HANCHU ESS

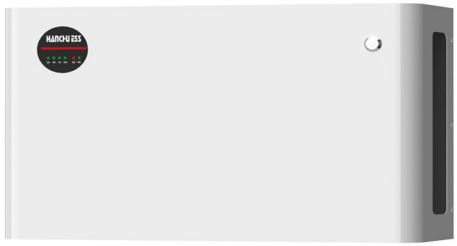
HOME-ESS-LV-3.2K

Quick Installation Guide

Version 03

Android APP

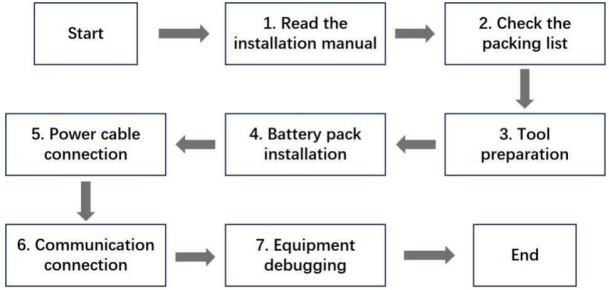
iOS APP



1.Installation Precautions

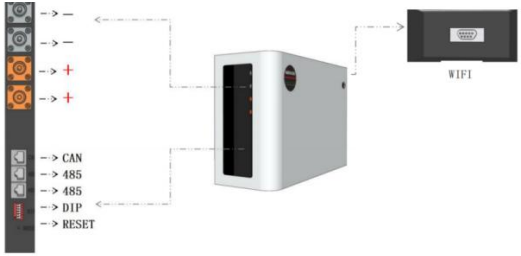
Flow chart of installation steps:

Please follow the equipment installation steps process to ensure the equipment can be successfully installed.



Schematic diagram of battery interface:

The definition of each interface must be clear during the installation process, otherwise the wrong connection will lead to installation failure or even damage to the equipment.



Please ensure that the installer meets the following requirements:

This system should only be installed by personnel with training and adequate knowledge of electrical power systems.

Please make sure the installation location meets the following conditions:

● The installation and operation environment need to comply with local laws and regulations and relevant international national and regional standards for lithium battery products.

● Install in a dry, well-ventilated environment and secure the equipment on a sturdy and horizontal support surface.

● Avoid water accumulation in the installation location and keep away from water sources such as faucets, sewer pipes, and sprinklers. to avoid water infiltration.

● The environment around the installation location needs to be clean. There is no infrared radiation, heat source, conductive dust, organic solvents and corrosive gases, etc.

● When the equipment is running, the temperature of the under-frame and heat sink will be relatively high, please do not install it in a place where it is easy to be touched.

● When the equipment is running, do not block the ventilation openings or cooling system to prevent high-temperature fires.

● Please choose a sheltered installation site or build an awning to avoid direct sunlight or rain.

2.Check the Packing List

Please refer to the packing items shown below, please check the packing list carefully, if any items are missing, please contact your dealer directly.

Battery

Wall mount

Power cable 1

Black

Power cable 2

Red

Power cable 3

Black

Power cable 4

Red

RS485 communication line

CAN communication line

Expansion bolt * 6

Ground screw and terminal

/SC-25-6 *2

Quick Installation Guide

3.Tool Preparation

Step 1 : Protective equipment products must be worn and maintained during the installation process.

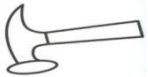
Safety gloves

Safety goggles

Safety shoes

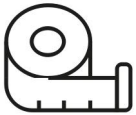
Step 2 : Installation Tools: tools needed in the process of installing equipment, more effective to improve installation efficiency.

Phillips screw driver

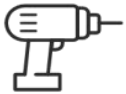


Hammer

Torque screw driver



Ruler



Electric screwdriver

Marker pen

4.Battery Pack Installation

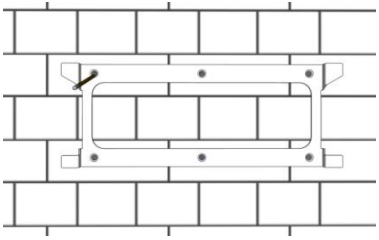
Before you start connecting cables, make sure that the inverter and battery is fully switched off!

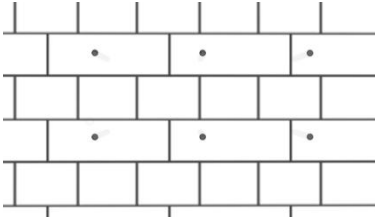
Make sure the wall is strong enough to bear the weight of the battery system.

Make sure there is no water source above or near the battery, including downspouts, sprinklers, or faucets.

Step 1: Locate drill holes in the wall

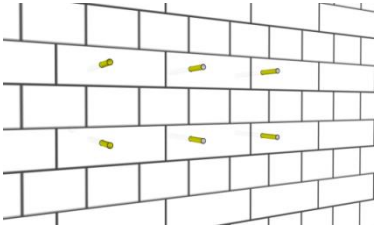
Use the bracket as a template to make positioning holes in the wall, mark the positions of the 6 holes, and then drill 10mm holes to ensure that the depth of the holes is greater than 50mm.

