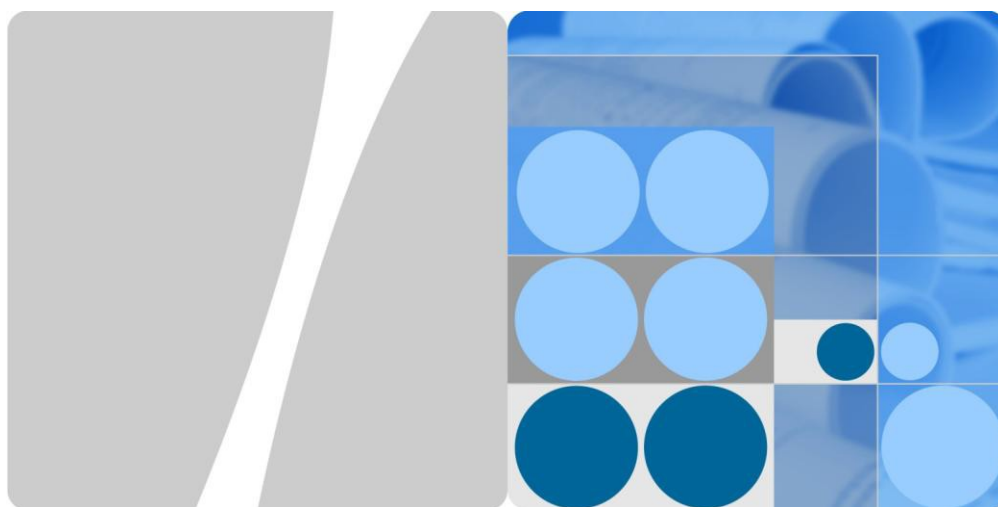




KY-EST Series Three-Phase Energy Storage Inverter (30-60kW)

Quick installation Guide

Jiangsu Koyoe Energy Technology Co.,Ltd

Add: Building 3, Industrial Zone C, No.588 Wutaishan Road, New
District, Suzhou, Jiangsu P.R. China

Business Cooperation: info@koyoe.com

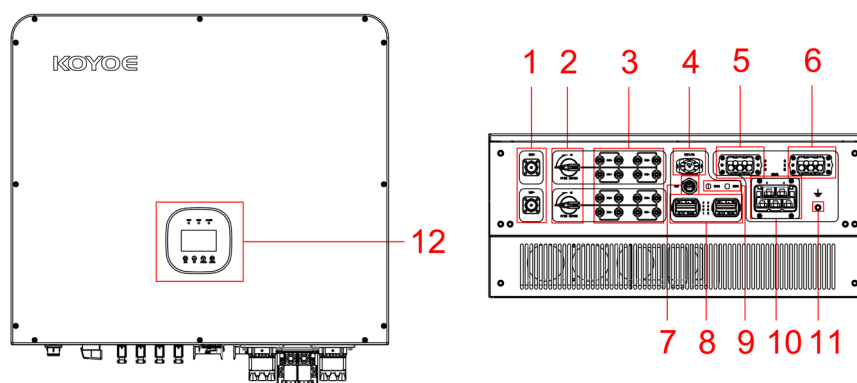
After Sales Service: service@koyoe.com

Web: www.koyoe.com

Global Support Hotline: +86 400-900-9536

1 System Installation

1.1 Interface introduction



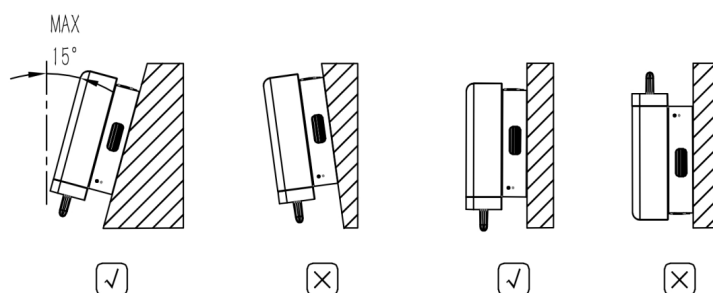
Description			
NO	Designation	NO	Designation
1	BAT Terminal	2	PV Switch
3	PV Terminal	4	WIFI/4G
5	UPS Terminal	6	Terminal for Diesel Generator
7	USB Terminal	8	COM Terminal
9	Dry Contact Terminal	10	GRID Terminal
11	Ground	12	LCD

1.2 Packing List

Inverter X1	PV negative plug X8	PV positive plug X8	BAT positive plug X1	BAT negative plug X1
CT sensor X3	COM connector X2	UPS connector X1 Tube type terminal X5	GEN connector X1 Tube type terminal X5	GRID connector X1 M10 terminal X5
M8 terminal X1	Meter X1	Communication line X1	Panel X1 Wall hanging strip X3	Expansion bolt X6
Installation Information X1	WiFi/4G X1(optional)	Pedestal X1(optional)		

