



# SOLAX POWER X3 Matebox Advanced 3 Phase Switching Device Installation Guide

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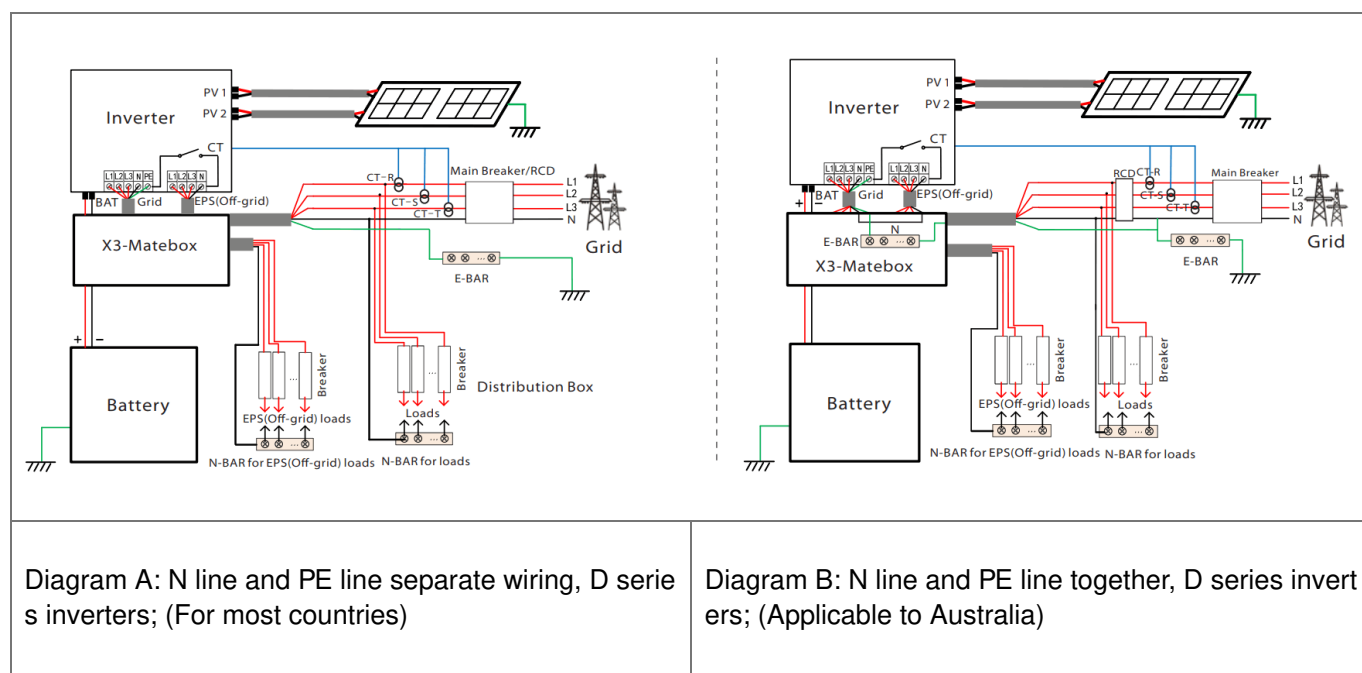
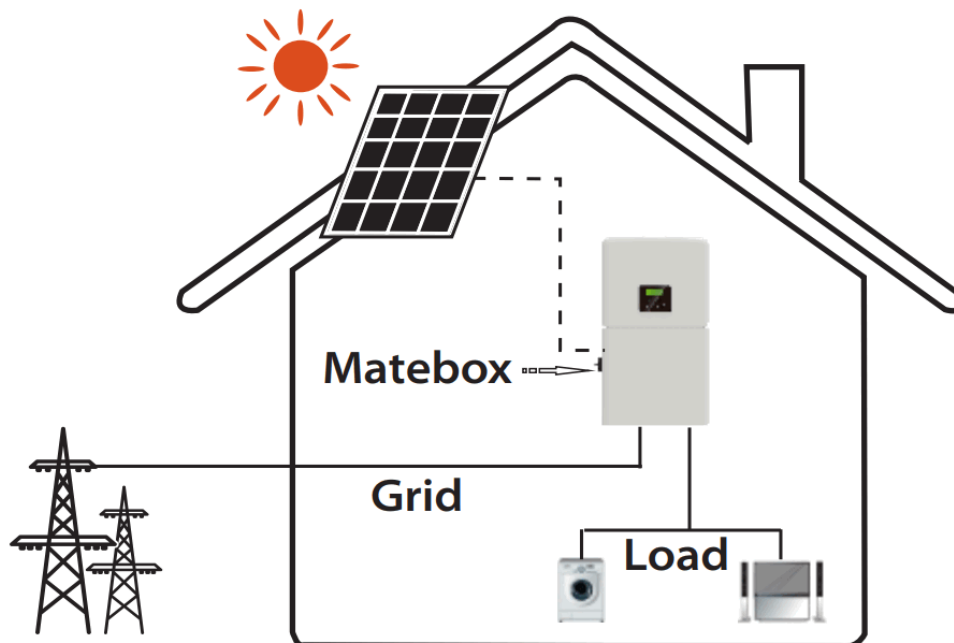
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## Introduction

