

YIXIANG DIY V3 Stacked Battery

Assembly Instructions

280ah 300ah 302ah 304ah 320ah



Chapter 1 Preparation

1.1 Tool Requirements:

Torque wrench (torque range:4-6N·m)

Insulating tape,screwdriver,multimeter

1.2 Safety Precautions:

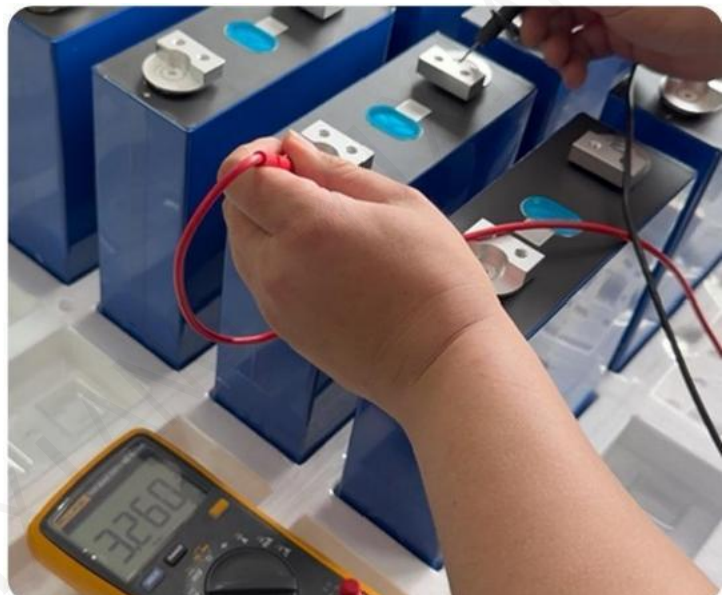
Wear insulated gloves before operation and ensure a dry, ventilated work environment.

Avoid short circuits between positive and negative terminals, and keep away from open flames

Chapter 2 Assembly Procedures

Step 1:Voltage Detection of Battery Cells

Use a multimeter to detect the voltage of battery cells, ensuring voltage consistency (deviation $\leq\pm 5\text{mV}$).



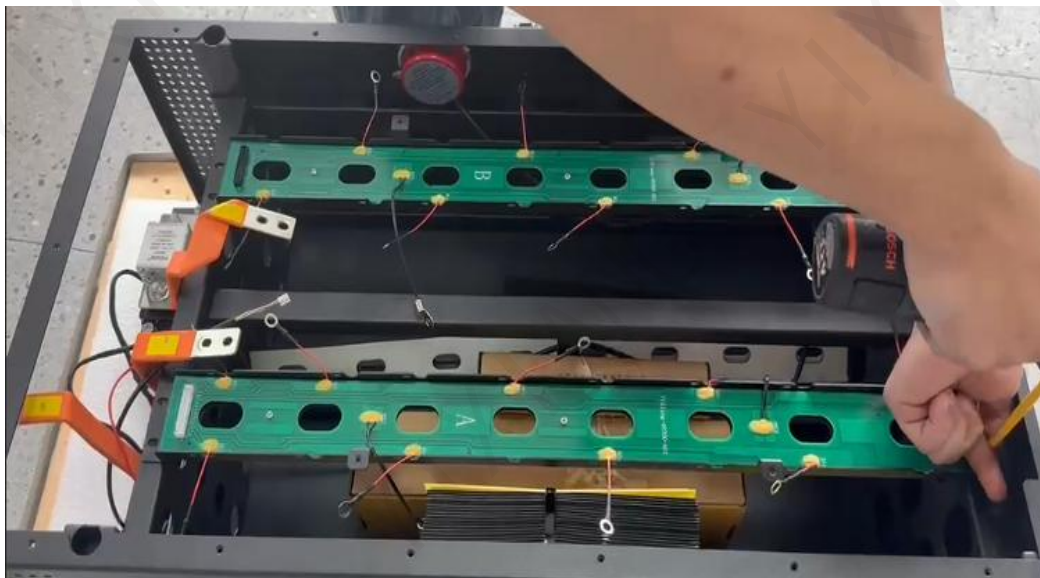
Step 2: Remove the Box Housing

Remove the case cover and the yellow insulation sheet and communication panel, Release the interface and flexible busbar of the communication panel connection