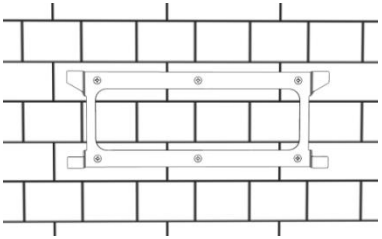




Step 2: Fix the wall mount bracket

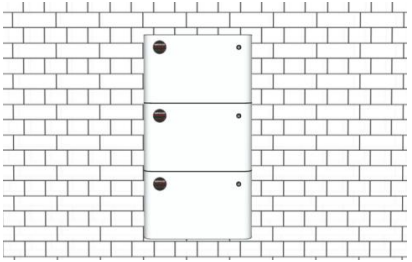
Fit the expansion tube into the hole and pull tight, then use the expansion screw to install and secure the wall mount bracket to the wall.





Step 3: Fix the battery module

There is a hook design on the back of the battery box, align and fix it to the positioning groove of the wall bracket for firm support.



5.Power Cable Connection

Step 1 : Power connections between two batteries

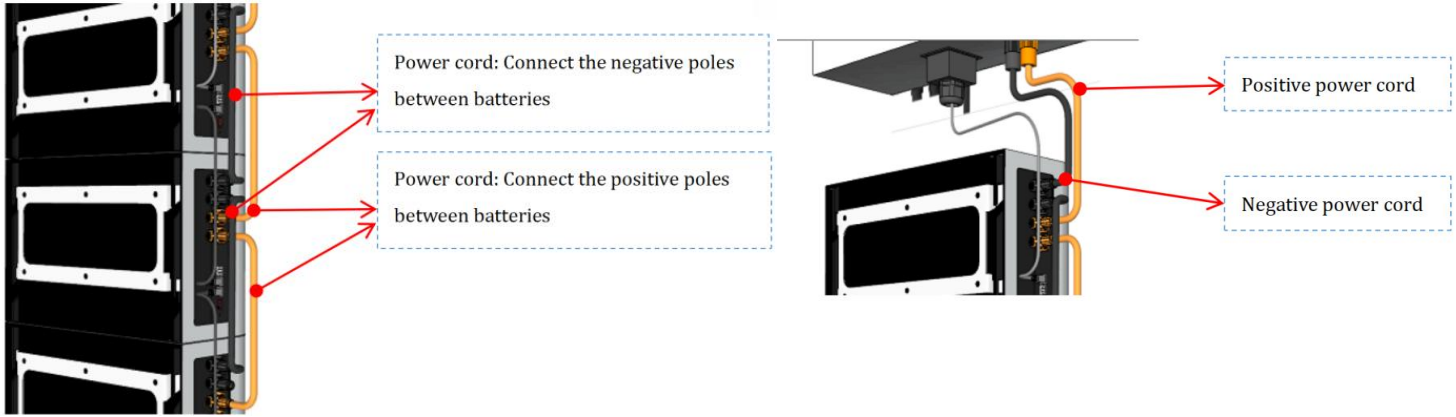
Use power cable 1 to connect the negative pole (P- terminal) of battery A to the negative pole (P- terminal) of battery B, and use power cable 2 to connect the positive pole (P+ terminal) of battery A to the positive pole (P+terminal) of battery B.

Step 2 : Power connections more than two batteries

Analogy derivation, more than two battery connections, connect the negative poles (P-terminal) between the batteries, and connect the positive poles (P+ terminal) between the batteries.

Step 3 : Connect the battery to the inverter power supply

After the battery is connected according to Step 1-2, connect the negative pole (P- terminal) of the battery A and the BAT - terminal of the inverter with the power cable 3; connect the positive pole (P+ terminal) of the battery A and the BAT + terminal of the inverter with the power cable 4 .



NOTE :

When the inverter is electrically connected, the inverter and batteries need to be powered off. Hear a sound locking into place as the cable connects to the terminal. It is forbidden to mix batteries of different brands, specifications and batches, otherwise it will cause system failure.

6.Communication Connection

Step 1 : Connect the CAN communication line

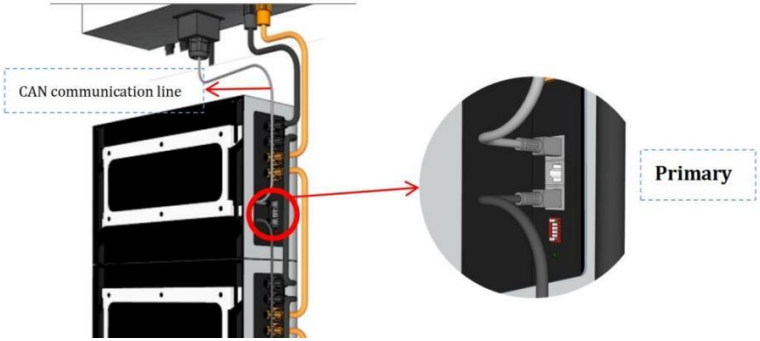
Use the CAN communication cable to connect the inverter to the battery's CAN port.

