EP10/EP11 Quick Installation Guide
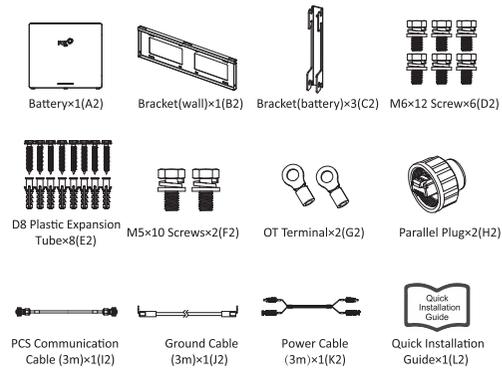
1. Tools Required

The following tools will be required to install battery.
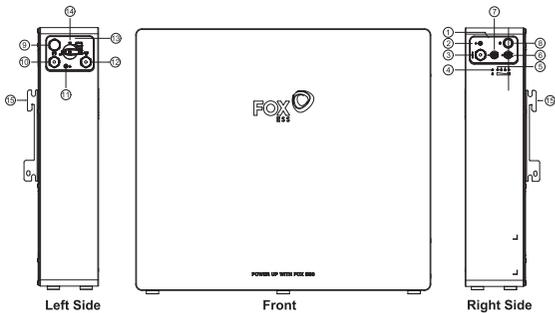
- 6mm Magnetic Phillips Screwdriver(A1)
- Crimpers(B1)
- Safety Shoes(C1)
- Safety Gloves(D1)
- Safety Glasses(E1)
- Rubber Mallet(F1)
- Marker(G1)
- 8mm External Hexagonal Socket(H1)
- Cable Ties(I1)
- Hammer Drill @φ8mm(J1)
- Spirit Level(K1)
- Multimeter (Vdc>500)(L1)

2. Packing List

Please check if following items are included with the package:

- Battery×1(A2)
- Bracket(wall)×1(B2)
- Bracket(battery)×3(C2)
- M6×12 Screw×6(D2)
- D8 Plastic Expansion Tube×8(E2)
- M5×10 Screws×2(F2)
- OT Terminal×2(G2)
- Parallel Plug×2(H2)
- PCS Communication Cable (3m)×1(I2)
- Ground Cable (3m)×1(J2)
- Power Cable (3m)×1(K2)
- Quick Installation Guide×1(L2)

3. Product Appearance

Left Side   Front   Right Side

No.	Description	No.	Description
①	Handle	⑨	Valves
②	Ground Terminal	⑩	LINK OUT
③	PCS COM	⑪	Ground Terminal
④	BMS Status LED	⑫	LINK IN
⑤	BMS SOC LED	⑬	Handle
⑥	DC+	⑭	DC Switch
⑦	DC-	⑮	Battery Bracket
⑧	Power Switch		

4. Installation Prerequisites

Installation Angle Requirements

The battery can be installed on the floor or on the wall. The installation angle requirements are as follows:
- Do not install the battery in a forward tilt, backward tilt, lateral tilt, horizontal position, or upside-down position.
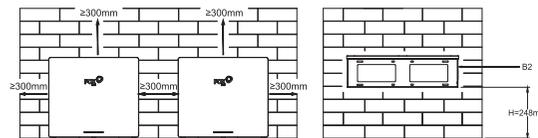
Installation Location Requirements

- The location should be far from the seaside to avoid salt spray and high humidity, with a distance of over 1000m.
- The location should be free from flammable or explosive materials, with a minimum height of 0.9m.
- The environment at the location should be cool, away from high temperatures and direct sunlight.
- There should be minimal dust and dirt at the location.
- The location should be free from corrosive gases, including ammonia and acidic vapors.
- The building should be of solid brick and concrete structure for installation on walls or floors. If other types of walls and floors are used, they must be made of flame-retardant materials and meet the load requirements of battery.
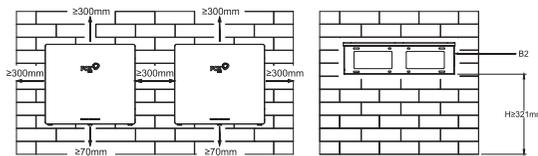
Installation Space Requirements:

