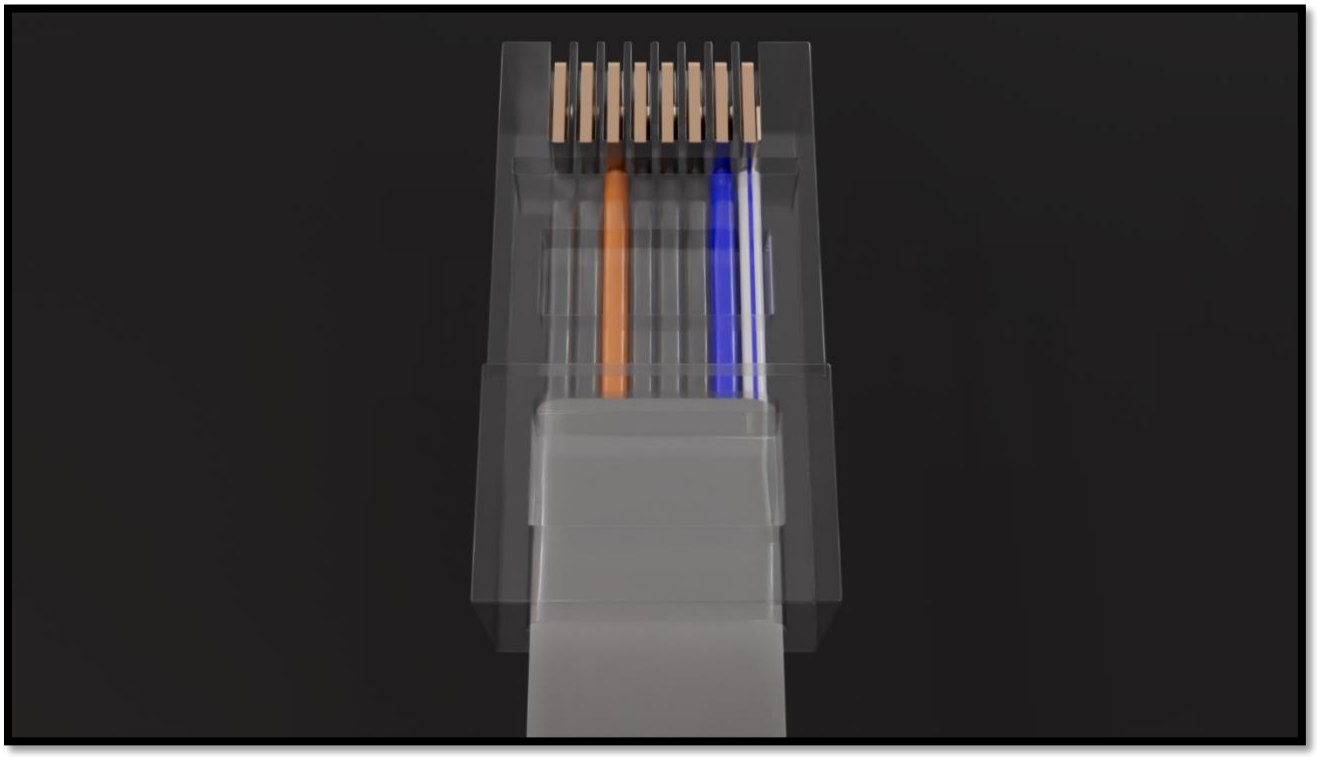
RJ45 PIN LAYOUTS

Ensure that the clip is pointed away from you when counting the pins.

Pin	Inverter	X-101/AM-4/AM-2	AM-5/AM-10	Blade
1	-	-	-	-
2	-	GROUND	-	-
3	GROUND	-	-	-
4	-	CANH	CANH	CANH
5	-	CANL	CANL	CANL
6	-	-	-	-
7	CANH	-	-	-
8	CANL	-	-	-