X3-Matebox advanced is a critical part for energy storage system, which integrates the DC breaker/AC breaker/switch unit/Meter and so on, it can easily be installed compare to the traditional separate system, this

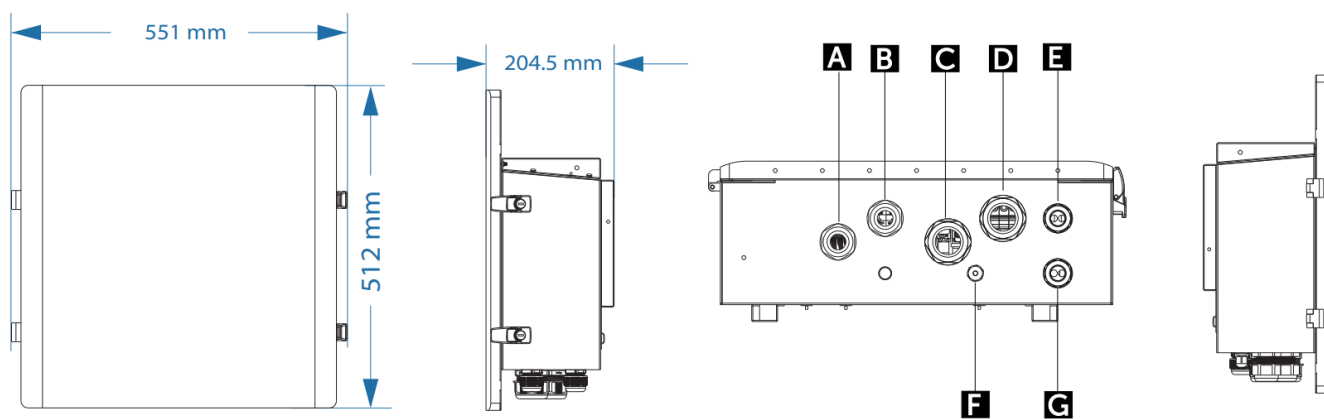
unit can be used with Hybrid and Fit series inverters.

There are 2 wiring diagrams for your system connection reference, please follow your local policy to chose which one is suitable for your side.