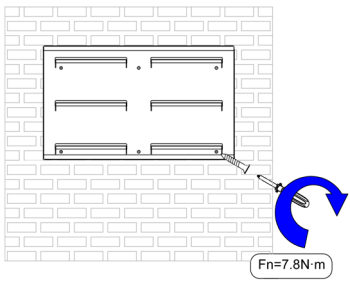
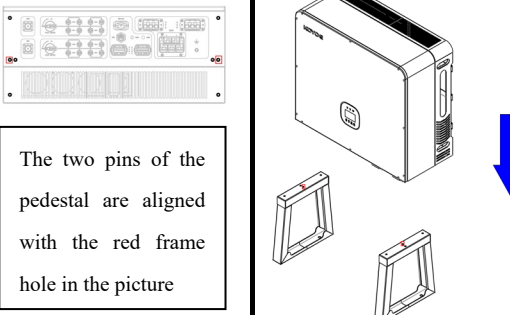
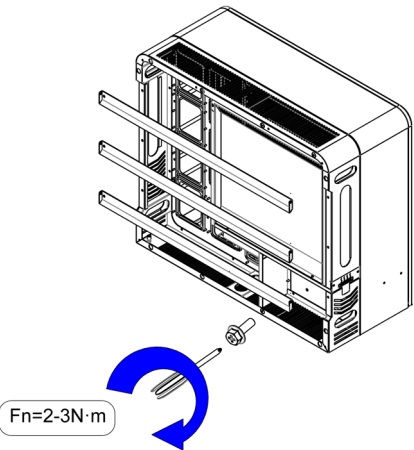
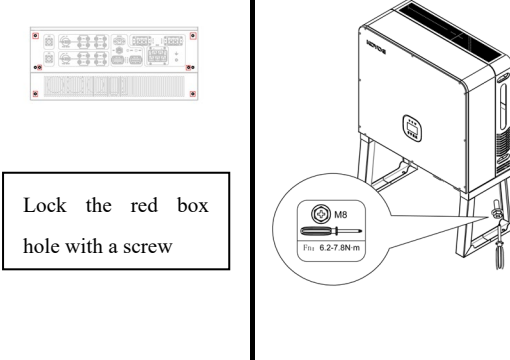
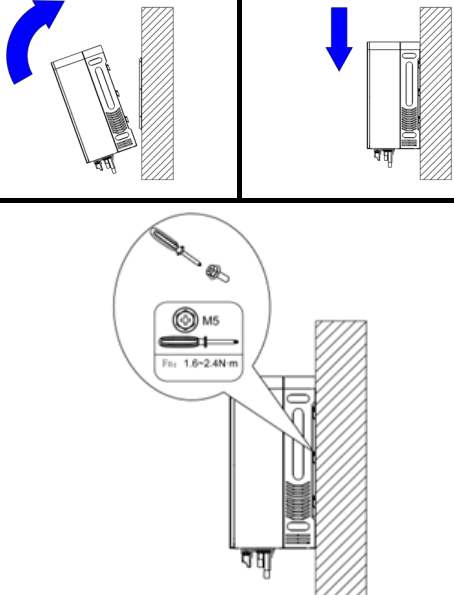
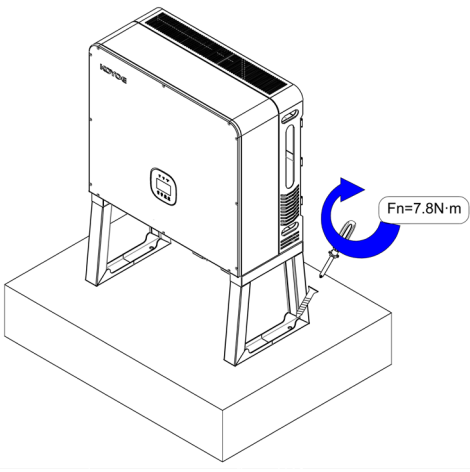
1.3 Installing Inverters (concrete wall installation as an example)

Correct device installation method



Install the inverter according to the following steps (two installation methods, please refer to one of the following two installation methods according to whether you choose the pedestal)

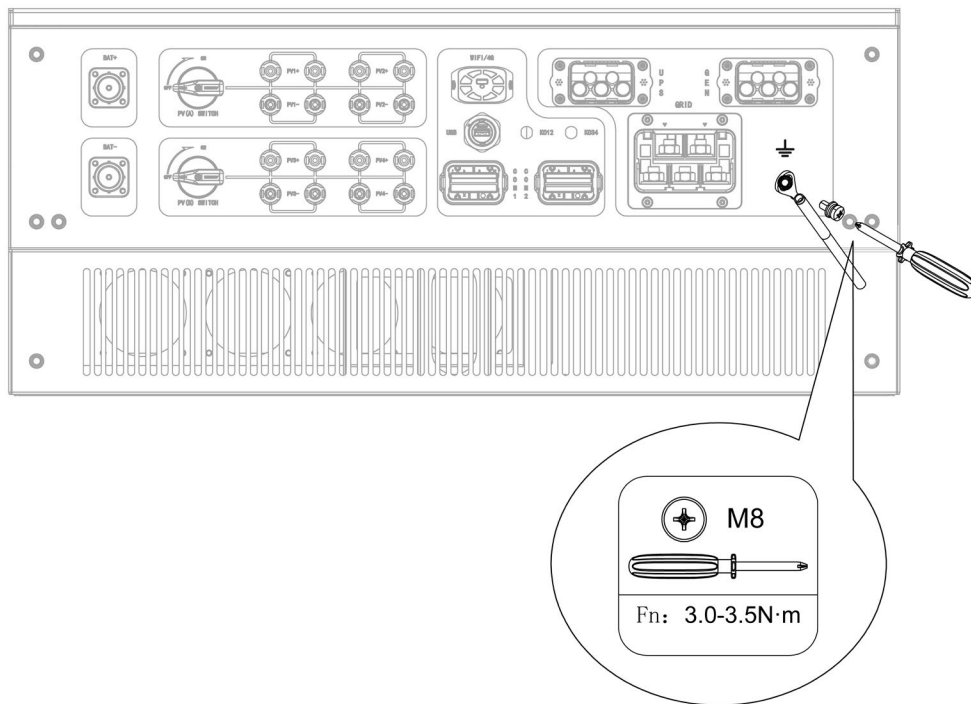
Choose the pedestal	Choose the pedestal					
Wall-mounted	Floor-mounted					
Step 1: Select the appropriate installation location						
<table><tr><td>Front: 300mm</td></tr><tr><td>Left: 500mm</td></tr><tr><td>Right: 500mm</td></tr><tr><td>Down: 600mm</td></tr><tr><td>Up: 300mm</td></tr></table>		Front: 300mm	Left: 500mm	Right: 500mm	Down: 600mm	Up: 300mm
Front: 300mm						
Left: 500mm						
Right: 500mm						
Down: 600mm						
Up: 300mm						
Step 2: Mark the hole location	Step 2: Install expansion bolts					
Step 3: Install expansion bolts						

