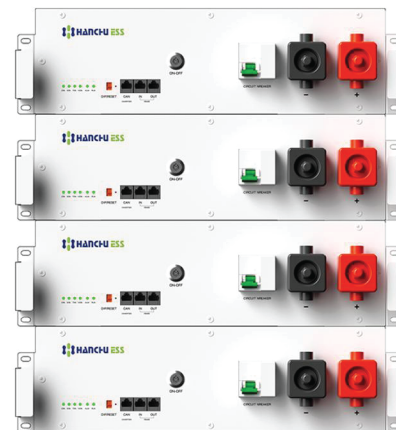


HOME-ESS-LV-5.12K-S

Quick Installation Guide

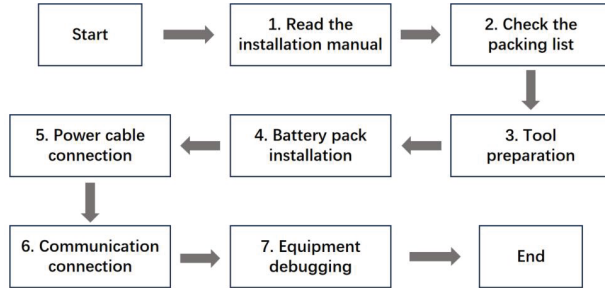
Version 01



1.Installation Precautions

Flow chart of installation steps:

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



Please ensure that the installer meets the following requirements:

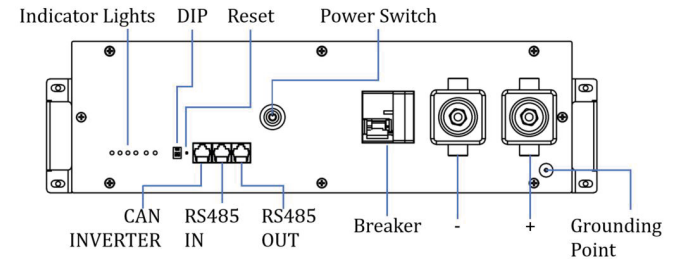
This system should only be installed by personnel with training and adequate knowledge of electrical power systems.

Please ensure that 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.

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.



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



Power cable 1
Black



Power cable 2
Red



Power cable 3
Black



Power cable 4
Red



RS485 communication line



CAN communication line



Quick Installation Guide



Ground screw terminal
M4x10/OT6-4 *2



Spare terminal
SC-35-8 *2

NOTE : The matching power cable is 3AWG, and the max carrying capacity is 120A. Please do not work under the condition of exceeding this current.

3.Tool preparation

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



Safety gloves



Safety glasses

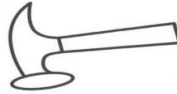


Safety shoes

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



Phillips screwdriver



Hammer



Torque screwdriver



Ruler



Electric transfer



Marker pen

4. Battery pack installation

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

Ensure no water source above or near the battery, including downspouts, sprinklers, or faucets.

Installation method 1:

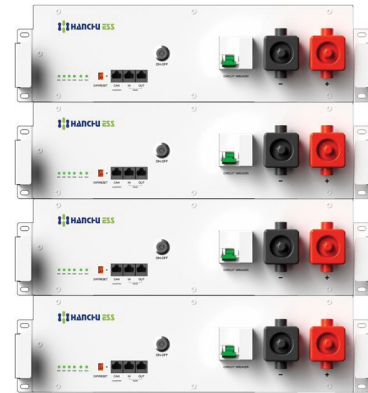
Cabinet installation (Not included in the product).

- 1) Put the battery into the cabinet at the installation position.
- 2) Secure the battery unit to the cabinet with a nut through the mounting holes.
- 3) Clearance is required around the battery.



Installation method 2:

Put the battery on suitable ground where is dry and well-ventilated is the quicker and more convenient method.



5. Power and communication cable connection

Step 1: Connect the battery ground cable

The area of the grounding cable shall be prepared at least 6mm^2 , using a ground screw and terminal to connect the ground cable which can ground the battery. The bolt locking torque is 2NM.