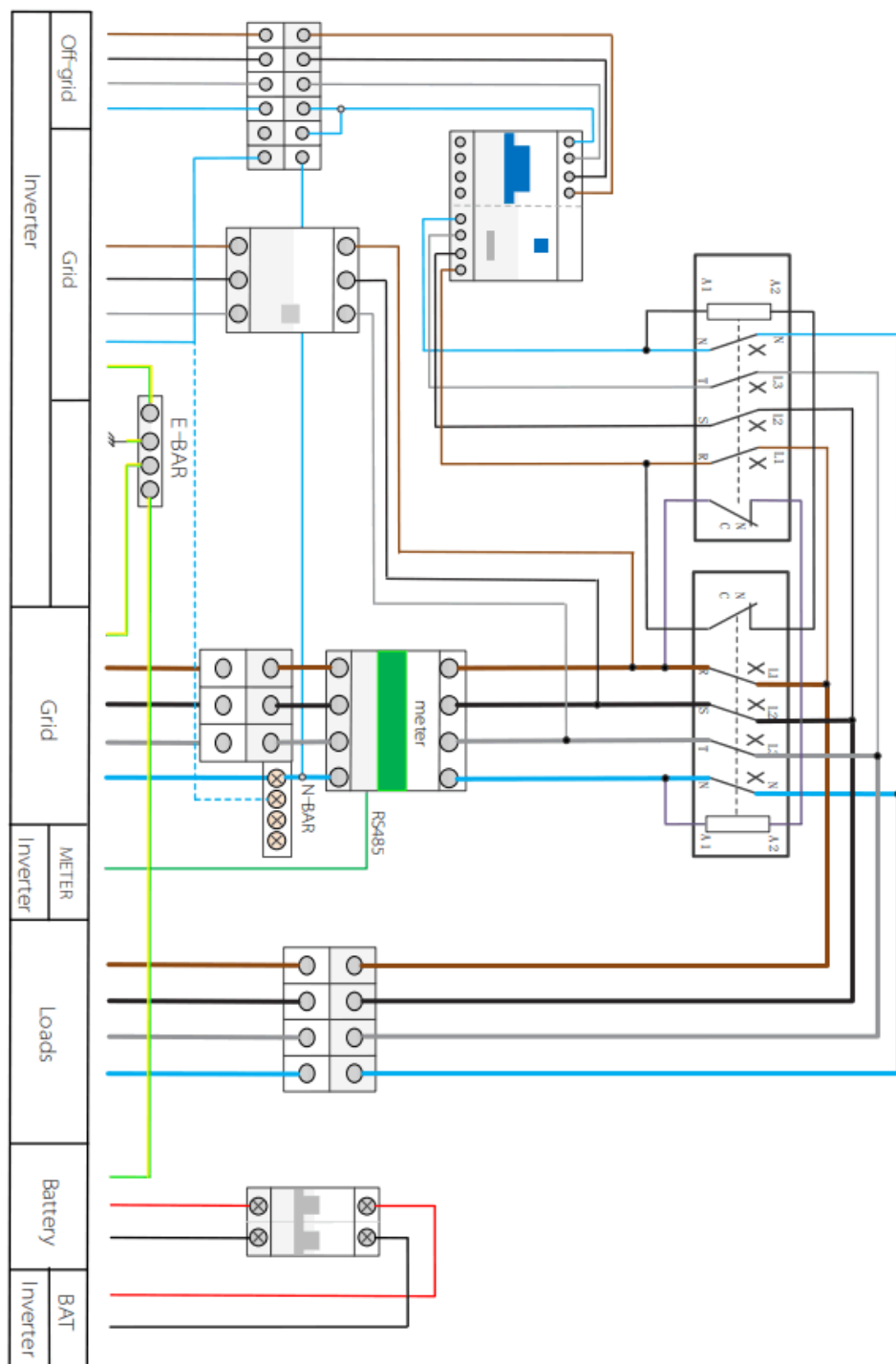
## Overview

### 1. Dimension and terminals of X3-Matebox advanced.



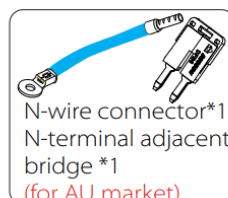
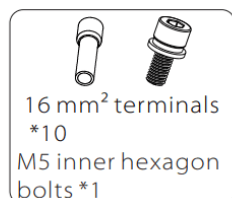
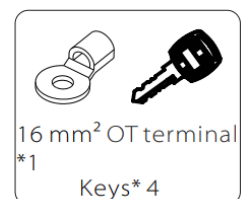
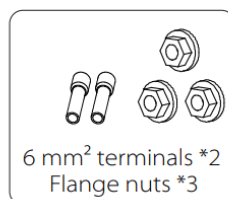
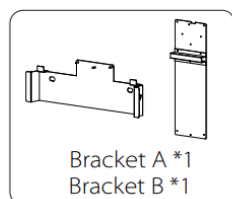
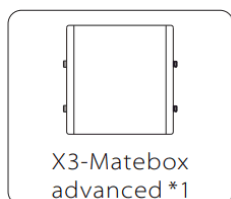
Object	Name	Description
A	EPS(INV)/(Off-grid)	EPS output port of the inverter
B	Grid(INV)	Grid output port of the inverter
C	Grid	Grid connection port (to local grid)
D	Load	Load connection port
E	E BAT	Battery connection port (to battery pack)
F	Meter	Meter
G	BAT(INV)	Battery connection port of the inverter