Step 3: Remove Fixings and Take Out Other Items

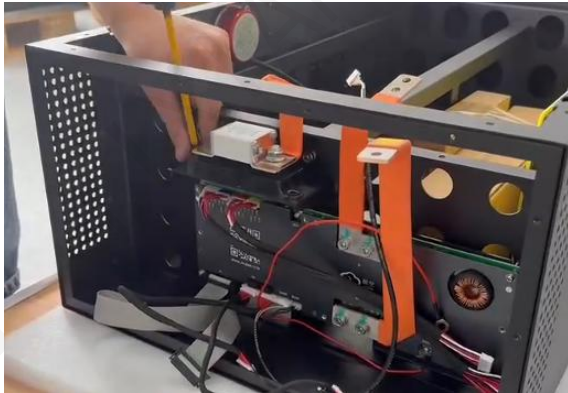
Remove the PCB clamping strip and shield from the box, and thoroughly clean all items inside to ensure the cavity is clear.



Step 4: Loosen Panel Fasteners & Release Baffle

Remove the fuse.

Loosen the fixing screws of the front panel and release the built-in baffle to prepare the box for battery cell placement.



Step 5: Laying of Insulation Materials

Attach yellow insulating boards to the inner walls of the box, ensuring full coverage of all metal contact surfaces to prevent electric leakage.



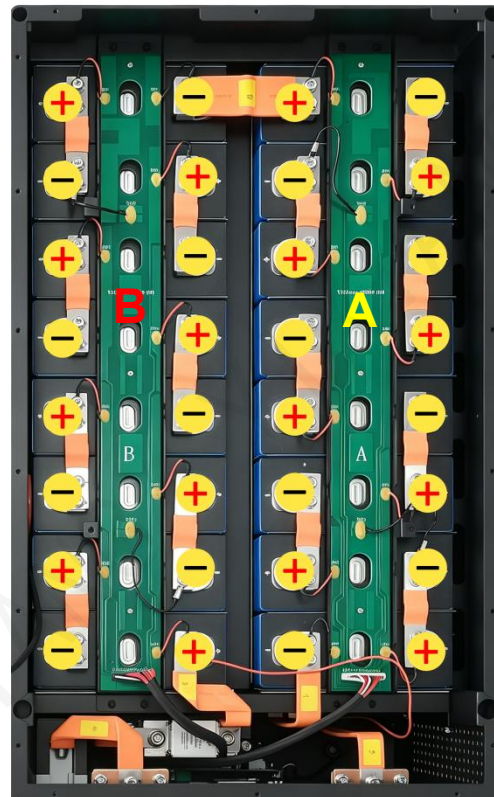
Step 6:Laying of Insulation Materials

Lay black EVA foam at the designated positions inside the box to enhance the buffering and insulation performance of the battery pack.



