HUBBLE™ ENERGY

DEYE
INVERTER GUIDE

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HUBBLE ENERGY & DEYE

Hubble Lithium batteries are fully compatible and approved by Deye.
Deye inverters are hybrid inverters with a large range of features that provides great flexibility for installers.

The following field guide will assist with the correct battery settings and cable connections you should use. For further detailed information ensure that you read the manual of the supplied battery or Cloudlink regarding the setup and installation instructions.

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

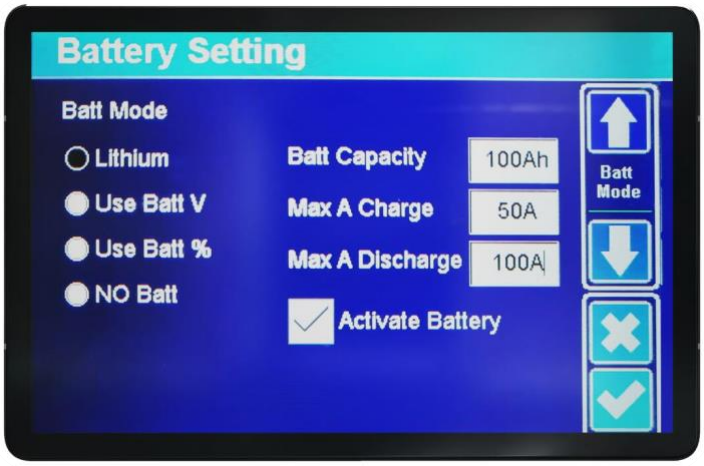
WARNING

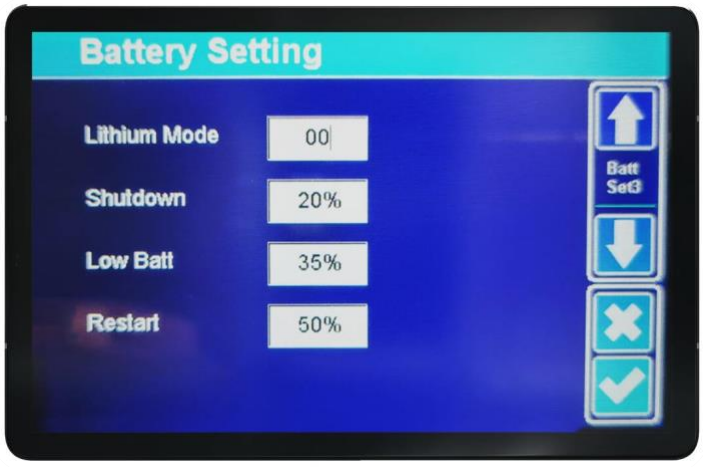
Working with high-voltage systems is dangerous. Do not attempt to modify your inverter and battery setup unless you are certain you understand the risk. Speak to a qualified electrician if you are unsure.

INVERTER SETTINGS

Model	Voltage	Equalised	Float	Cutoff	Charge Amps	Max Discharge Current
S-SERIES	12V	14	14	12	30A	100A
X-100	48V	52.8	52.8	44	30A	100A
X-101	48V	53.8	53.8	44	30A	100A
X-200	36V	41.5	41.5	34	30A	100A
AM-2	48V	53.8	53.8	44	30A	100A
AM-3	48V	53.8	53.8	44	20A	50A
AM-4	24V	29	28.5	22	30A	100A
AM-5	48V	55.2	55.2	47	30A	100A
AM-10	48V	55.2	55.2	47	60A	150A
BLADE	48V	55.2	55.2	47	50A	200A

The below settings are the recommended settings to use for the corresponding Hubble Lithium battery, as seen on the Deye display. Set the Lithium, maximum charge, and maximum discharge setting.





Charge should be set to 0.5C per Hubble battery.

Shutdown should not be lower than 20% to enhance battery life.

Plug in the Deye CAN bus cable into the master Hubble battery CAN bus port.

PIN LAYOUTS & CLOUDLINK

CLOUDLINK

Installing a Cloudlink is optional.