## 2) Electrical schematic diagram

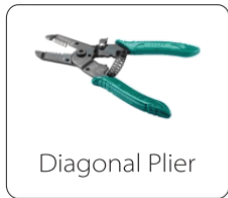


## Preparation

### – Packing Lists



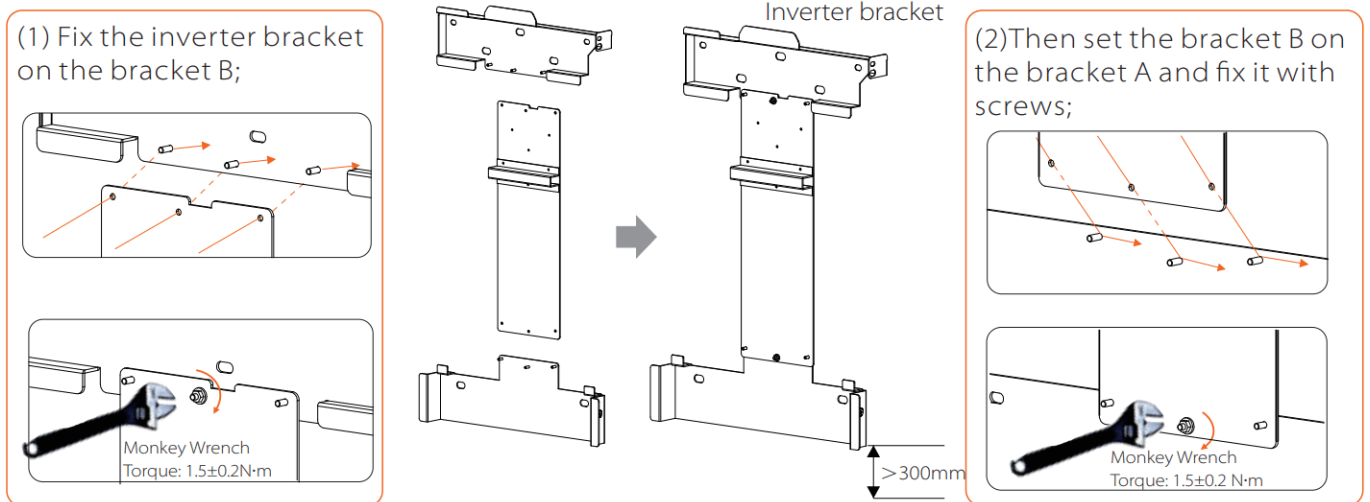
## – Tools



## Mounting

### Step 1: Bracket installation

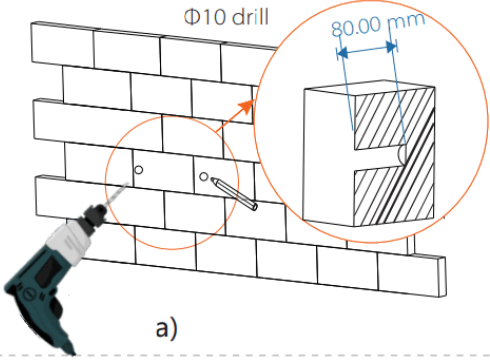
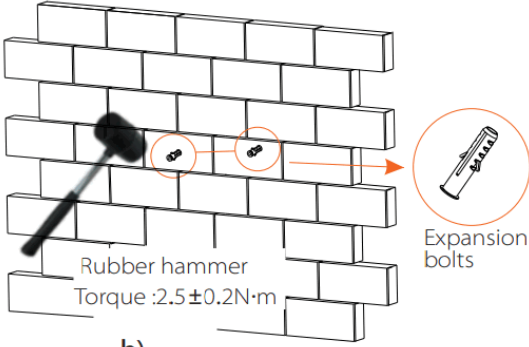
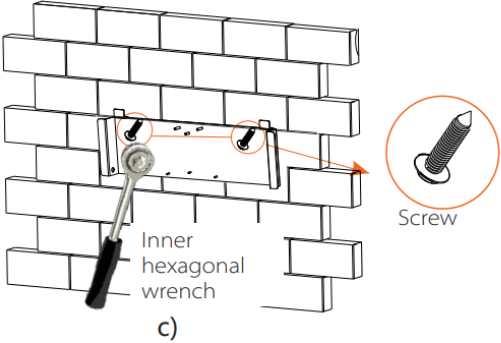
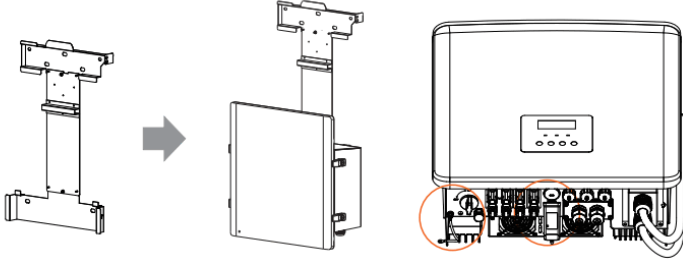
Fasten the brackets to the wall, according to the following steps.



**Note :**When installing the bracket, be sure to use a spirit level to test and keep the bracket parallel to the horizontal plane.

Bracket A should be installed at a distance of 300mm (at least) from the ground.