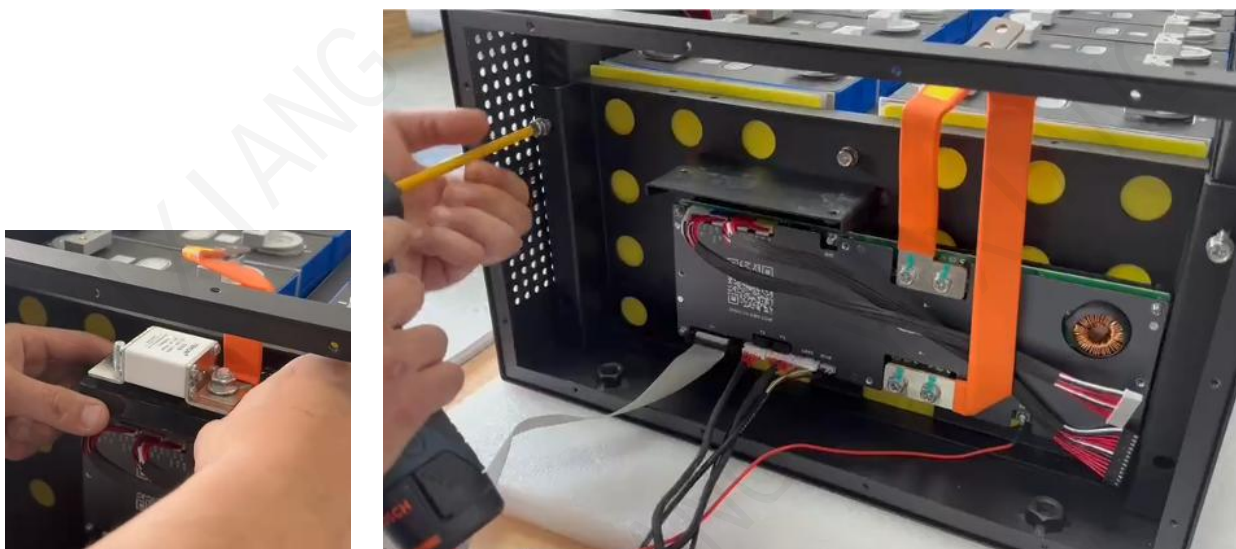
Notes on Battery Placement

Arrangement of Insulation Sheath,EVA Cotton,and Battery Termina



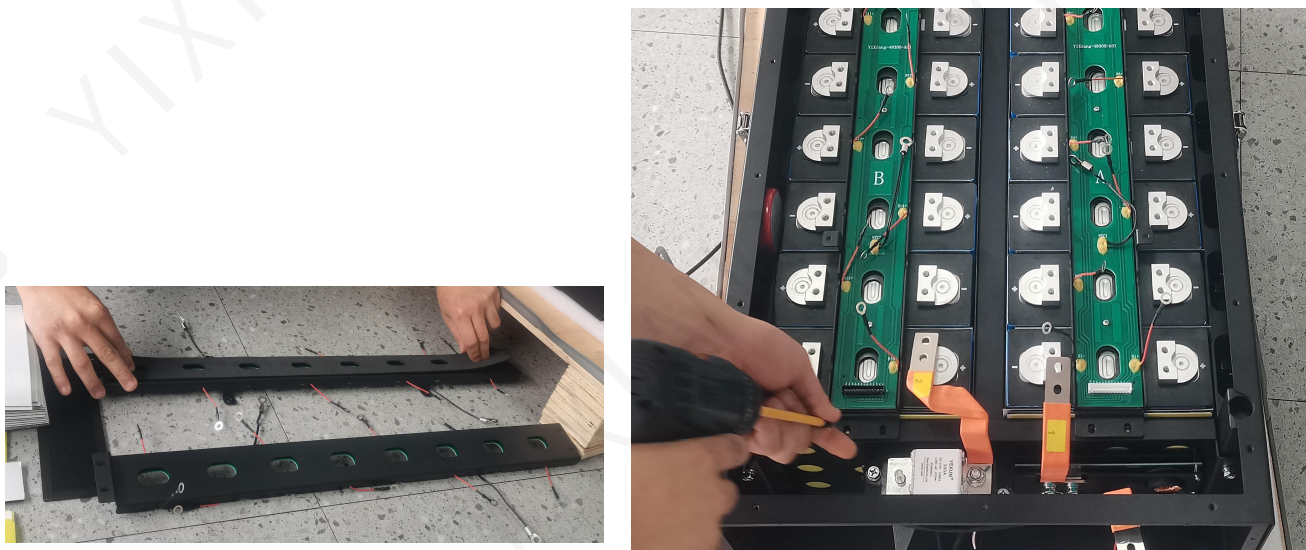
Step 7: Install the front baffle

Install the front baffle. After tightening the screws, pull on the battery to check if it is secure. Then, install the fuse.



Step 7: Install EVA foam and PCB clamping strip

Attach EVA foam to the specified position, then install and lock the PCB clamping strip to secure the PCB board in place.