During the installation steps, ensure that there are no other heating device or flammable materials around the battery. Sufficient space for heat dissipation and safety isolation should be provided.
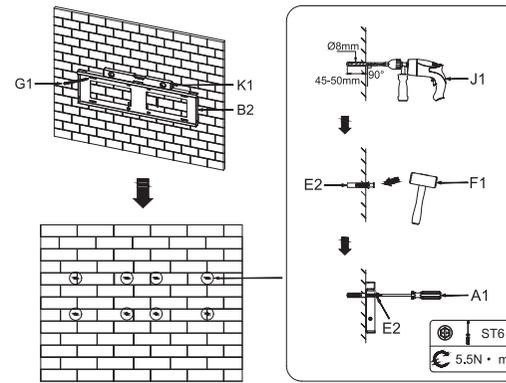
Standing mounting:

Wall mounting:

5. Installation Steps

STEP-1:

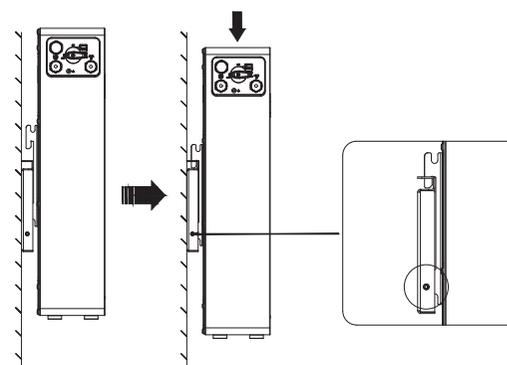The steps for installing the bracket are as follows:
a. Place the bracket against the wall, adjust the hole position with a Spirit Level (K1) , and mark the positions of the 8 holes.
b. Remove the bracket, drill the holes with a hammer drill (φ8mm, depth range 45-50mm), and tighten the expansion bolts to ensure that the bracket is securely installed.
c. Fix the bracket to the wall with ST6×40 screws (E2) , ensuring that the bracket is installed in a horizontal position.
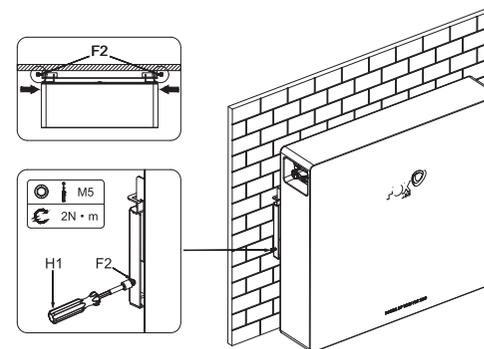

STEP-2:

The steps for installing the battery on the wall are as follows:
a. Align the buckle of the battery bracket with the holes of mounting bracket on the wall, then place the battery from top to bottom.
b. Observe the left and right sides of the bracket to ensure that the holes of the battery bracket and mounting bracket on the wall are aligned.

STEP-3:

Insert 2 pcs of M5×10 screws (F2) into the holes on the left and right sides of the mounting bracket then tighten the screws.
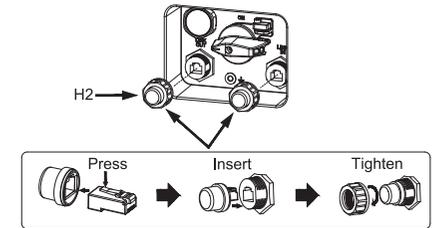