### Step 2: Screw the brackets on the wall

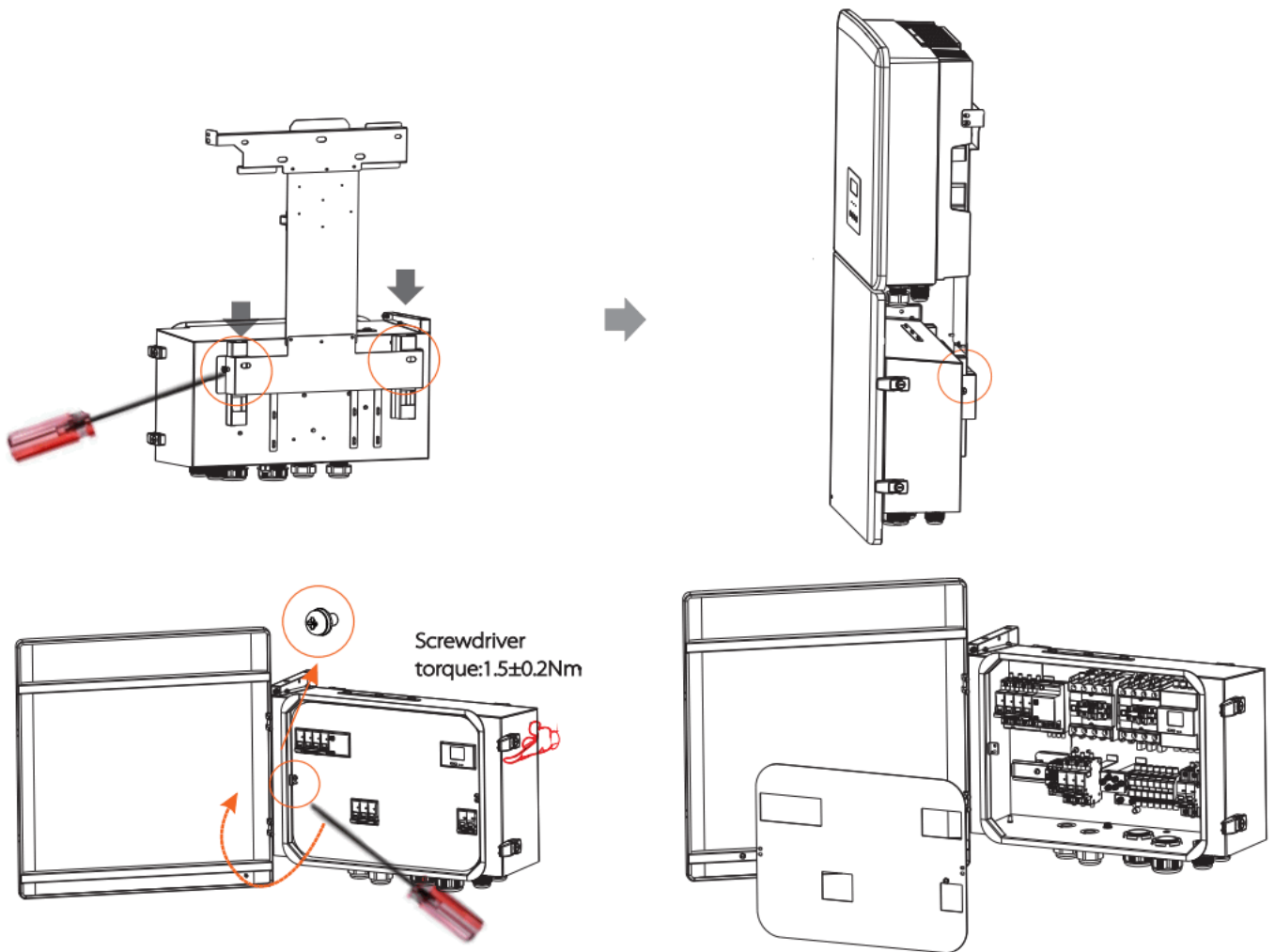
 <p>a)</p>	 <p>b)</p>
<p>a) Use the bracket as a template to mark the two holes on the wall with a marker pen. Drill holes at marked spots with depth of 80 mm.</p>	<p>b) Insert expansion bolt into the hole, use rubber hammer to knock the expansion screw bolt into the wall.</p>
 <p>c)</p>	 <p>d)</p>
<p>c) The bracket is aligned with the screw uses the inner hexagonal wrench to screw the tapping screw until the expansion bolt "bang" is heard.</p>	<p>d) The Mateo should be prioritized over the installation of the inverter. Before installing the inverter, you need connect the ground wire and the Dongle communication accessories)</p>

### Step 3. Match the X3-Matebox advanced with the brackets

Use a level rashi to ensure that the brackets in the system are rmly installed and level. Then follow the steps below to hang X3-Matebox advanced.

Mount X3-Matebox advanced on brackets and tighten the screws.