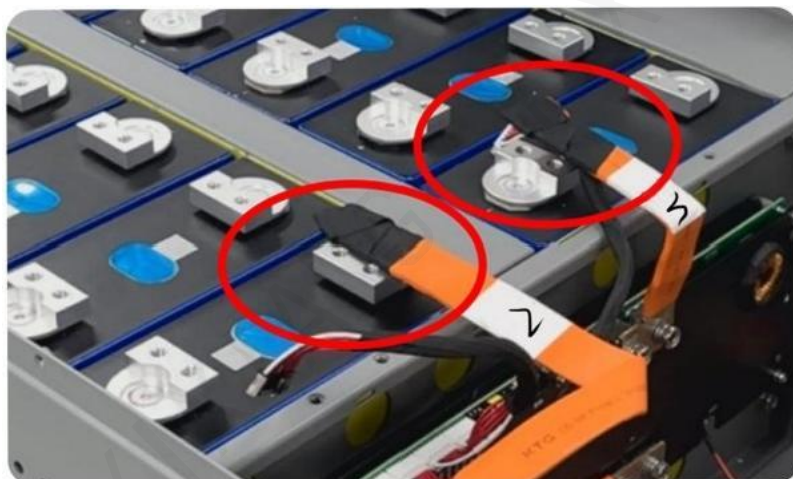
Step 8: Locking PCB clamping strip

Positive pole is connected to PCB-B

Negative pole is connected to PCB-A



Insulate positive and negative busbars
(high-temperature-resistant insulating tape
is recommended).



Step 9: Installation of Flexible Busbars

Use a torque wrench to install the flexible busbars for the battery cells. Ensure the busbars are in tight and close contact with the battery terminal posts, with all connections firm and free from loosening.

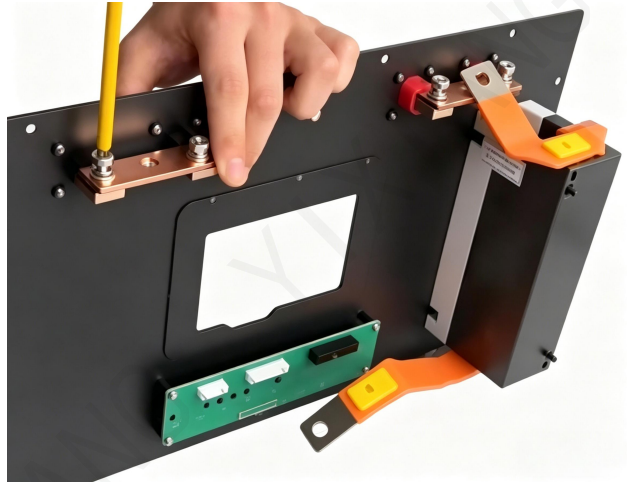


Use torque machine Value: 4~6NM

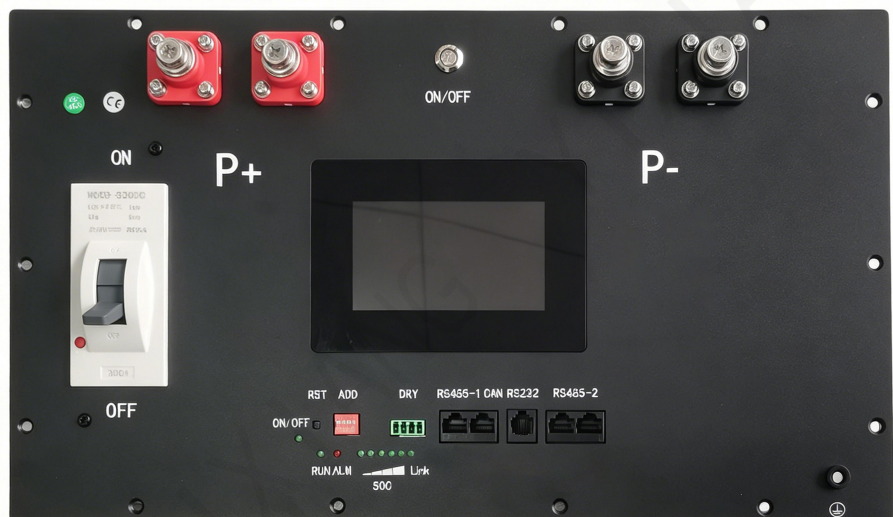


Step 10: Install the Control Panel

After installing rubber pads on the four terminal posts, proceed with the assembly and tighten the screws.

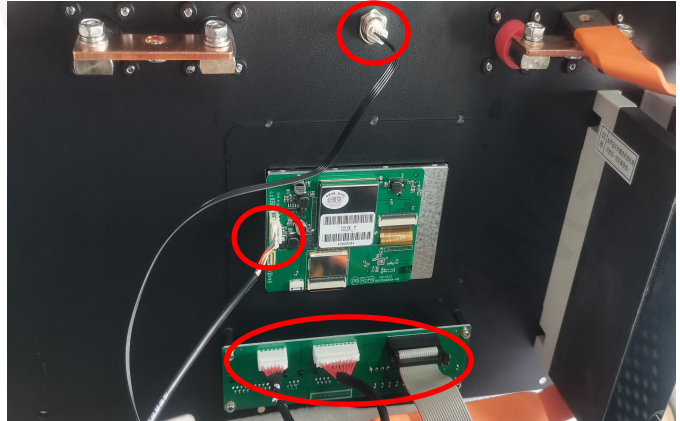


Remove the protective film from the display screen and install it at the designated position using the positioning markers.



