

## Quick Installation Guide

### Off-grid Inverter GF1-3K24S1

Scan the QR code below to view user manual and video



## II

## Packing List


**Note:** Delivery marked with 'optional', which need to be purchased additionally, please contact your local dealer for details respectively.

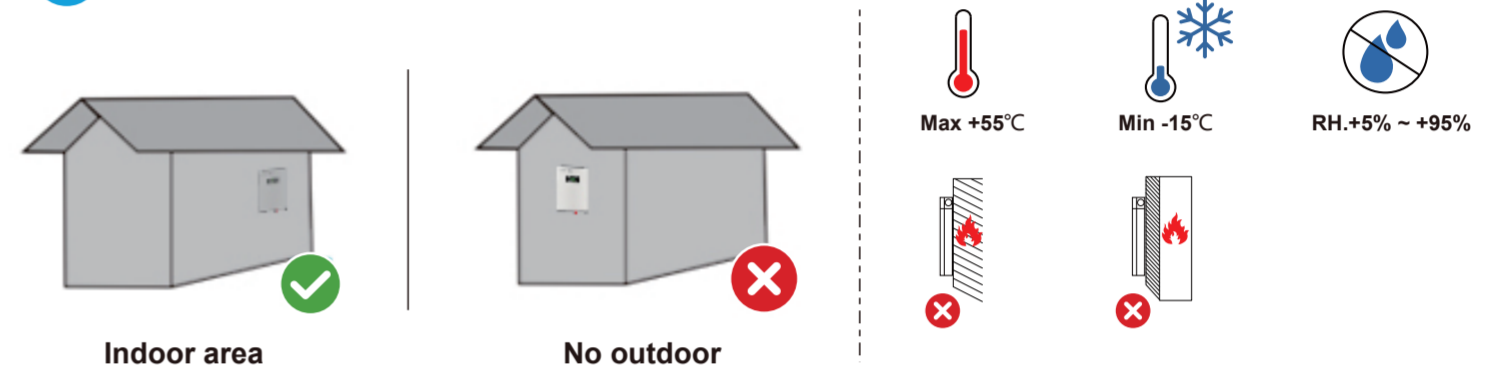
## I

## Preparation Tools

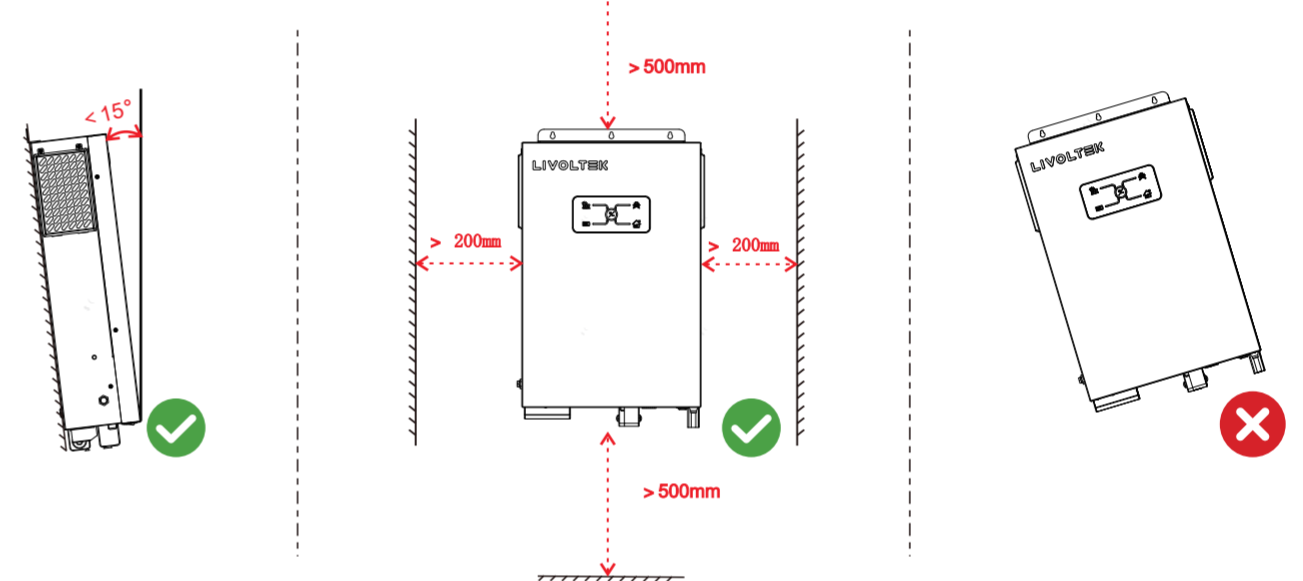

## III

## Installation Instructions

### A Location and Environment Requirements

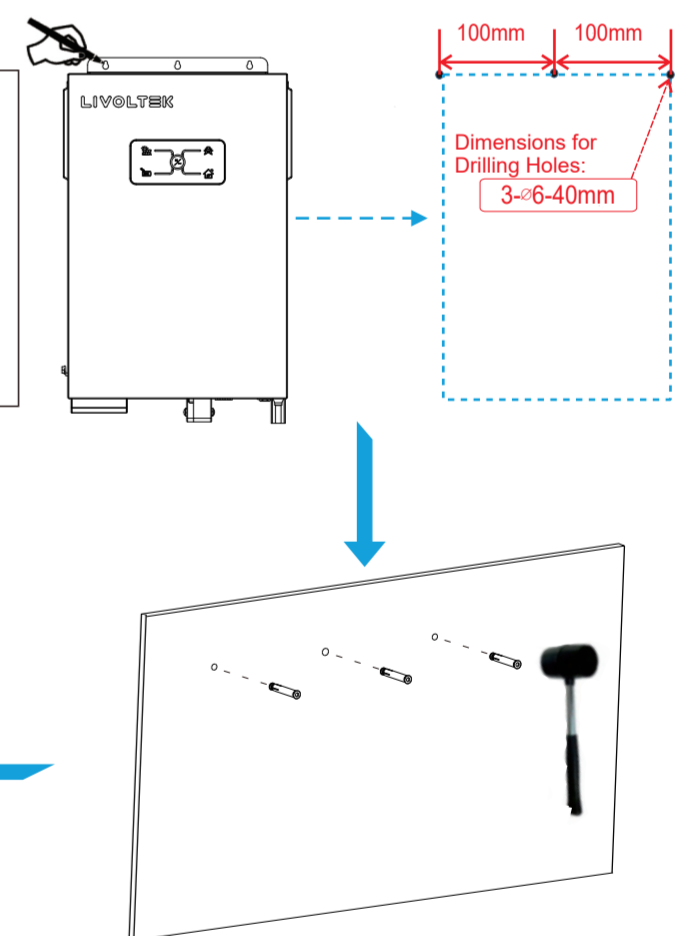


### B Angle and Space Requirements



### C Mounting Instructions

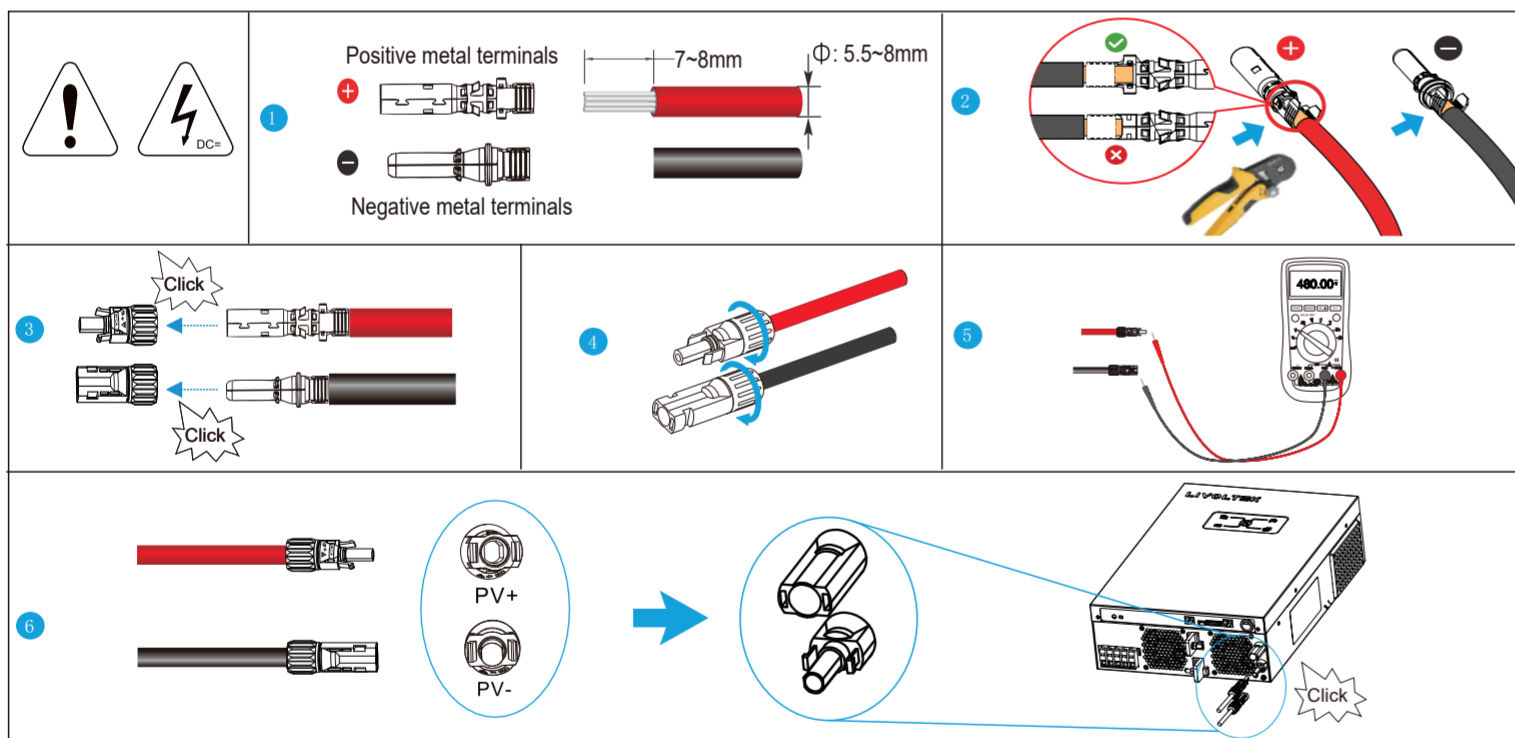
- Step1: Drill holes on the wall:**
- Mark the positions of holes of 3 corners of the inverter's bracket by marker pen.
  - Drill holes with driller and make sure the holes are deep enough (at least 40mm) to support the inverter.
- Step2: Drill holes on the wall:**
- Insert the expansion tubes into the holes and tighten them. Then install the inverter by screwing the screws.
- Step3: Installation Self-check**
- Make sure the inverter is well fixed.



## IV

## PV Cable Connection

- Remove an appropriate length (about 7~8mm) of the insulation layer from the PV Strings power cables.
- Connect the red wire to the positive metal terminal, and the black to the negative and crimp them using a crimping tool.
- Insert the crimped positive and negative power cables into the corresponding connectors until a "click" sound is heard.
- Tighten the locking nuts on the positive and negative connectors.
- Measure the voltage of every route Strings using a multimeter. Ensure that the polarities of the DC input power cables are correct.
- Insert the positive and negative connectors into their corresponding terminals of the inverter until a click sound is heard.