Step 4: Install panel and wall strip	Step 3: Install pedestal
 Fn=7.8N·m	 The two pins of the pedestal are aligned with the red frame hole in the picture
 Fn=2-3N·m	 Lock the red box hole with a screw Fn=6.2-7.8N·m
Step 5: Install the inverter	Step 4: Install the inverter
 Fn=1.6-2.4N·m	 Fn=7.8N·m

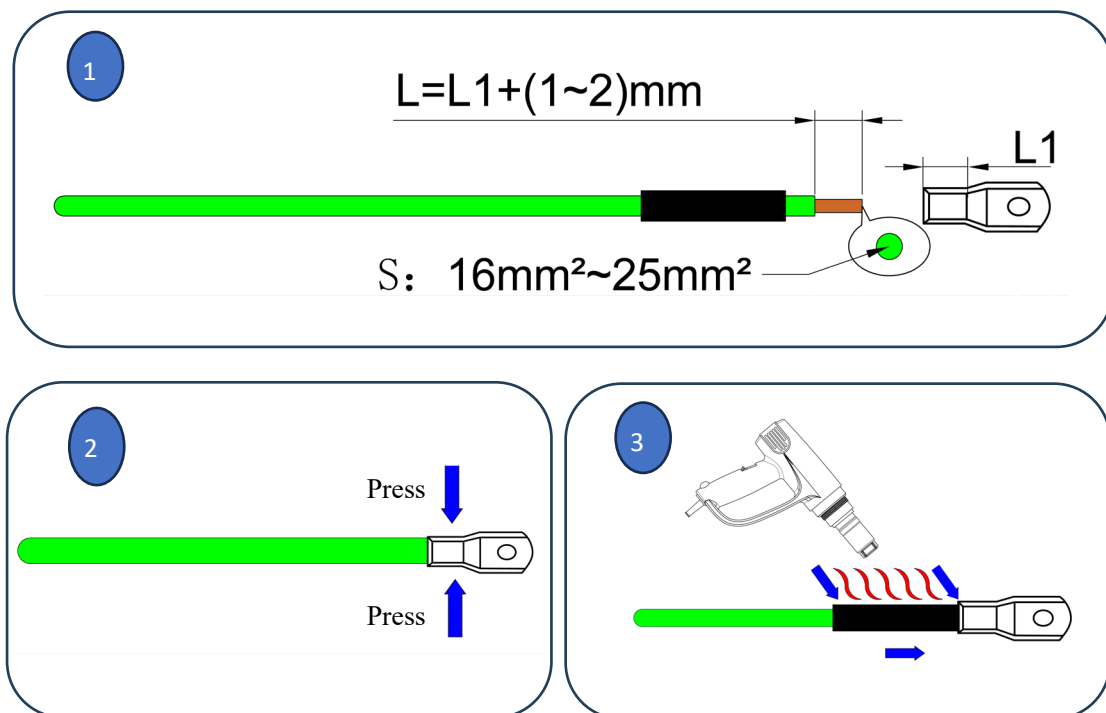
2 Electrical Installation

2.1 Ground side

Installation position of the grounding cable

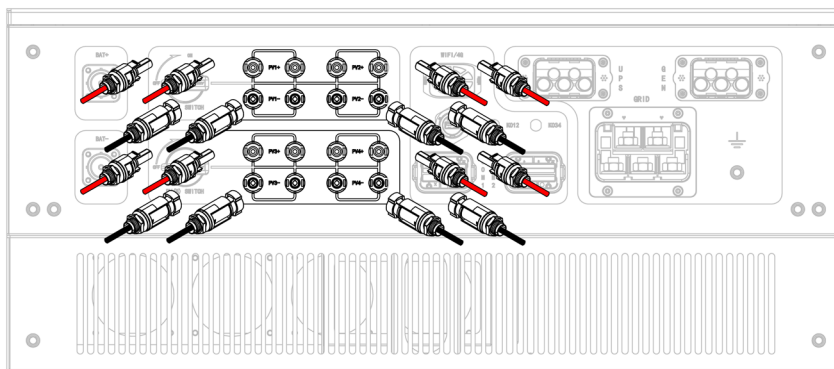


Wiring Harness Making

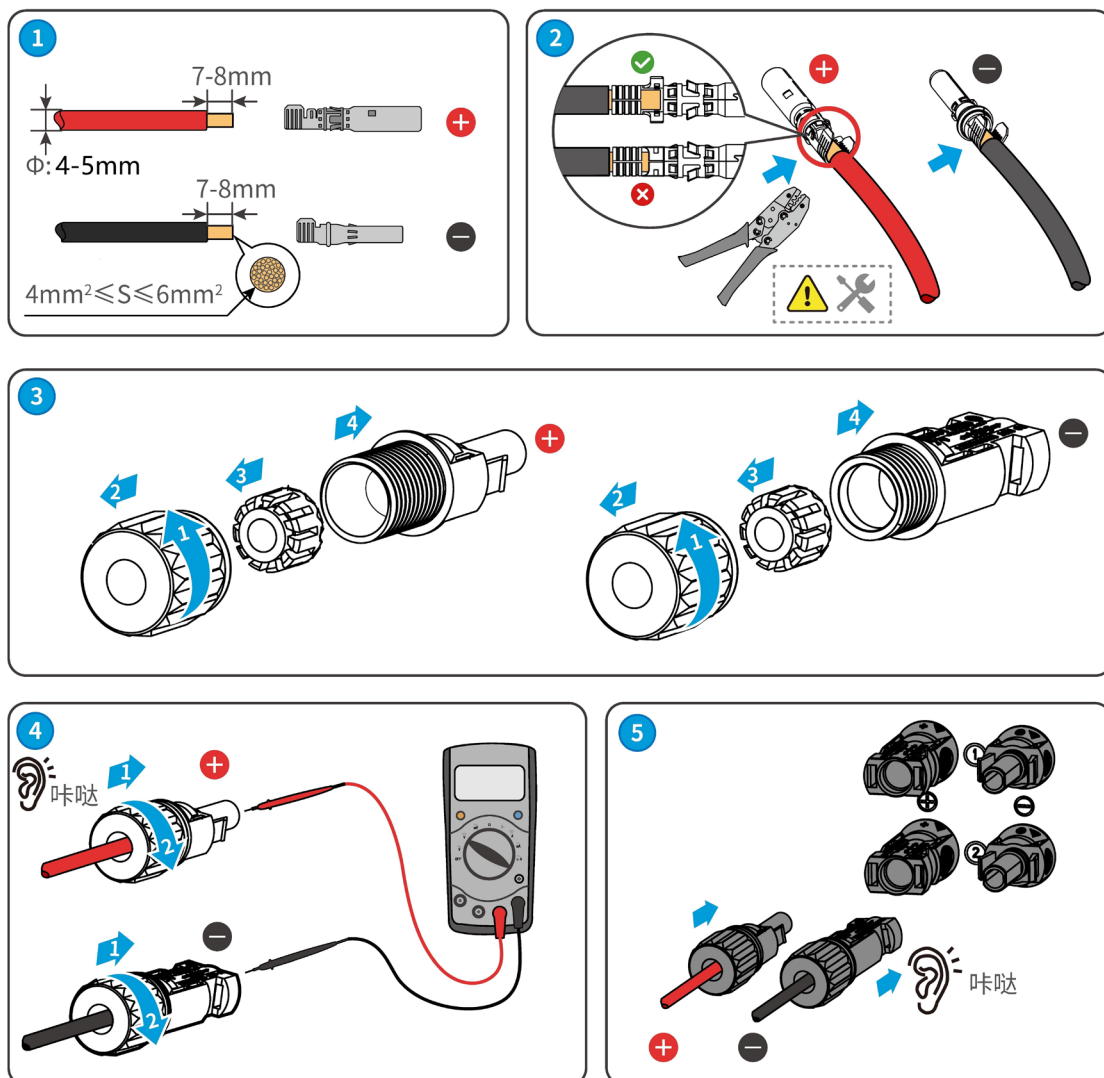


2.2 PV side