Ensure that the Cloudlink model is always compatible, older models need to have the RS485 comms enabled at the factory. Please make sure firmware is up to date on the Inverter and Cloudlink

The Cloudlink will connect to the Battery via:

Cloudlink's (Serial/RJ12 Port) to the Battery (RS232/RJ12 Port)

(Black Cable) – RJ12 to RJ12 (450mm) cable.

RJ45 PIN LAYOUTS

The Deye Inverter will connect to the Battery via:

Inverter (CAN Port) to Battery (CAN Port)

Straight RJ45 to RJ45 wire - 1500mm.

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

DEYE – 5kW / 8kW / 16kW (DUAL PORT)

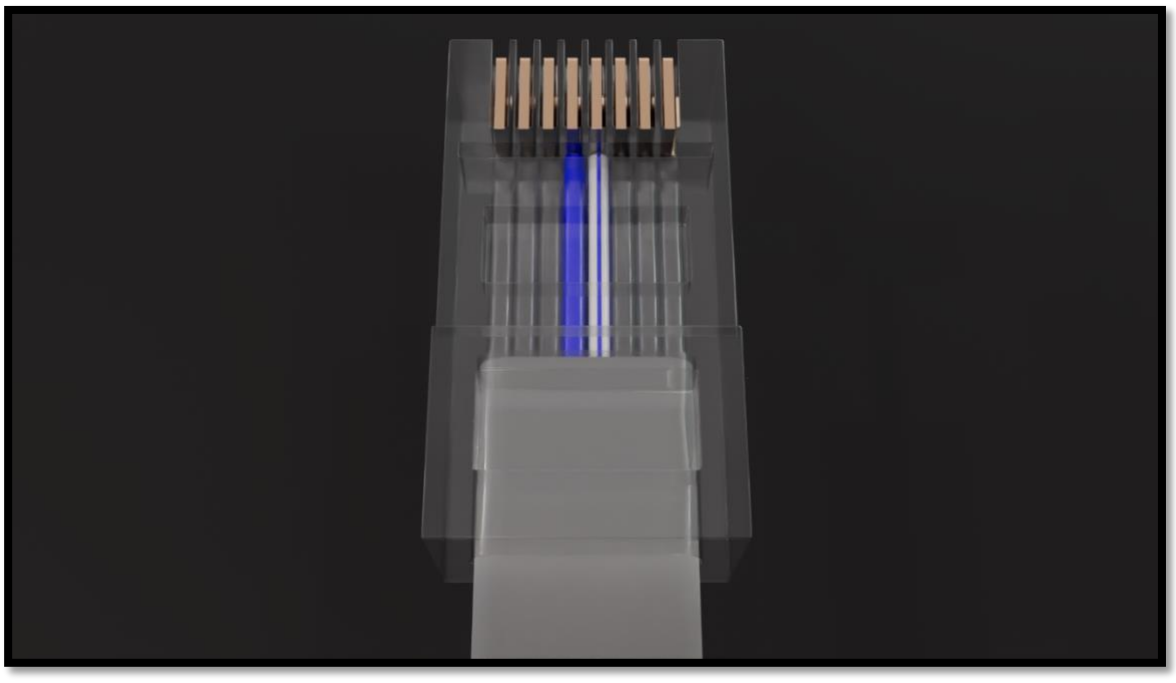
**Please note that Cloudlink communication with a DAUL PORT Inverter requires a second RJ45 cable that connects PIN 7 & 8 from Inverter (RS485) to Cloudlink (MUL/RS485).*

Pin	Inverter	X-101/AM-4/AM-2	AM-5/AM-10	Blade	Cloudlink
1	-	-	-	-	-
2	-	GROUND	-	-	-
3	-	-	-	-	-
4	CANH	CANH	CANH	CANH	CANH
5	CANL	CANL	CANL	CANL	CANL
6	-	-	-	-	-
7	-	-	-	-	RS485 A
8	-	-	-	-	RS485 B