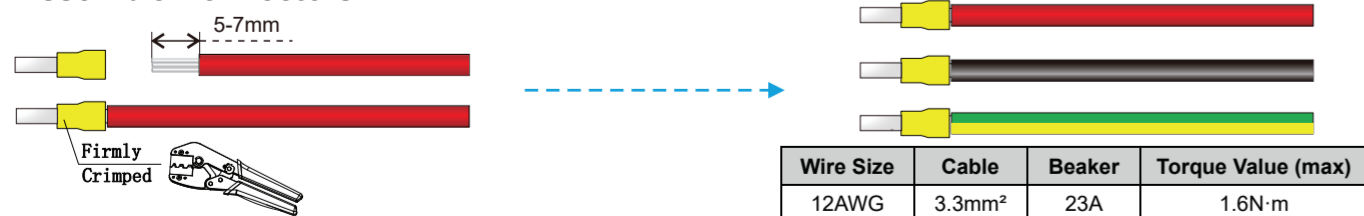


## V

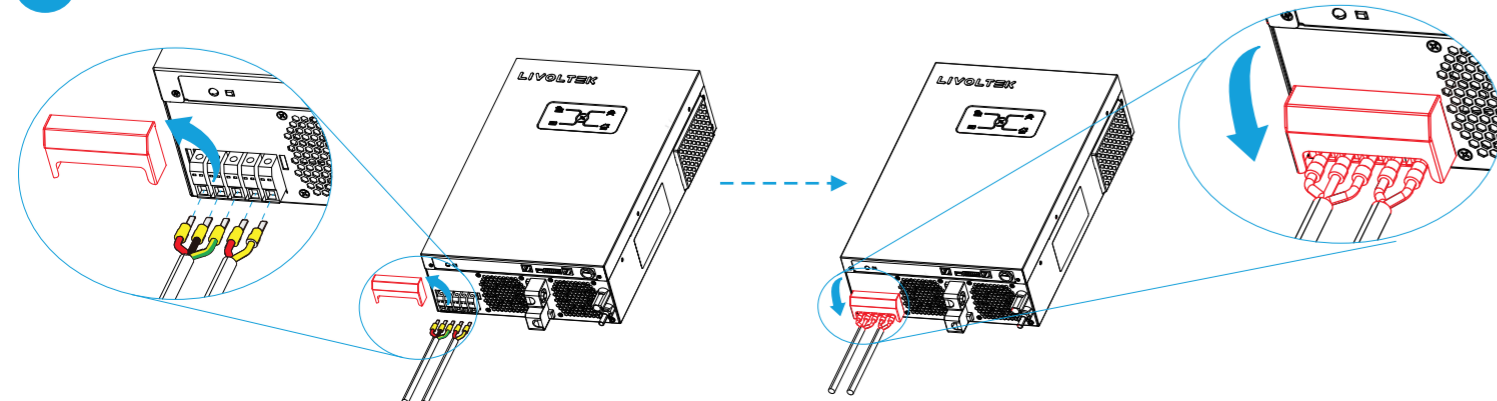
## AC Cable Connection

- Remove the cable jacket and strip the wire insulation by 5~7 mm.
  - Insert the conductors to the corresponding terminal and crimp them tightly.
  - Pull out the terminal protective cover diagonally upwards.
  - Insert GRID input and EPS output wires according to polarities indicated on terminal block and tighten the terminal screws.
- Note:** Connect 'PE' conductor to the grounding electrode. Connect 'L' and 'N' conductors to the AC circuit breaker.
- Make sure the wires are securely connected and slide the catch of the cover downwards to fix on.