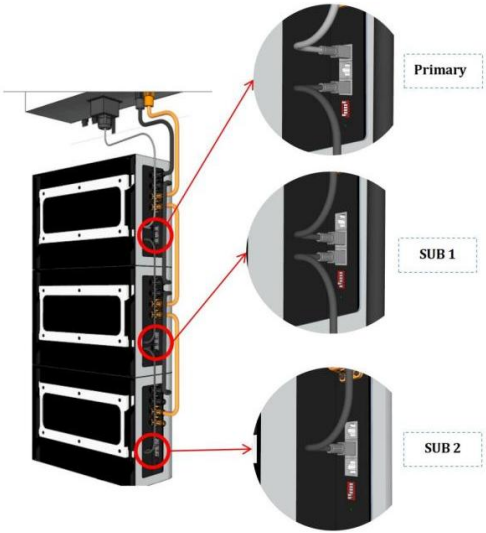
Step 2 : Connecting the RS485 communication line between two batteries

Use the RS485 communication line to connect the batteries in sequence through the RS485 port.

Step 3 : Connecting the RS485 communication line more than two batteries

Use the RS485 communication line to connect the adjacent batteries in sequence through the RS485 port.





NOTE :

The connection between the inverter and the battery must be connected to the CAN communication port of the battery, otherwise communication cannot be performed; similarly, the connection between the batteries must be connected to the RS485 port.

7. Commissioning

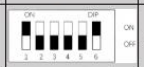
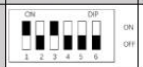
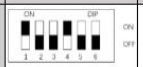
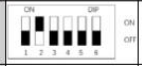
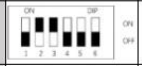
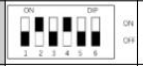
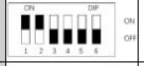
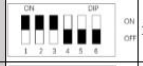
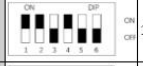
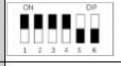
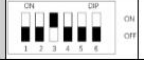
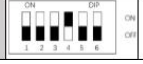
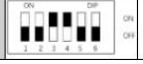
Step 1 : Primary dial setting: DIP address is (1:ON, 2-4:OFF), the battery factory default settings are the master mode and don't need to be changed.

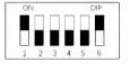
Step 2 : Sub dial setting: Dip address is #1-#4 , #5&#6 need to be dipped OFF.

NOTE : The battery directly connected to the inverter is the primary and the rest are subordinates.

The address allocation principle is binary. The battery address setting in the same system cannot be repeated.

The DIP Address of primary and subordinate units are set according to the table below:

DIP Settings																				
Address	Dip switch	DIP ON	DIP OFF	UNIT	Address	Dip switch	DIP ON	DIP OFF	UNIT	Address	Dip switch	DIP ON	DIP OFF	UNIT	Address	Dip switch	DIP ON	DIP OFF	UNIT
1		1、6	2、3、4、5	Primary	5		1、3	2、4、5、6	SUB	9		1、4	2、3、5、6	SUB	13		1、3、4	2、5、6	SUB
2		2	1、3、4、5、6	SUB	6		2、3	1、4、5、6	SUB	10		2、4	1、3、5、6	SUB	14		2、3、4	1、5、6	SUB
3		1、2	3、4、5、6	SUB	7		1、2、3	4、5、6	SUB	11		1、2、4	3、5、6	SUB	15		1、2、3、4	5、6	SUB
4		3	1、2、4、5、6	SUB	8		4	1、2、3、5、6	SUB	12		3、4	1、2、5、6	SUB	16		/	1、2、3、4、5、6	SUB

Primary unit	DIP ON	DIP OFF	Inverter brands
	1、6	2、3、4、5	HanchuESS(default)、Luxpower
	1、5、6	2、3、4	Deye、Pylon

Step 3 : Inverter protocol selection

The battery default factory CAN communication is Hanchu ESS protocol.

Protocol selection:

1) Check which protocols are supported by the inverter.

2) If the inverter supports the battery factory default protocol, select the corresponding protocol on the inverter directly.

3) If the inverter supports protocols other than the battery factory default protocol, select the same protocol on the battery and the inverter.

Battery protocol selection: select the protocol in the #5&#6 position of the primary DIP Address.

Step 4 : Equipment power on

Confirm again that the cables are connected in the correct order and the connection is firm before starting the test.

1) First close the circuit breaker switch on the inverter.

2) Then press the power switch on the battery pack in turn to turn on.

3) Observe whether the status of the indicator light on the battery panel is normal('RUN' green light flash, 'ALM' light off)

NOTE : The shutdown procedure is opposite to the startup process, first shut down the battery pack; then disconnect the circuit breaker of the inverter. When the system starts, ensure the boot sequence of each equipment, otherwise it may cause pre-charging and trigger the circuit breaker protection fault.

Contact

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