Installation position



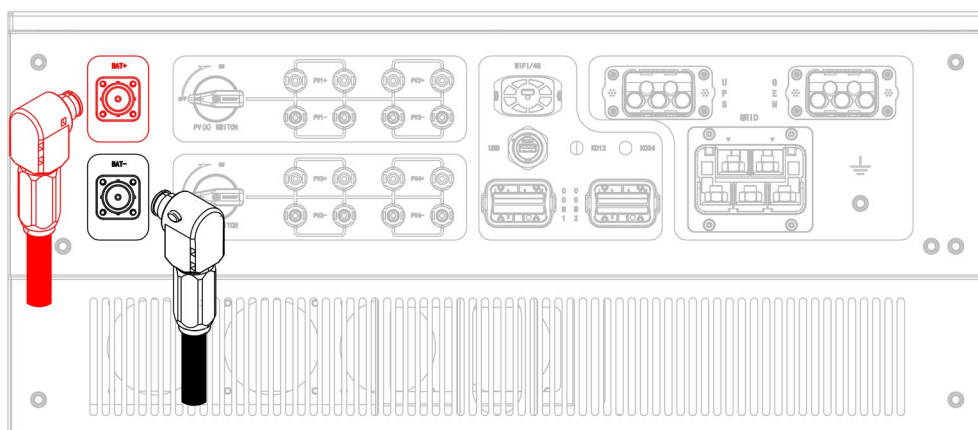
Wiring Harness Making



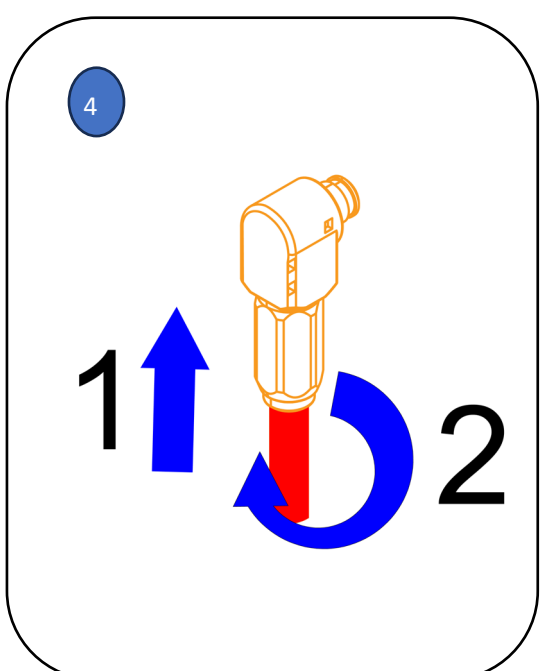
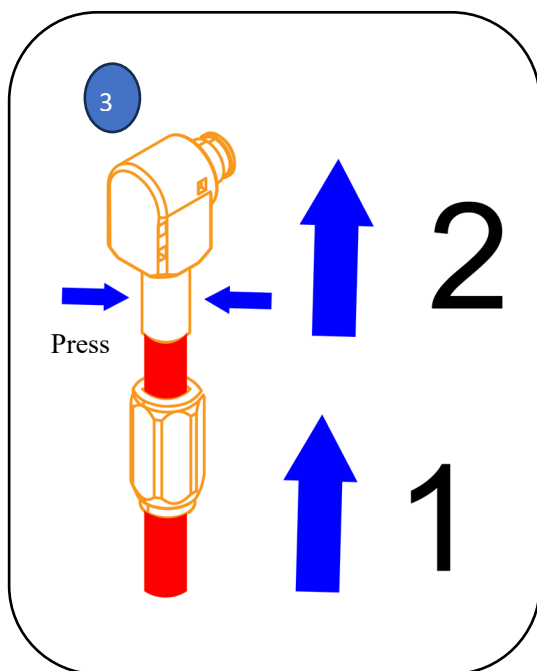
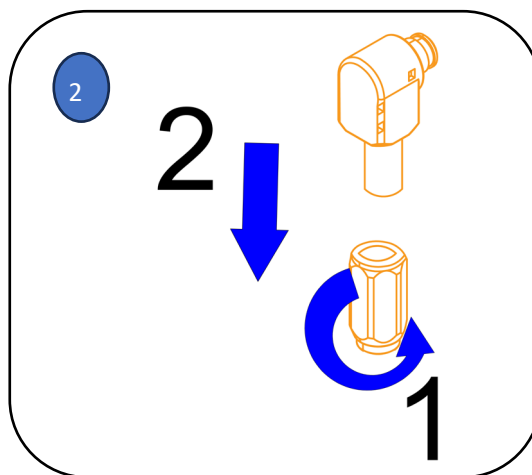
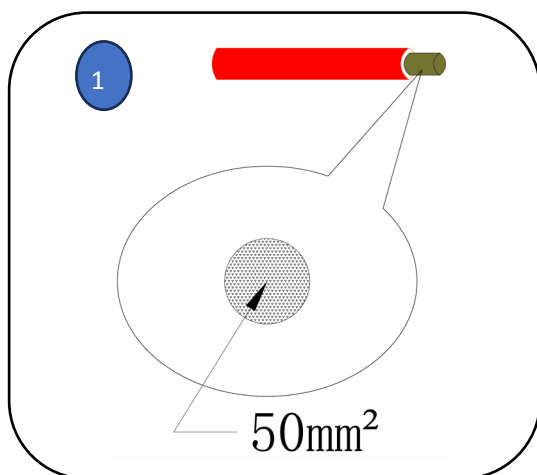
Note: Before inserting the PV terminal into the inverter, please confirm the following points:
1) PV module voltage must not be higher than 950Vdc, avoid affecting product's normal use;
2) Before connecting the PV interface to the inverter, please disconnect the PV combiner box switch and the PV switch of the inverter