### A Assemble Connectors



### B Install Connectors

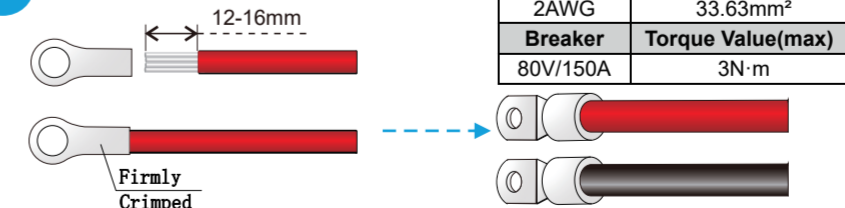


## VI

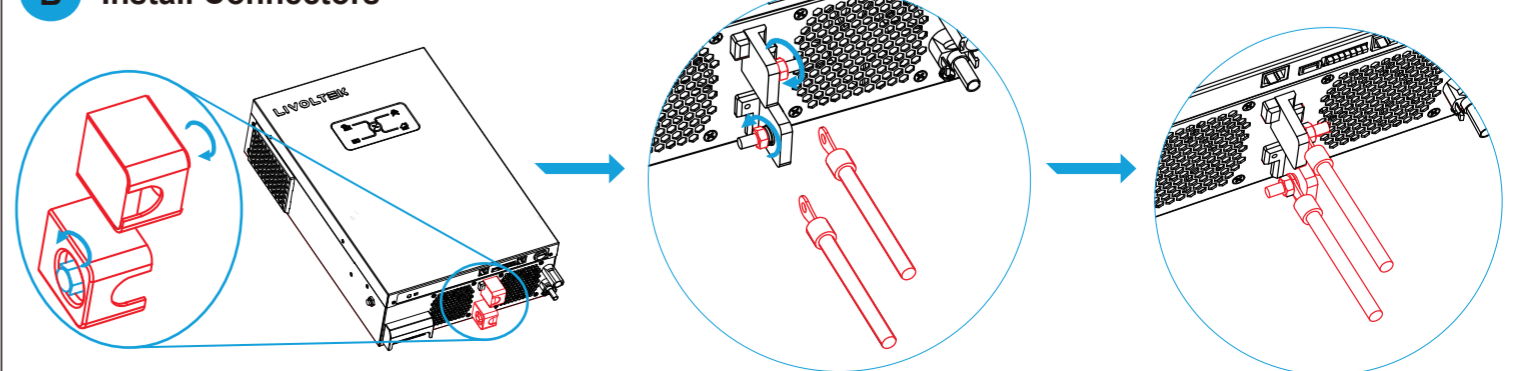
## Battery Cable Connection

- Remove insulation sleeve 12-16 mm for positive and negative conductors.
- Insert the exposed areas of the positive and negative power cables into the corresponding metal terminals of connectors respectively and crimp them using a crimping tool.
- Rotate the screws of protective covers at positive and negative connectors anticlockwise and loosen them to take off.
- Turn the screw anticlockwise to taken down, then insert the battery wires into battery connectors and make sure the bolts are tightened in clockwise direction.
- Make sure polarity at both the battery and the inverter/charge are correctly connected and conductors are tightly screwed into the battery terminals. Then, rotate the screws of protective covers clockwise to fix on.