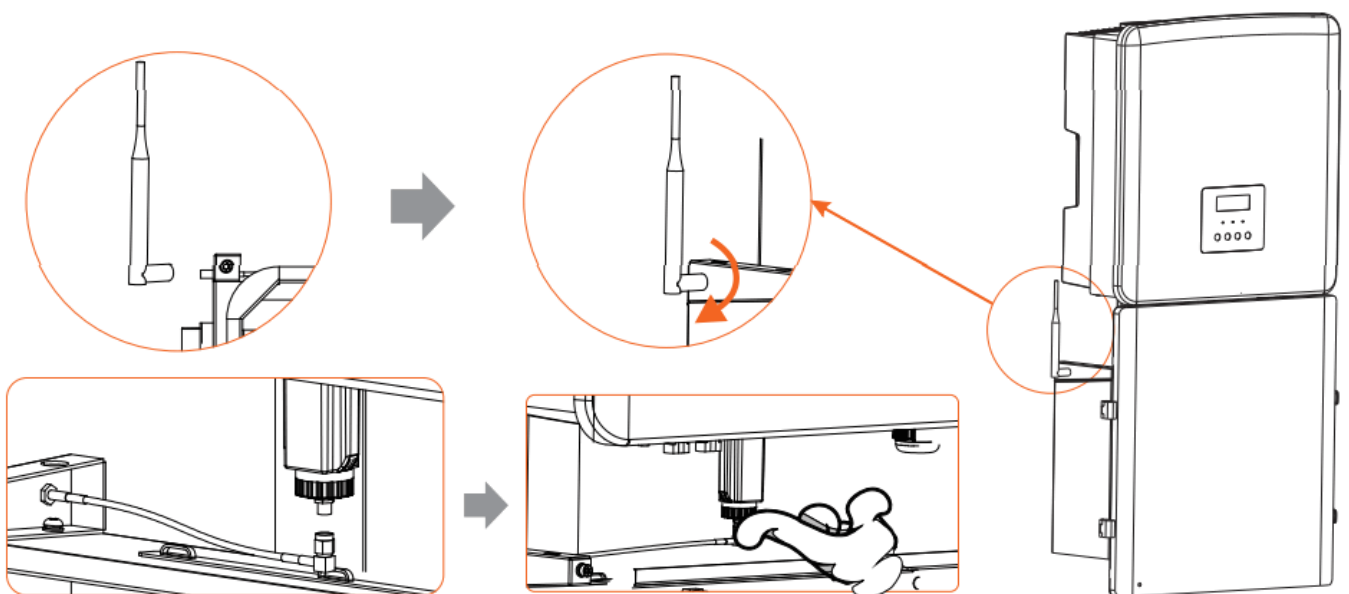
Open the upper cover and the isolation plate of X3-Matebox advanced before wiring.



## Monitor the antenna connections of accessories

There is an antenna in the box of monitoring accessories.

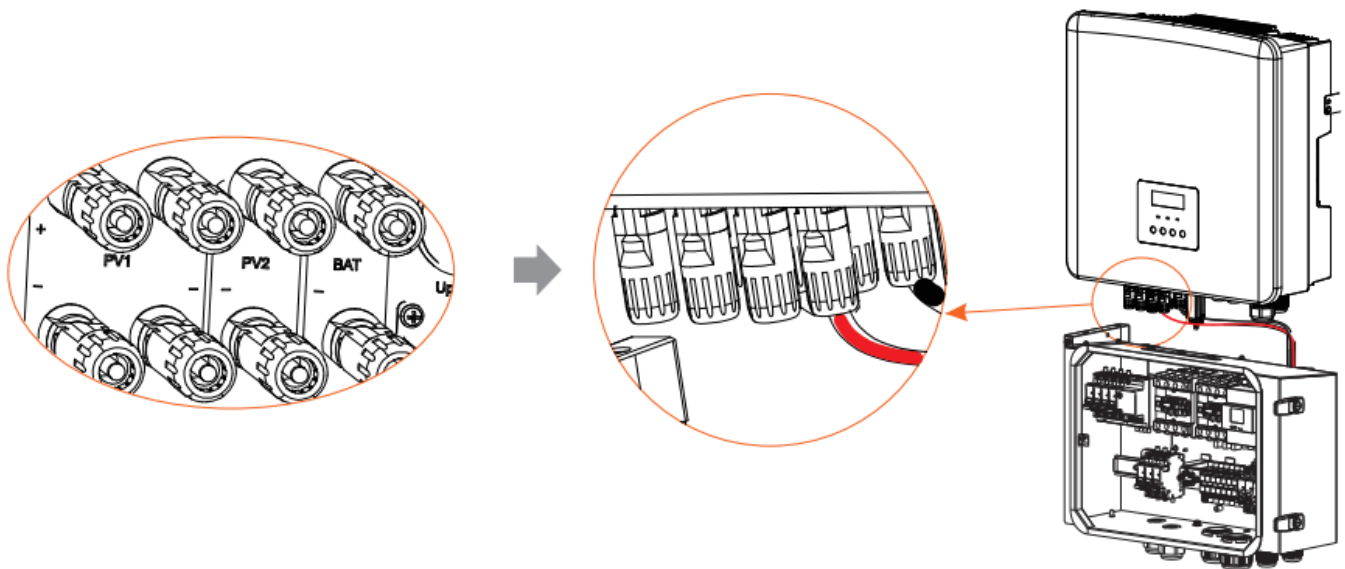
- Install the antenna on the box and tighten it by hand;
- Then connect the antenna cable to the end of the WiFi Dongle.



## Wiring Connection

### 6.1 Inverter side connection

According to the BAT(INV )+/BAT(INV )- line symbol on X3-Matebox advanced harness, the corresponding ports of BAT+/BAT- of the inverter are successively inserted.