Step 10:Reinstall the Front Panel

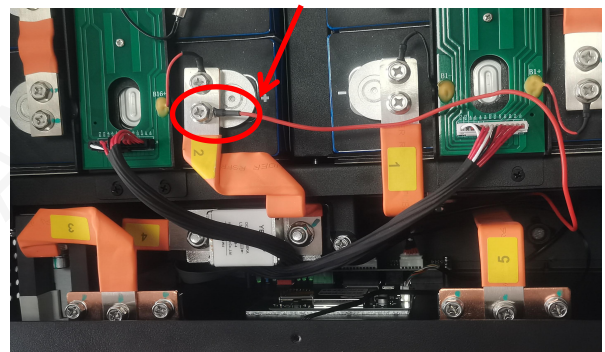
Connect the interface behind the communication panel .



Install the flexible busbar.Check the torque indicators for the flexible busbar connection (Use torque machine Value:4~6NM)

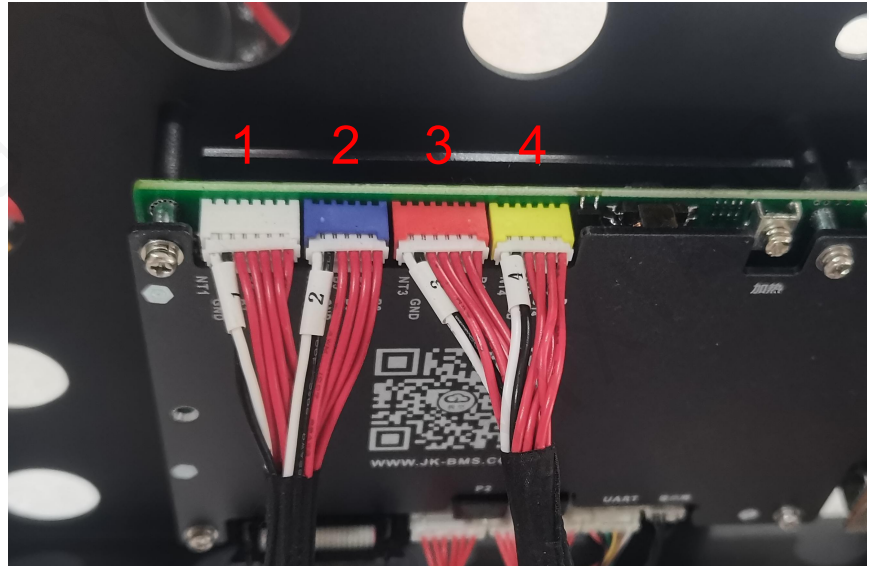


(Note:Connect the red wire to the positive terminal of the battery pack during this step.)



BMS wiring operations

please check the connection line sequence
of BMS(1-2-3-4)

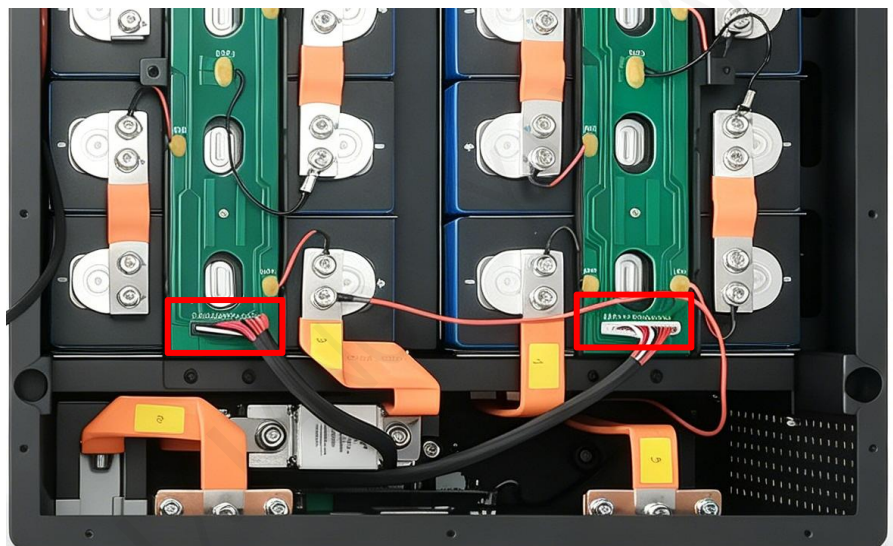


Insert the black wire harness into the black port of the PCB board
and the white wire harness into the white port of the PCB board.