2.3 Battery side

Installation position

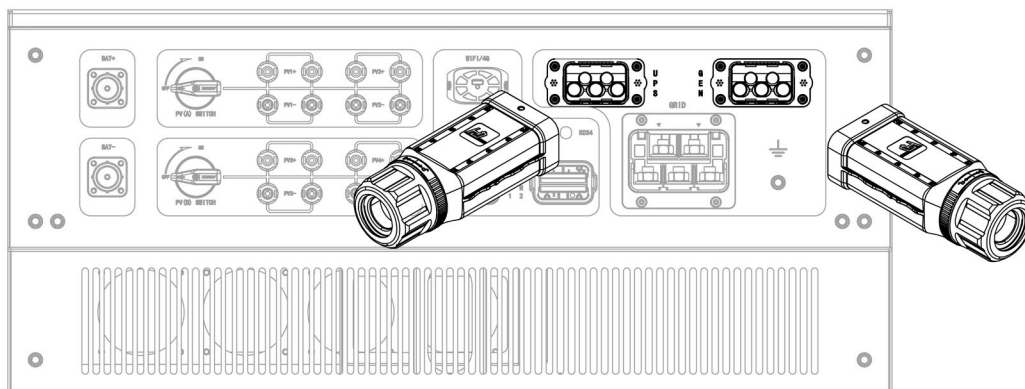


Wiring Harness Making

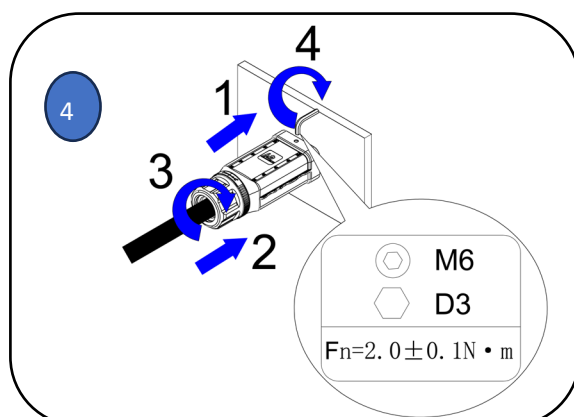
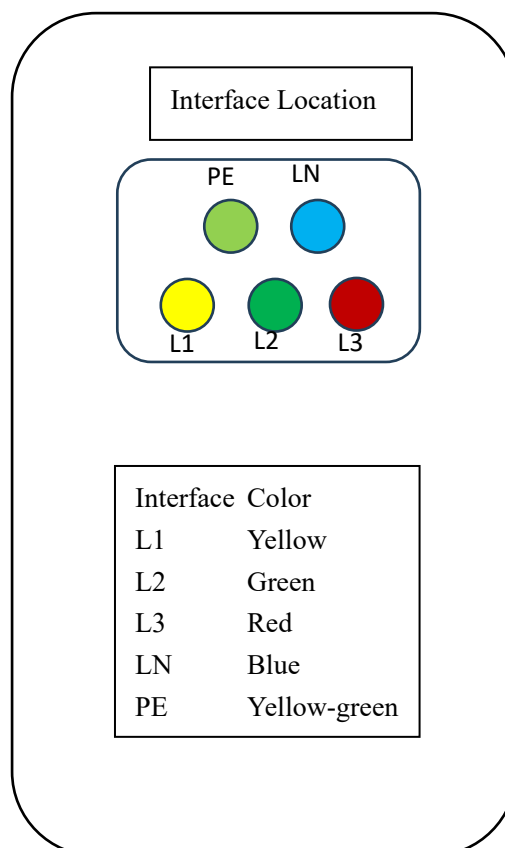
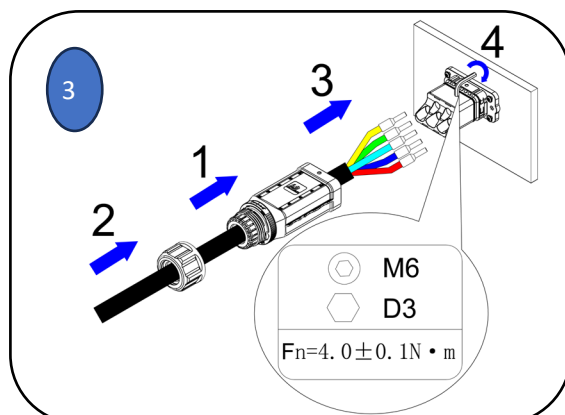
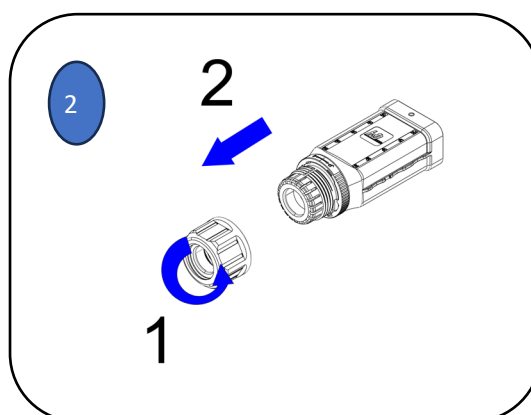
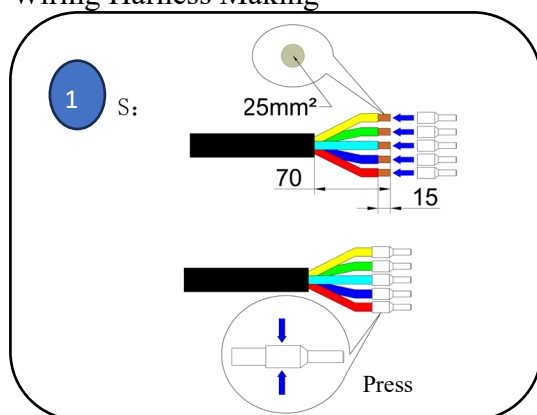