## 6.2 X3-Matebox advanced side connection

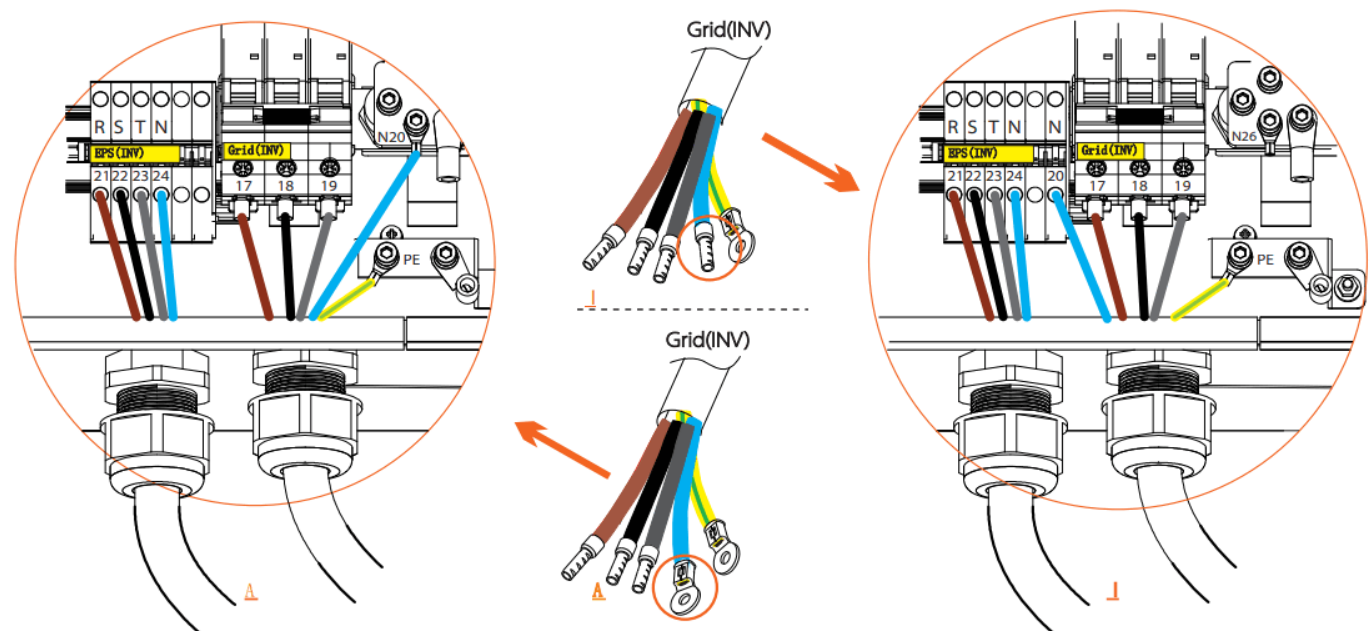
– Grid(INV) and EPS(INV)

1) Connect the Grid(INV) R/S/T/N and EPS (INV) R/S/T/N/PE ports of the inverter to the X3-Matebox advanced port. The connection method is as follows :

a) First, insert the R/S/T EPS(INV) into the R/S/T port of EPS (INV) in X3-Matebox advanced and the N EPS(INV) directly into the hole, directly into the hole and ensure that the installation is tight ;

b) Then nd the Grid(INV) (R/S/T) port in X3-Matebox advanced, connect the corresponding wire harness, and lock the screw with a screwdriver.

C) Finally, lock the PE wire/N wire with a hexagonal keys;



**Note:** According to the different N terminals of Grid(INV), select the corresponding connection position.(if need:(A + 6.4B) or (I + 6.4II))