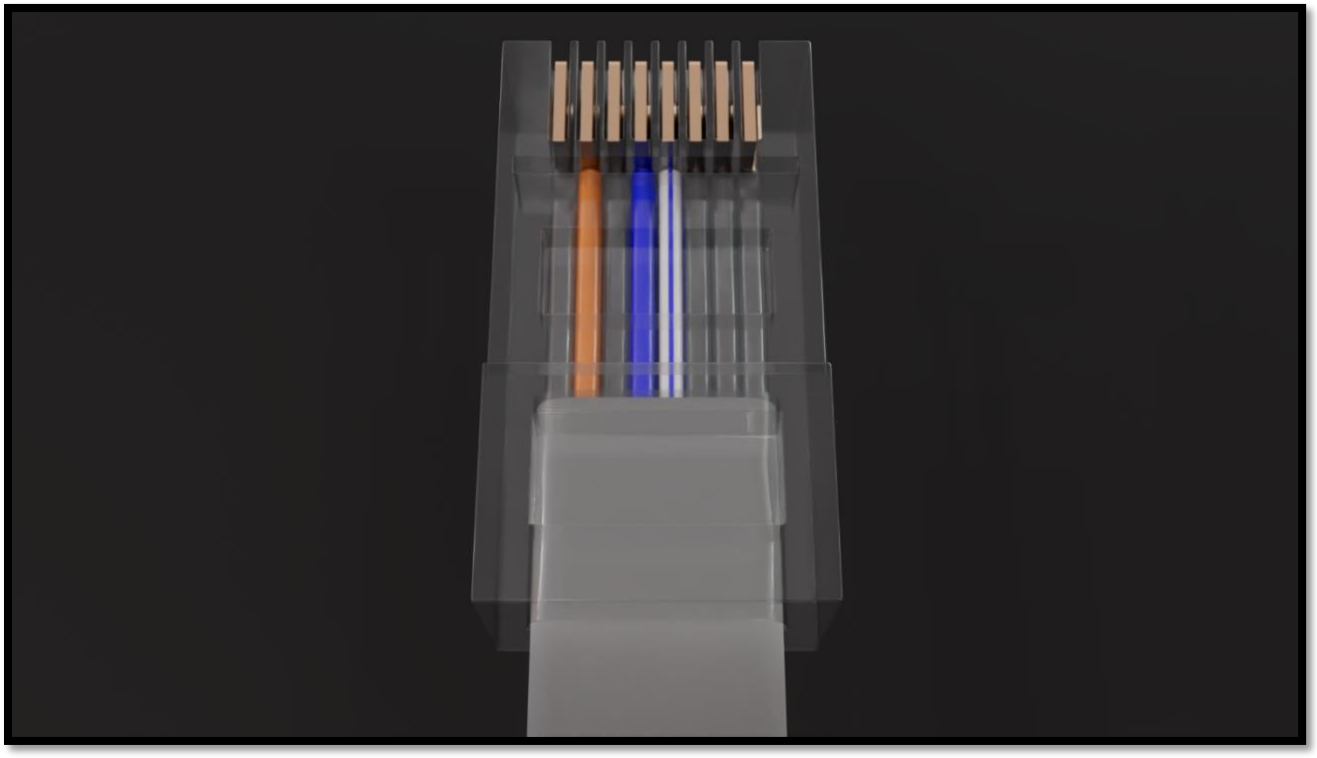
3, 7 & 8 Pin Layout image reference seen below:

- To CERBO GX



2, 4 & 5 Pin Layout image reference seen below:

- To Cloudlink CAN



HUBBLE DIP SWITCH SETTINGS

FOR MULTIPLE BATTERY INSTALLATION

For correct setup and communication, each battery needs a unique serial address to communicate. If you are only using one battery in your setup, consider this the master battery and ensure you set it to address 1.

AM-2, AM- 4, AM-10+, AM-16+ & BLADE DIP SWITCHES

ADDRESS	SWITCH POSITIONS			
	#1	#2	#3	#4
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

AM-5 & AM-10 DIP SWITCHES (4-DIP VERSION)

ADDRESS	SWITCH POSITIONS			
	#1	#2	#3	#4
1	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF
3	OFF	ON	OFF	OFF
4	ON	ON	OFF	OFF
5	OFF	OFF	ON	OFF
6	ON	OFF	ON	OFF
7	OFF	ON	ON	OFF
8	ON	ON	ON	OFF

AM-10 (8-DIP VERSION)

ADDRESS	SWITCH POSITIONS						
	#1	#2	#3	#4	#5	#6	Mark (#7 & #8)
0	ON	ON	OFF	OFF	OFF	OFF	Mastery Battery/Enable CAN BUS Port - ON
1	OFF	OFF	OFF	OFF	OFF	OFF	Slave 2 - OFF
2	OFF	ON	OFF	OFF	OFF	OFF	Slave 3 - OFF
3	OFF	OFF	ON	OFF	OFF	OFF	Slave 4 - OFF
4	OFF	ON	ON	OFF	OFF	OFF	Slave 5 - OFF
5	OFF	OFF	OFF	ON	OFF	OFF	Slave 6 - OFF
6	OFF	ON	OFF	ON	OFF	OFF	Slave 7 - OFF
7	OFF	OFF	ON	ON	OFF	OFF	Slave 8 - OFF
8	OFF	ON	ON	ON	OFF	OFF	Slave 9 - OFF
9	OFF	OFF	OFF	OFF	ON	OFF	Slave 10 - OFF
10	OFF	ON	OFF	OFF	ON	OFF	Slave 11 - OFF
11	OFF	OFF	ON	OFF	ON	OFF	Slave 12 - OFF
12	OFF	ON	ON	OFF	ON	OFF	Slave 13 - OFF
13	OFF	OFF	OFF	ON	ON	OFF	Slave 14 - OFF
14	OFF	ON	OFF	ON	ON	OFF	Slave 15 - OFF

FREQUENTLY ASKED QUESTIONS

What cable do I need to connect my Hubble Energy battery with a Victron Inverter?

For the Victron inverters to communicate with the Hubble Energy range of batteries you will require a Victron Type B cable. You will also need a Victron Type B cable if using the Hubble Cloudlink. The Cloudlink will enable the Victron Extended Protocol, remote monitoring, and extended battery BMS monitoring.

How do you set up multiple batteries?

You will have to set dip switch settings per battery to give them a unique address. You also must connect the included RJ45 battery link cables into the "Battery Link" port of each battery. Ensure your master battery dip switch 1 is on, 2,3,4 is OFF. Only the master battery CAN Bus will be enabled. You can then connect the Hubble Cloudlink into the CAN port of the master battery for communications to work.

Do I have to use the communication battery link cables if I don't want to monitor or have communications?

Yes.