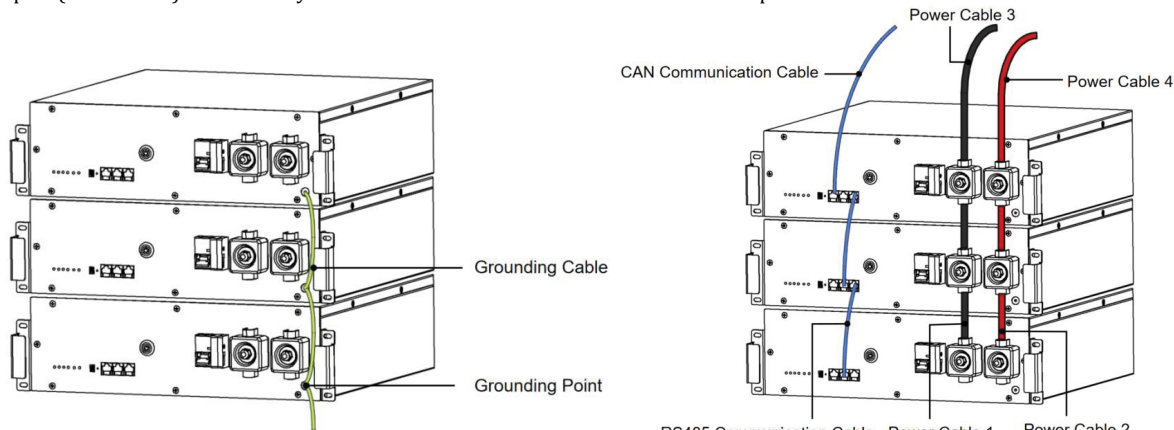
Step 2: Power connections between batteries

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.

For 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 Steps 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.



Step 4: Connect the CAN communication line

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

Step 5: Connecting the RS485 communication line between batteries

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

NOTE :

- 1. When the inverter is electrically connected, the inverter and batteries need to be powered off.
- 2. It is forbidden to mix batteries of different brands, specifications and batches, otherwise, it will cause a system failure.
- 3. 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.

6. Equipment debugging

Step 1: Primary dial setting: Setting the Primary DIP Address according to different communication protocols and inverter brands.

- Inverters using the **CAN** communication protocol need to set the Primary DIP Address according to the following table name of CAN communication.
- Inverters using the **RS485** communication protocol need to set the Primary DIP Address according to the following table name of RS485 communication.

Primary unit	DIP ON	DIP OFF	Inverter brands	
			CAN communication	RS485 communication
	1	2	Pylon, Deye	GT, SMK
	2	1	HANCHU ESS, Luxpower	HANCHU ESS
	1,2	/	Victorn, SMA	Voltronic
	/	1,2	Protocols can be selected on HANCHU TestSys	

NOTE:

- The battery directly connected to the inverter is the primary and the rest are subs. Only the primary needs to set the DIP address to select the protocol.
- When #5 is dialled to OFF status, protocol can be selected on HANCHU TestSys.

Step 2: Equipment power on

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

- 1) First turn on the inverter.
- 2) Then press the power switch power on the battery pack in turn to turn on.
- 3) Next, turn on the circuit breaker switch on the battery.
- 4) Observe the status on the battery panel to ensure it is normal ('RUN' green light flash, 'ALM' light off).

NOTE:

The shut down procedure is opposite to the startup process, first shut down the battery circuit breaker; Then shut down the power switch power on the battery. Final turn off 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.

Step 3: Confirm Address

- 1) When the system is used in parallel, it supports up to 16 batteries in parallel.
- 2) This battery supports automatic address recognition between the primary and subs, no need to manually set the DIP address.

Step 4: Inverter Protocol Selection

- 1) On the inverter, the battery manufacturer chooses the same protocol as the battery.
- 2) Then you should see the normal status information of the battery pack such as voltage, SOC, etc. from the inverter.

Contact

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