### A Assemble Connectors



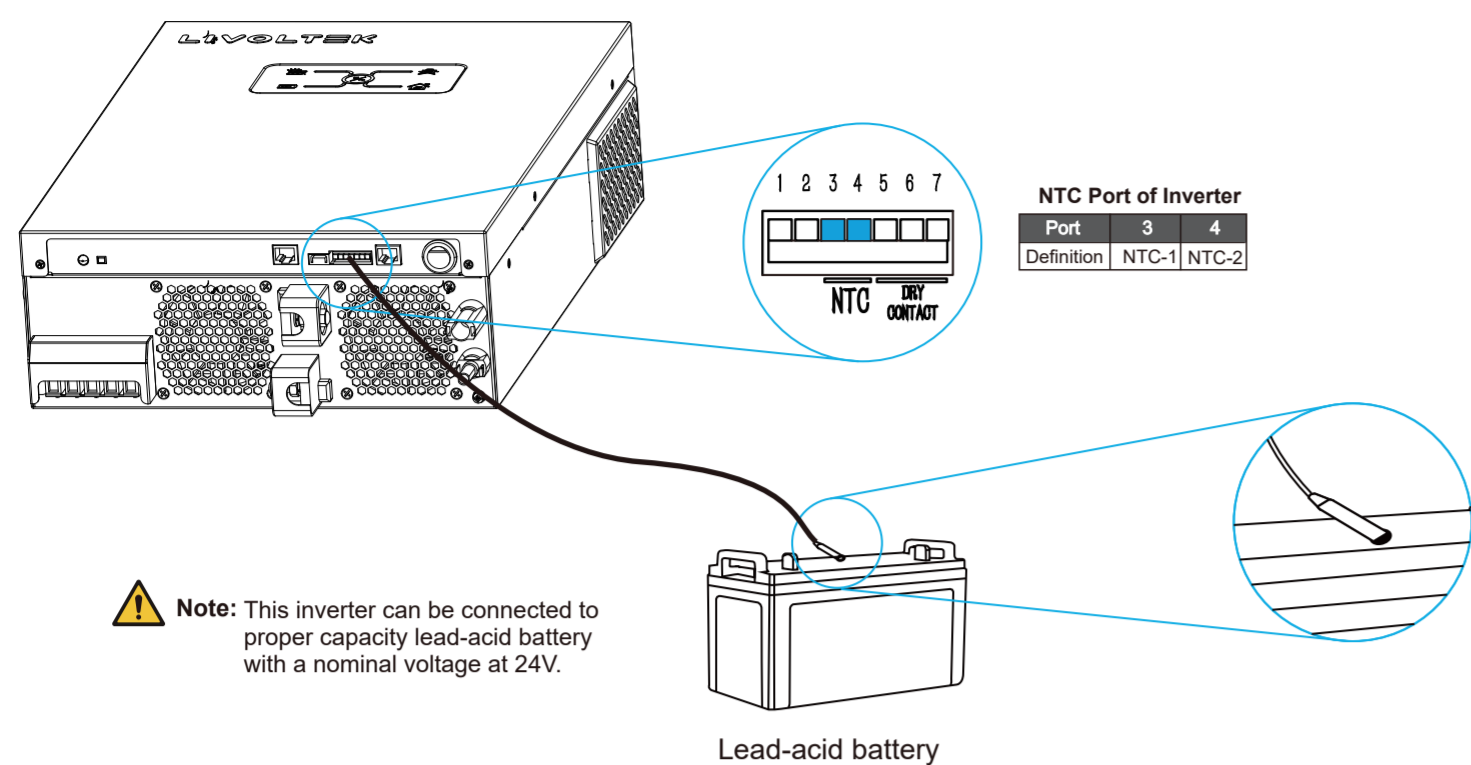
### B Install Connectors



## VII

### Battery Communication Connection

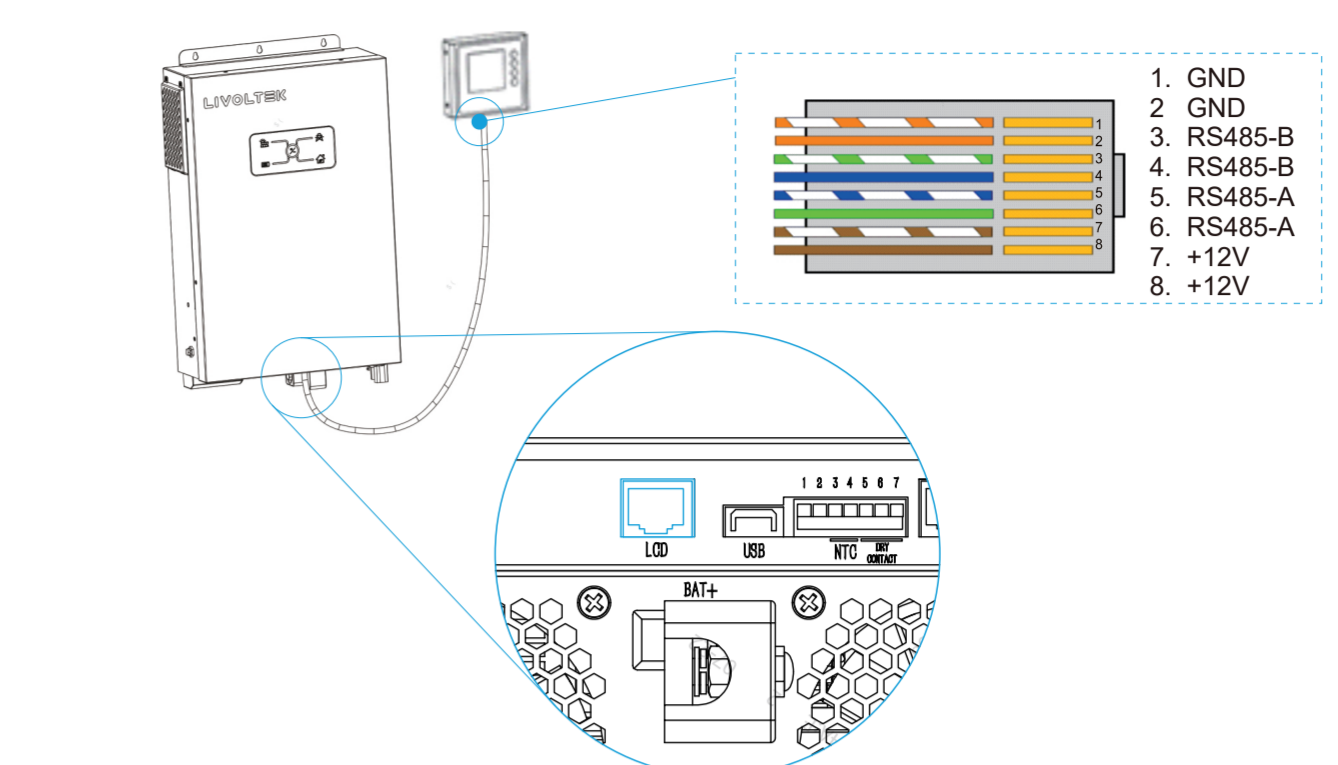
- Step 1 Please find the NTC cable and a piece of tape in the accessories package of inverter.  
 Step 2 Insert the exposed terminals of NTC cable into the NTC port of inverter.  
 Step 3 Please clean the surface part of battery where you will stick cables before sticking (any place but must be nonmetallic).  
 Step 4 Attach the teardrop-shaped terminal of NTC cable to the battery and tape it in place.