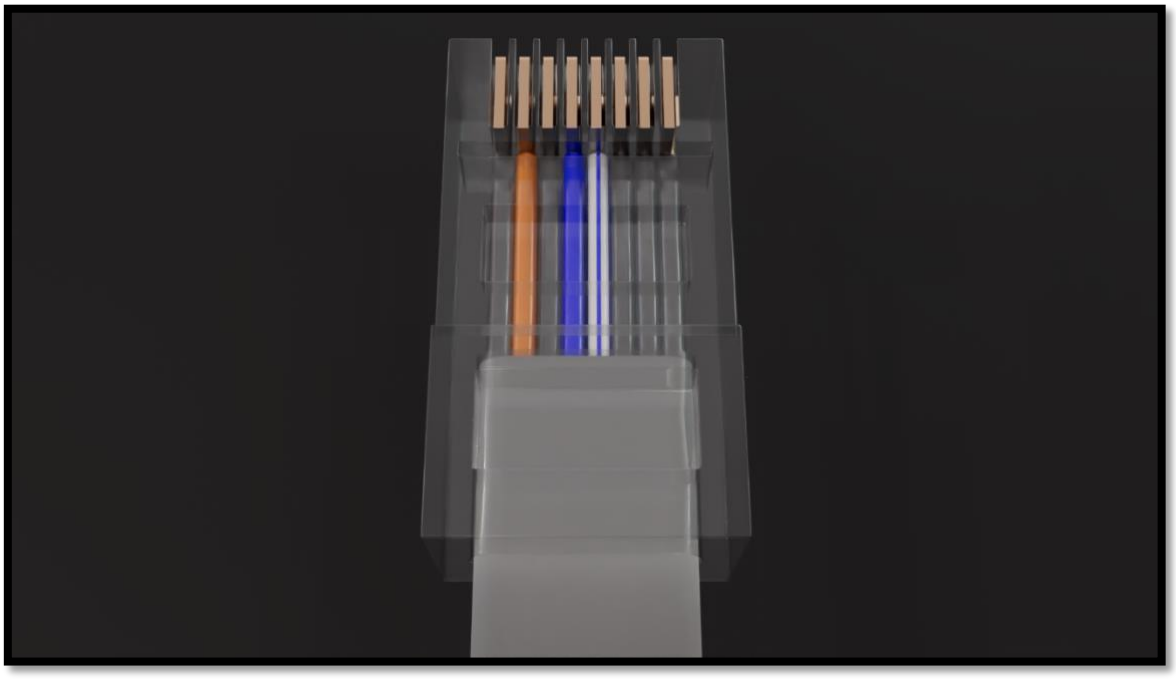
DEYE – 8kW / 10kW / 12kW (SINGLE PORT)

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

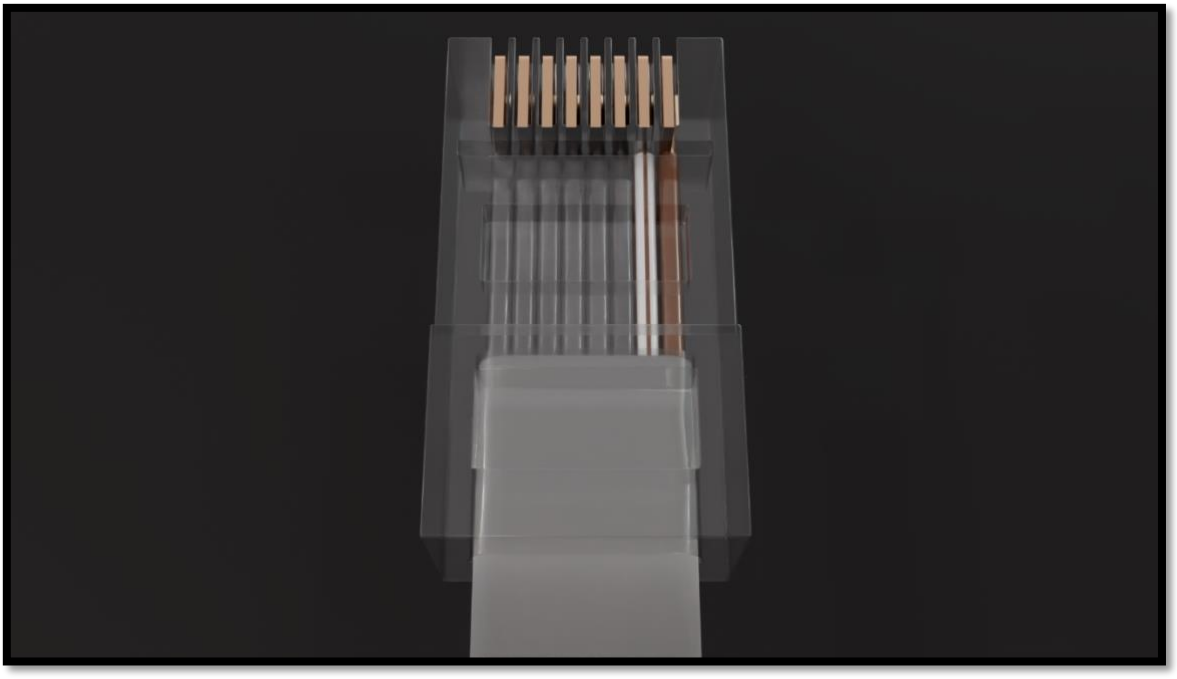
4 & 5 Pin Layout image reference seen below:



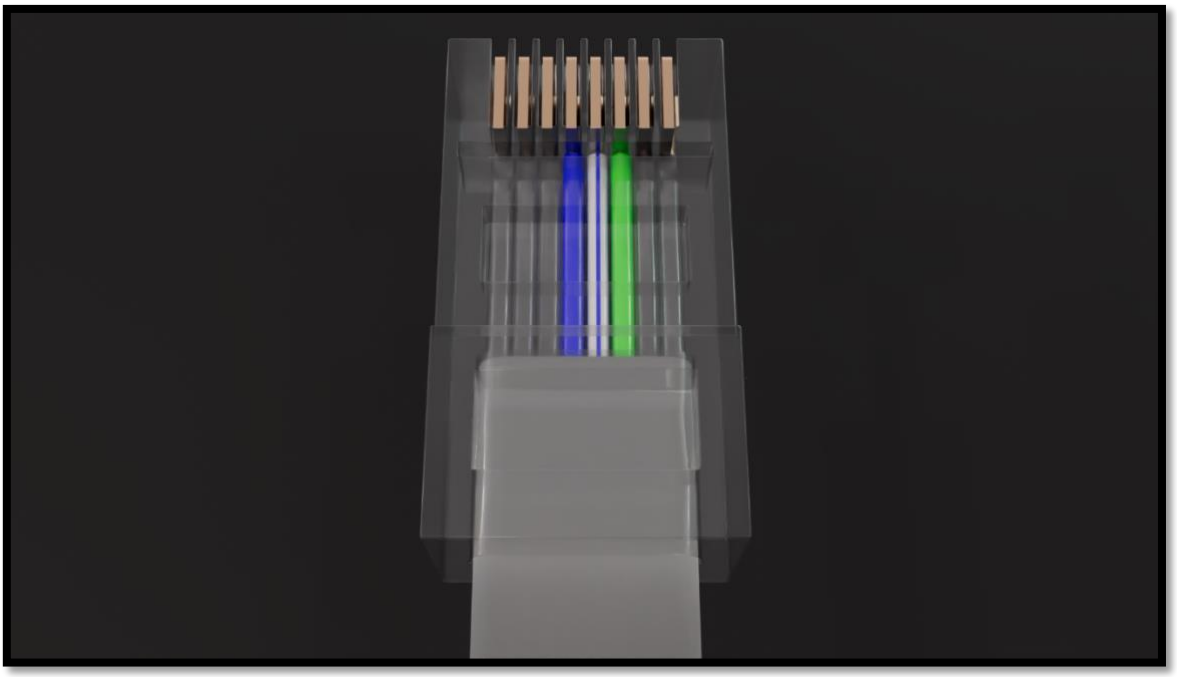
2, 4 & 5 Pin Layout image reference seen below:



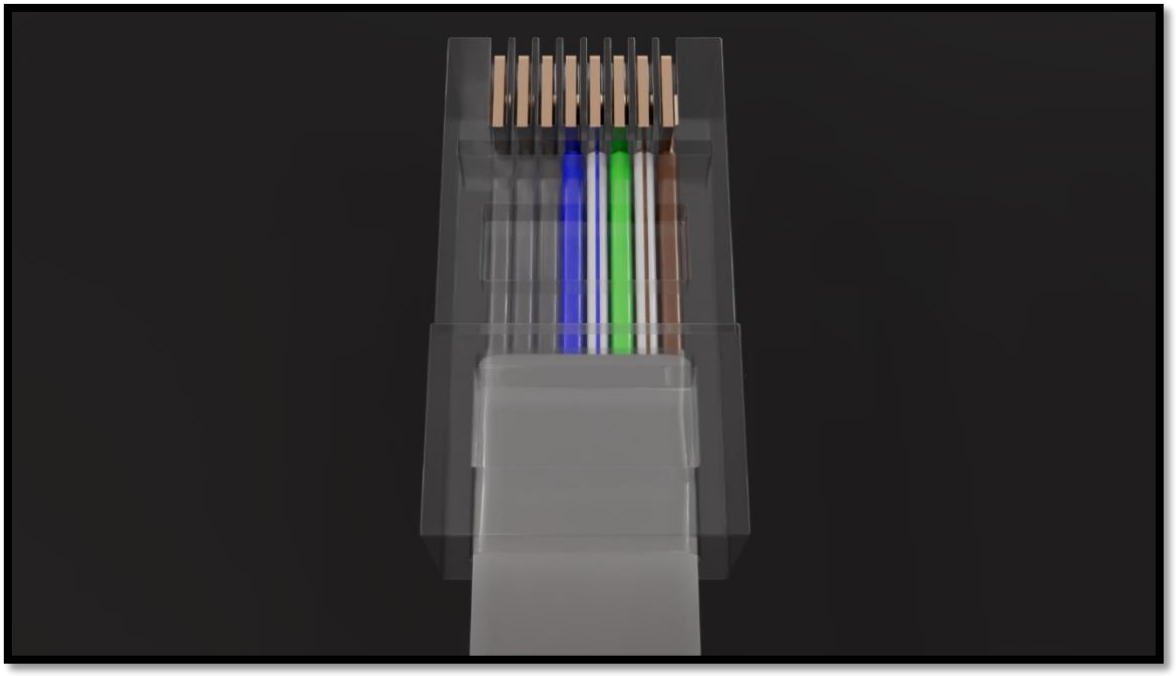
7 & 8 Pin Layout image reference seen below:



4, 5 & 6 Pin Layout image reference seen below:



4, 5, 6, 7 & 8 Pin Layout image reference seen below:



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.

FOLLOW DIP SWITCH SETTINGS TABLE

Link up all your extra batteries as per the manual and set each address accordingly. The Hubble batteries will automatically start communicating with the Deye inverter.

AM-2, AM- 4, AM10+, AM16+ & 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

Deye Setup Queries

- The inverter RS485 address not configured. Solution: Set the inverter to "slave" and configure address 1 to enable the port.
- Inverters may have older firmware. It takes more than 2.5 sec to respond to RS485 commands, which then cause timeouts on the bus. Solution: Ensure the firmware is up to date.
- In some early firmware versions of Deye/Cloudlink firmware, not all the data was available via Modbus. This has been rectified in the newer firmware versions.
- On some inverter hardware versions if you use both CAN bus and RS485 at the same time and use 8-core straight CAT5 then RS485 pin A is short-circuited to GND, and comms won't work. Solution: Only use the needed pins or wires on the CAT 5 cable, do not use a straight cable. Required pins for CAN bus: 2, 4 and 5 only. Required pins for RS485: 7 and 8 only.
- Older Cloudlink models need to be checked for hardware compatibility with Technical Support. Incompatible models need to be updated with Support directly.

How do you set up multiple batteries?

See table above and check your product manual for a more detailed explanation. 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.