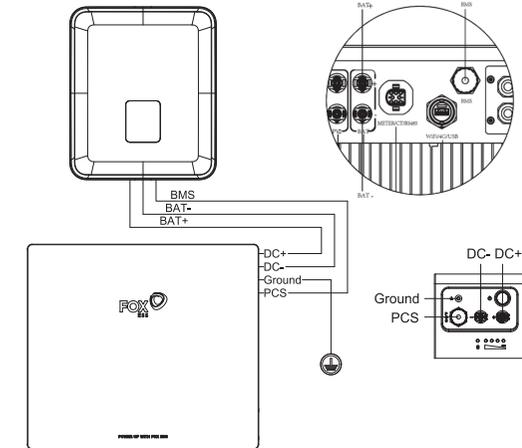## 6. Wiring Steps

Stand-alone Mode:

STEP-1:

Insert the 2 Parallel Plugs (H2) into the LINK IN and LINK OUT ports respectively.
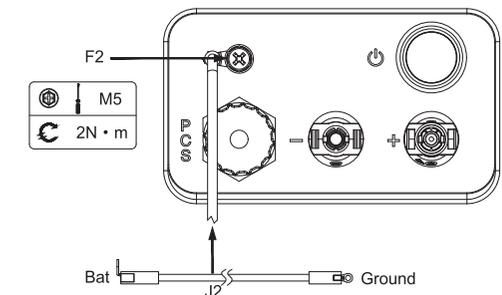

Press   Insert   Tighten
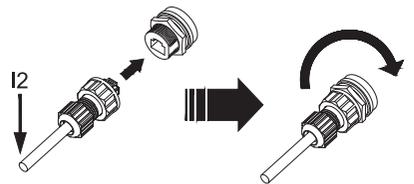
STEP-2:

Connect the inverter cables:

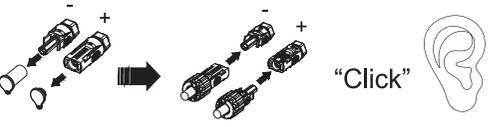Note: Power Cable (K2) must be pulled straight from the battery DC+/- for more than 80mm before bending.

a. Connect the Ground Cable (J2) to the ground.

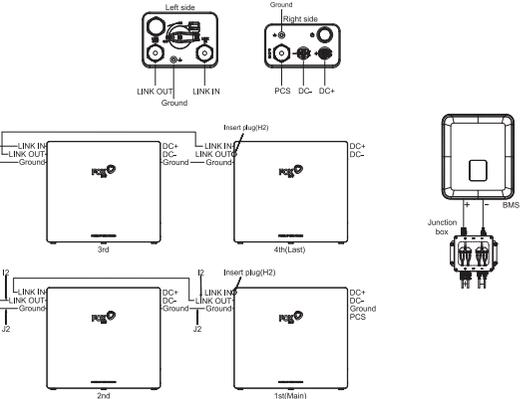**b.** Connect the PCS Communication Cable (I2) to the BMS port on the inverter.

c. Remove the waterproof bridge from DC+ and DC-, then insert the Power Cable (K2) into DC+ and DC-.
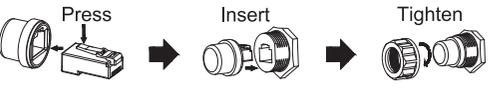

"Click"

Parallel Mode:

STEP-1:

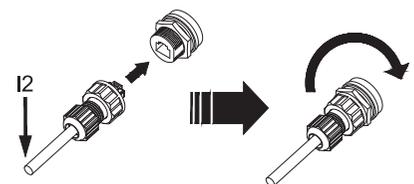Connect the parallel cables:

The steps for parallel connection of batteries are as follows:
a. Insert the Parallel Plug (H2) into the LINK IN port, this battery is defined as the **Main** battery (whichever battery can be set as the **Main**).
b. Connect the Ground Cable (J2) from the ground terminal of the **Main** battery (left side of the battery) to the ground terminal of the next battery (right side of the battery), and continue the same connection until the ground terminal of the last battery (left side of the battery).
c. Use the PCS Communication Cable (I2) to cross-connect the LINK OUT of the previous battery with the LINK IN of the next battery. Start from the LINK OUT of the **Main** and continue until reaching the LINK IN port of the last battery.
d. Insert the Parallel Plug (H2) into the LINK OUT port of the last connected battery.
Note 1: The steps of inserting the Parallel Plug (H2) are as follows:
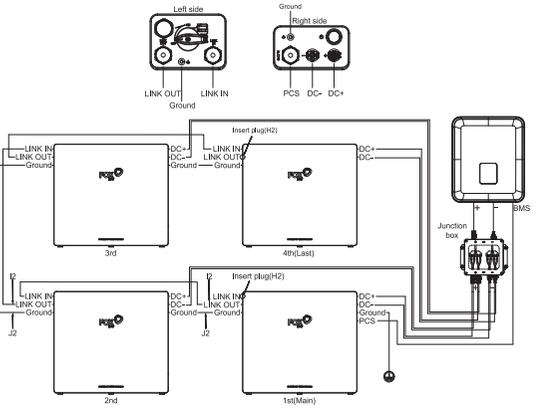

Press   Insert   Tighten

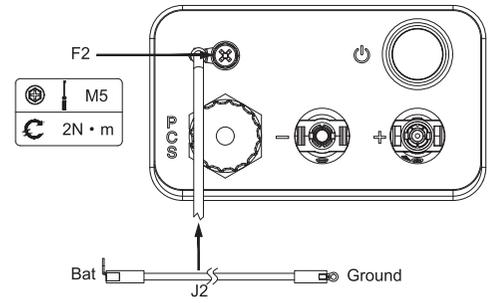Note 2: The steps of installing the parallel communication cable are as follows:
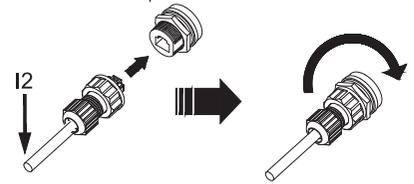

STEP-2:

Connect the inverter cables:

Note: Keep a distance of 300-600mm from the battery to the junction box. Power Cable(K2) must be pulled straight from the battery DC+/- for more than 80mm before bending.
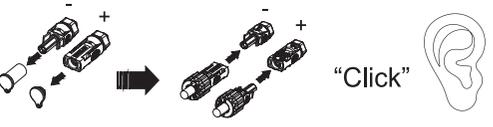
a. Connect the Ground Cable (J2) of the **Main** battery to the ground.

F2
M5
2N · m
Bat
J2   Ground

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b. Connect the PCS Communication Cable (I2) of the **Main** battery to the BMS communication port of the inverter.
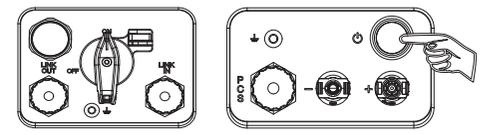

c.Connect the Power Cable (K2) of each battery to the junction box (need to purchase separately).Connect the output power cable of the junction box to the battery port of the inverter.
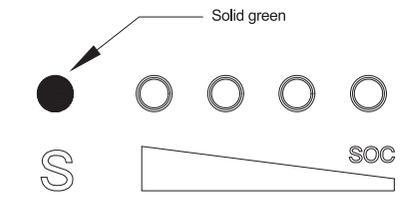

"Click"

7. System Start Up

Rotate the "DC Switch" of each battery to the "ON" position, then press and hold the "Power Switch" on the **Main** battery for about 3 seconds, and then release the switch. Each battery LED will light up and flash, indicating that the battery has been activated.

Note
In special cases, such as when the grid and solar panels are not in use, the battery can be activated through the "Black Start" function. That means that our energy storage inverter and battery can continue to operate. The startup steps for black start is as follows:
a. Ensure that the battery is activated. Once the battery starts to make "Click" sound,start button for 3 seconds. Please complete it within 30 seconds.
b. When at least one battery's LED turns green and remains steady, and the LED of the other batteries does not turn red, it indicates that the batteries have entered normal running state.

Solid green

Please scan the QR Code and follow the steps below to download our latest multi-language User Manual/Quick Installation Guide:

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Note: Different model of batteries cannot be mixed in one system, any further questions related to the battery versions please contact our technical team at service@fox-ess.com.