## VIII

### External LCD Display Connection(Optional)

- Note:** Communication interface between inverter and external LCD screen is RS485 with a RJ45 connector.  
 Step 1 Insert the RJ45 connector into the port marked "LCD" on the inverter and tighten the cover.  
 Step 2 Plug the other end of the RJ45 cable into the port of the external LCD screen.



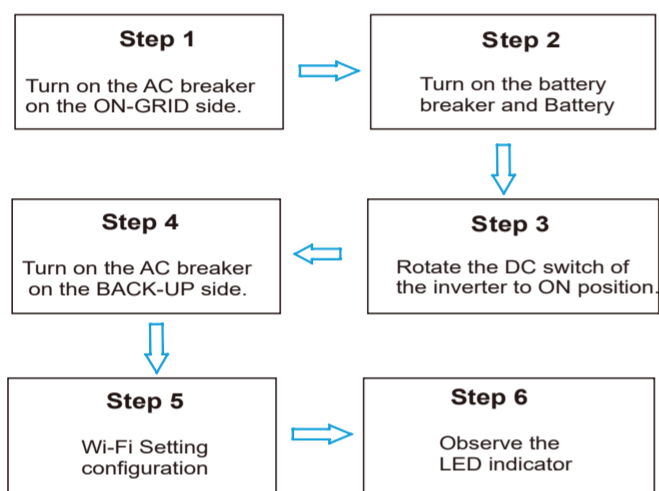
## IX

### Powering ON/OFF the Inverter

#### A Inspection before Commissioning

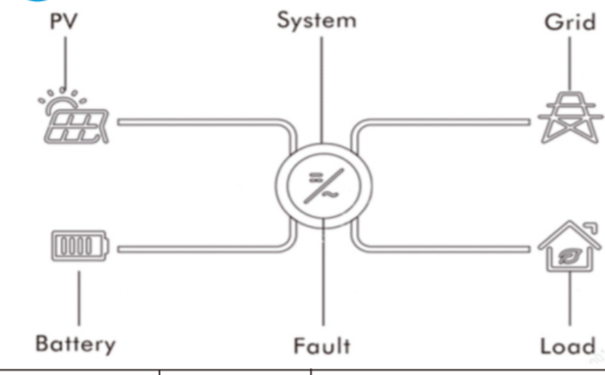
No.	Content	State
1	All the switches connected to the inverter are set to the OFF position.	Yes/No
2	The inverter is installed correctly and securely.	
3	All cables are connected correctly and securely.	
4	Unused cable holes are fitted using the waterproof nuts.	
5	The electrical conduit holes are sealed.	
6	The battery is well connected.	

#### B Powering on the System



**Note:** The shutdown steps are opposite to the above order.

#### C LED Display



Color	Status	Description
Green	On	The inverter is running normally
	Off	Other statuses except Running
Red	On	Fault occurs
	Off	No fault occurs
Green/Red	Blink	System startup or updating

**WARNING** Before maintaining and commissioning inverter and its peripheral distribution unit switch off all the charged terminals of the inverter, and wait at least 10 minutes after the inverter is powered off.

## X

### Wi-Fi Configuration

#### A Preparation

- Power on inverter.
- Power on router and check the wireless networks that your mobile phone joined.
- Open the 'My Livoltek' APP.

**APP:** Search for My Livoltek on Apple App Store, Google Play.



**Note:** 'My Livoltek' is the APP to communicate with your device via WiFi or bluetooth on your phone. You can scan the QR code to download the APP on your phone.

#### B Configuration on the APP

**Step 1**  
Click on 'Local Mode'

**Step 2**  
Click on 'Bluetooth'

**Step 3**  
Find your inverter according to device's SN number ("BLF-GF-xxxx"), which is the few tail numbers of SN on the label.

**Step 4**  
Click on click settings

**Step 5**  
Click on 'Network Configuration'

**Step 6**  
Enter wireless network name & password and click on 'Confirm'

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