2.4 AC Side

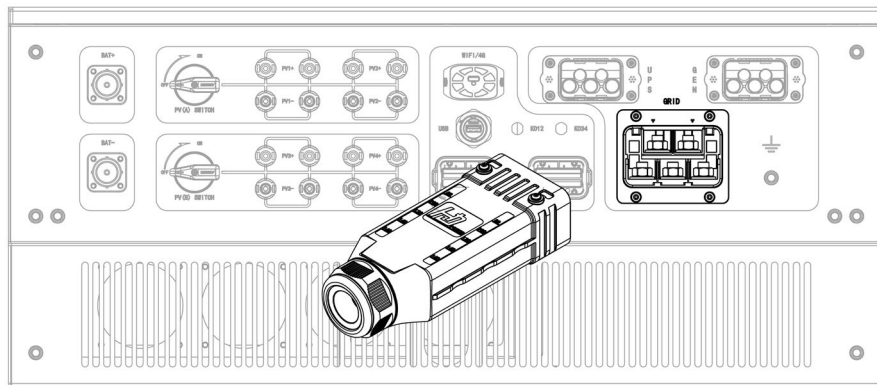
Installation position-UPS/GEN



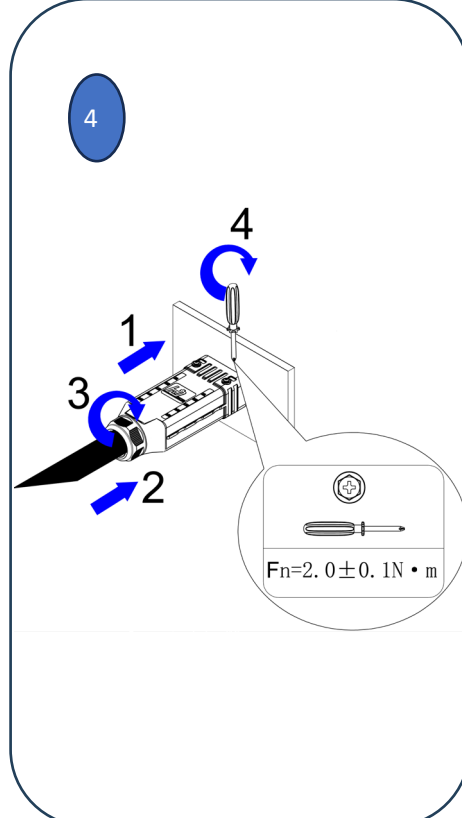
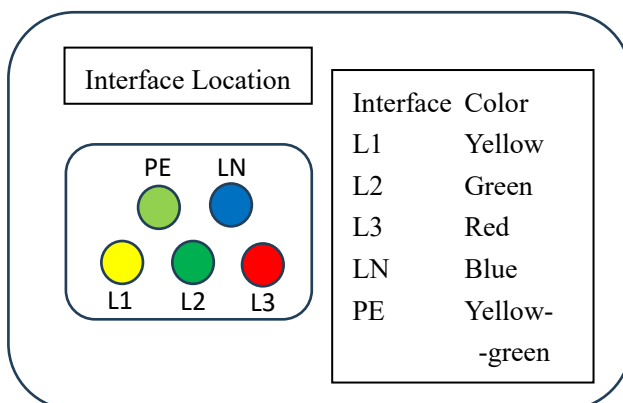
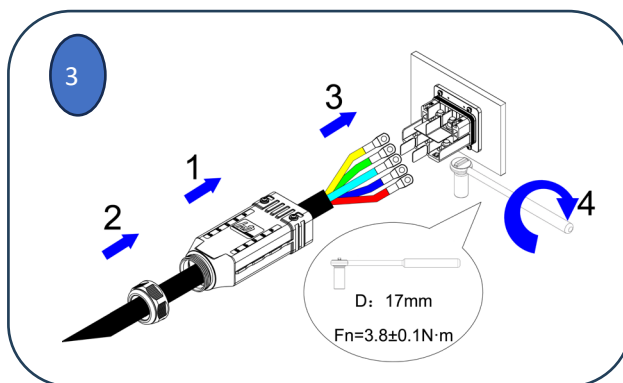
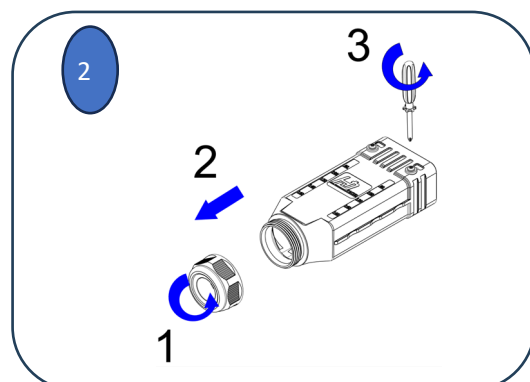
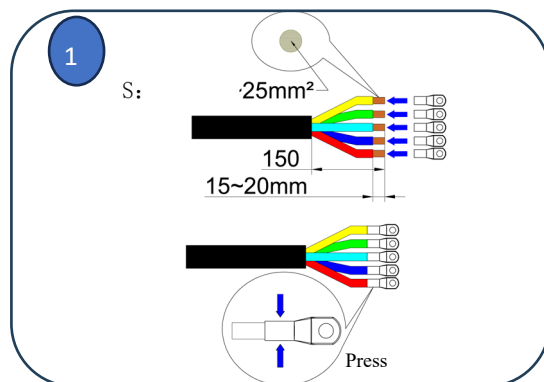
Wiring Harness Making



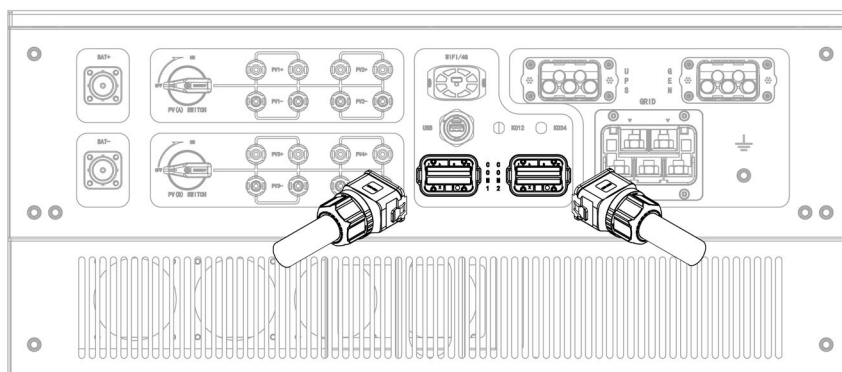
Installation position-GRID



Wiring Harness Making



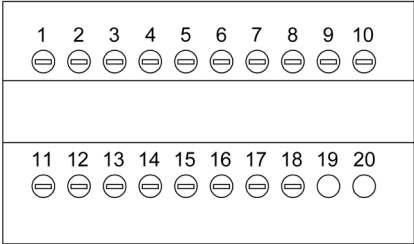
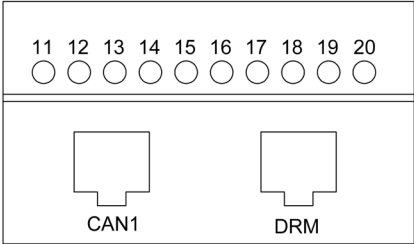
Installation position

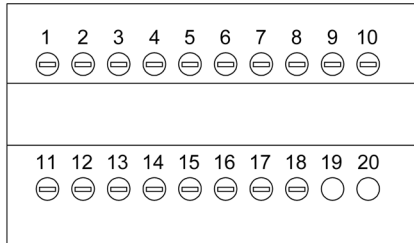
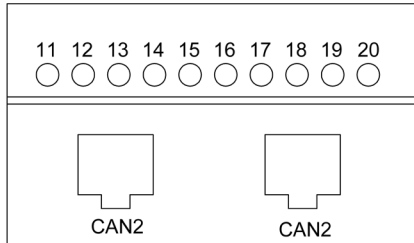


The diagram illustrates the five steps for assembling a cable connector:

- Step 1:** Preparation of the cable. The outer jacket is stripped back by 70.00 mm, and the braided shield is stripped back by 15.00 mm.
- Step 2:** Identification of components. The parts shown are the connector housing (1), the braided shield cap (2), the connector nut (3), and the connector plug (4).
- Step 3:** Insertion of the braided shield. The braided shield is inserted into the connector housing (1) and secured with the braided shield cap (2). A D2mm screwdriver is used to tighten the cap.
- Step 4:** Assembly of the connector. The connector nut (3) is threaded onto the connector plug (4) and tightened.
- Step 5:** Final assembly. The completed connector is shown, with the cable jacket secured by the connector housing (1).