Check polarity of all harnesses to

prevent reverse

connection damage.

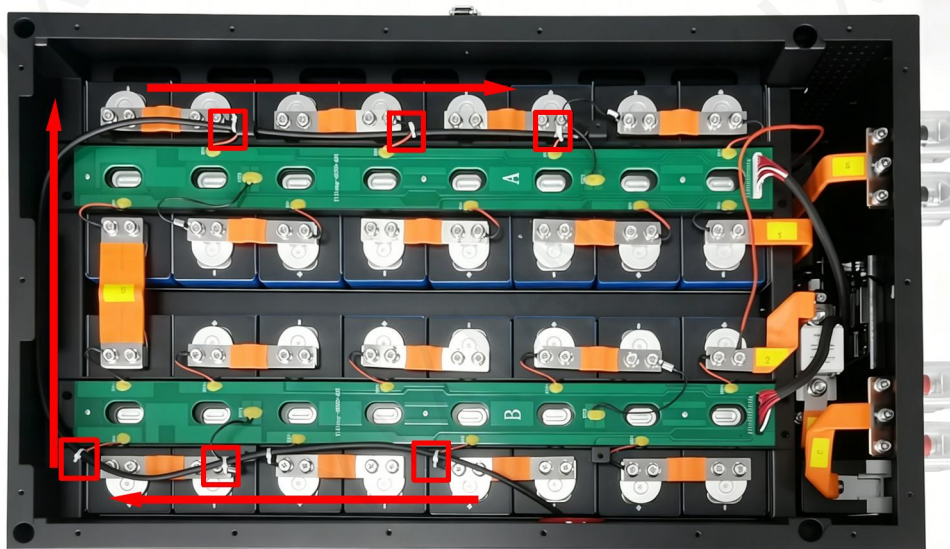


After confirming the wiring port is correct, press the screen switch to check the display status. Once verified, tighten the screws on the communication panel.



Step 11: Fire extinguisher wiring method

Place the starter wire of the fire extinguisher sol gel in the position indicated on the diagram and secure it with a strap. After fixation, trim any excess binding straps.



Step 12:Lay the Insulation Board

After confirming that all wiring and component installations are correct and error-free,lay the insulation board at the specified internal position of the box to provide secondary insulation protection for the internal components.



Step 13:Close and Lock the Box Cover

Coat the box cover onto the battery box and tighten all locking screws evenly to ensure the box cover is sealed tightly and securely.



Chapter 3 BMS Configuration (Jikong BMS)



Before operation



After operation



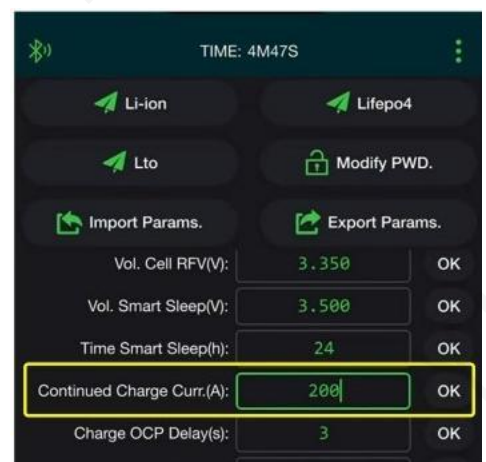
Modify password of settings



Click LiFePO4



Adjust the corresponding
capacity parameter.



Adjust charge/discharge
capacity parameters

Attention:After placing the cells into the box and
ompleting the installation,power on the battery.

You may see two red warning indicators—do not worry.

This is due to the default password not being changed.

Simply click to reset the password, (**Default password:123456**)

and the two redalarms will disappear.

Chapter 4 Accessories List