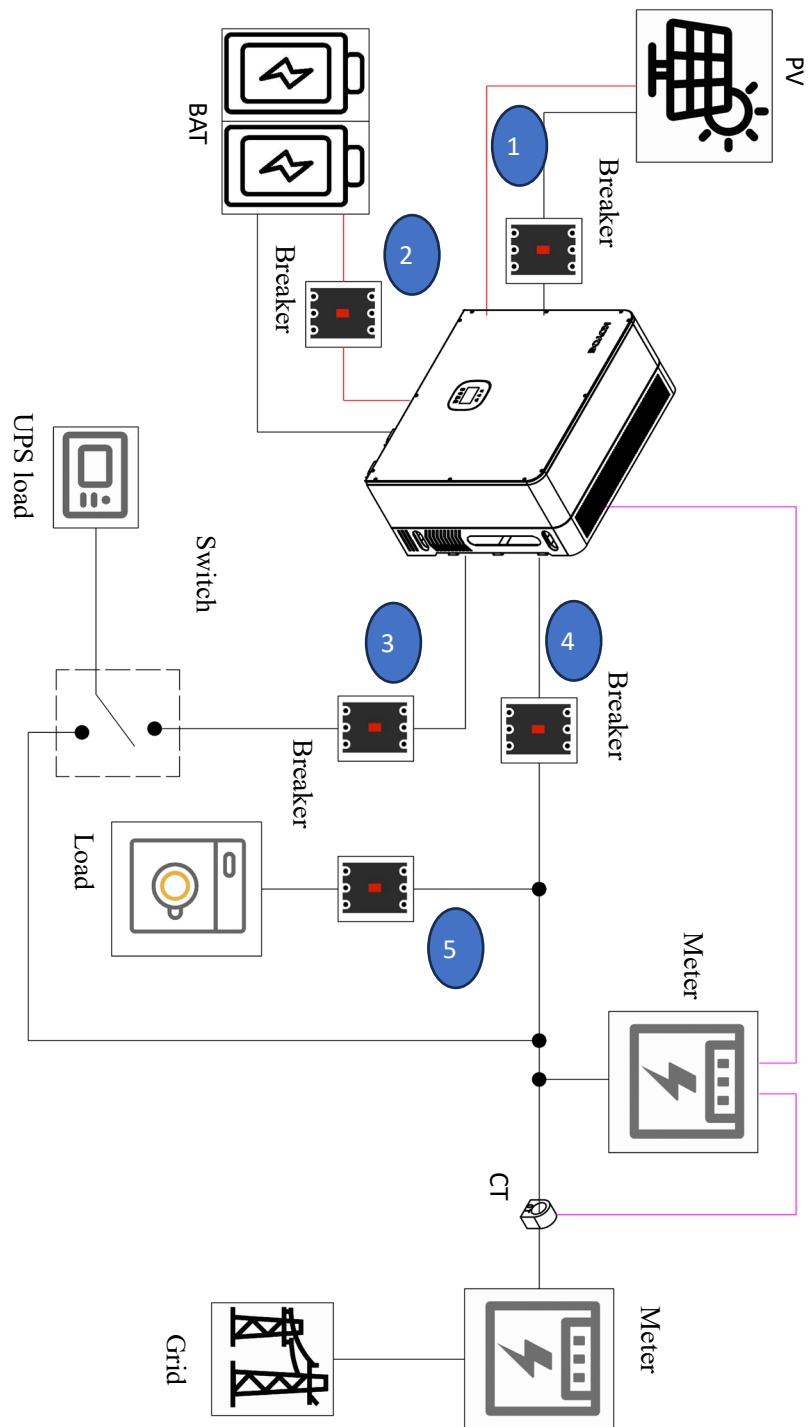
Communication interface definition and location

Communication interface : COM1							
							
NO	Description	NO	Description	NO	Description	NO	Description
1	Meter1_A	2	Meter1_B	3	GND	4	Para_A
5	Para_B	6	GND	7	Para_A	8	Para_B
9	GND	10	GND	11	KIN1+	12	KIN1-
13	KIN2+	14	KIN2-	15	KIN3+	16	KIN3-
17	NTC+	18	NTC-	19	NC	20	NC
Network interface-left: CAN1				Network interface-right: DRM			
PIN interface: Left—Right (PIN1—PIN2)				PIN interface: Left—Right (PIN1—PIN2)			
PIN1	NC	PIN2	NC	PIN1	DRM1/5	PIN2	DRM2/6
PIN3	NC	PIN4	CAN1_H	PIN3	DRM3/7	PIN4	DRM4/8
PIN5	CAN1_L	PIN6	NC	PIN5	GEN	PIN6	COM
PIN7	NC	PIN8	NC	PIN7	NC	PIN8	NC

Communication interface: COM2							
							
NO	Description	NO	Description	NO	Description	NO	Description
1	CT1+	2	CT1-	3	CT2+	4	CT2-
5	CT3+	6	CT3-	7	SYNC IN	8	SYNC OUT
9	SYNCS	10	SYNCS	11	Meter2_A	12	Meter2_B
13	GND	14	LCD12V	15	LCD12V GND	16	LCD485A
17	LCD485B	18	SYNC GND	19	SYNC GND	20	SYNC POWER
Network interface-left: CAN2				Network interface-right: CAN2			
PIN interface: Left—Right (PIN1—PIN2)				PIN interface: Left—Right (PIN1—PIN2)			
PIN1	NC	PIN2	NC	PIN1	NC	PIN2	NC
PIN3	NC	PIN4	CAN2_H	PIN3	NC	PIN4	CAN2_H
PIN5	CAN2_L	PIN6	NC	PIN5	CAN2_L	PIN6	NC
PIN7	NC	PIN8	NC	PIN7	NC	PIN8	NC

3 Power on the Device

General wiring diagram of equipment



Power-on procedure:

Turn on: 4—2—1—3

Power-off procedure:

Turn off: 3—4—1—2

For detailed instructions, please read the manual carefully. The latest manual can be obtained at <http://download.koyoe.com/>, or scan the QR code below.