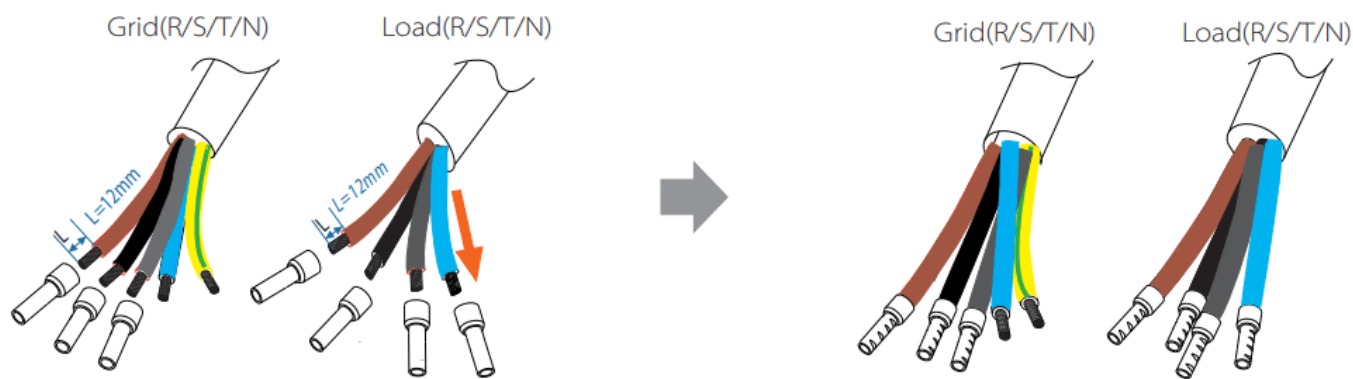
– Grid and Load and Battery

2) Grid(R/S/T/N/PE) /Load(R/S/T/N) side connection

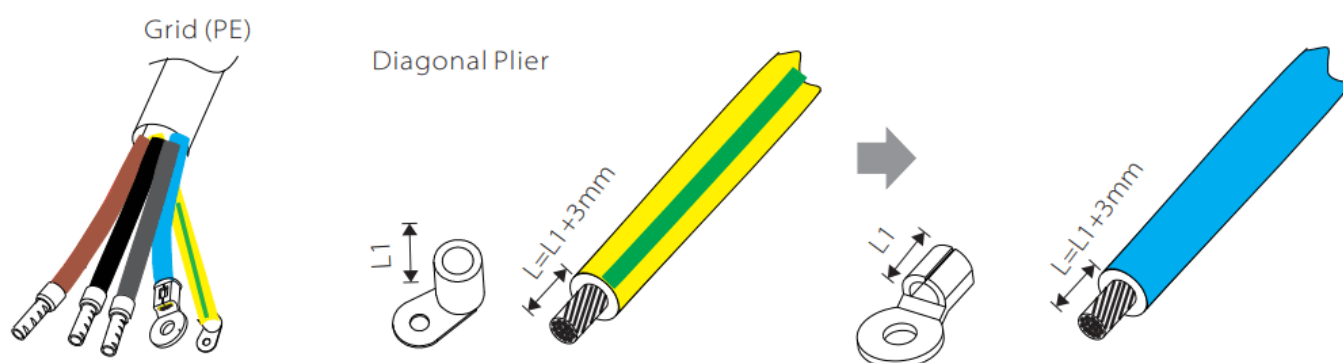
a) Prepare ordinary 10mm<sup>2</sup> Grid(R/S/T/N/PE) /10mm<sup>2</sup> Load(R/S/T/N) and remove the 12mm insulation layer at the end of the wire. Insert the European-style terminals respectively.

The stripped terminals must be inserted into the European-style terminals and nally pressed down with the crimping pliers.

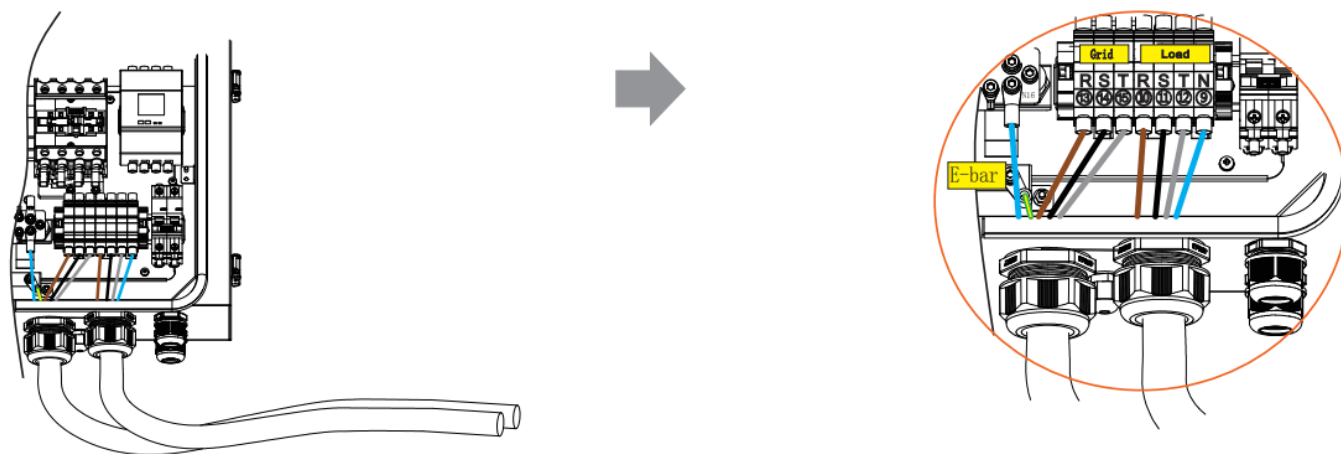




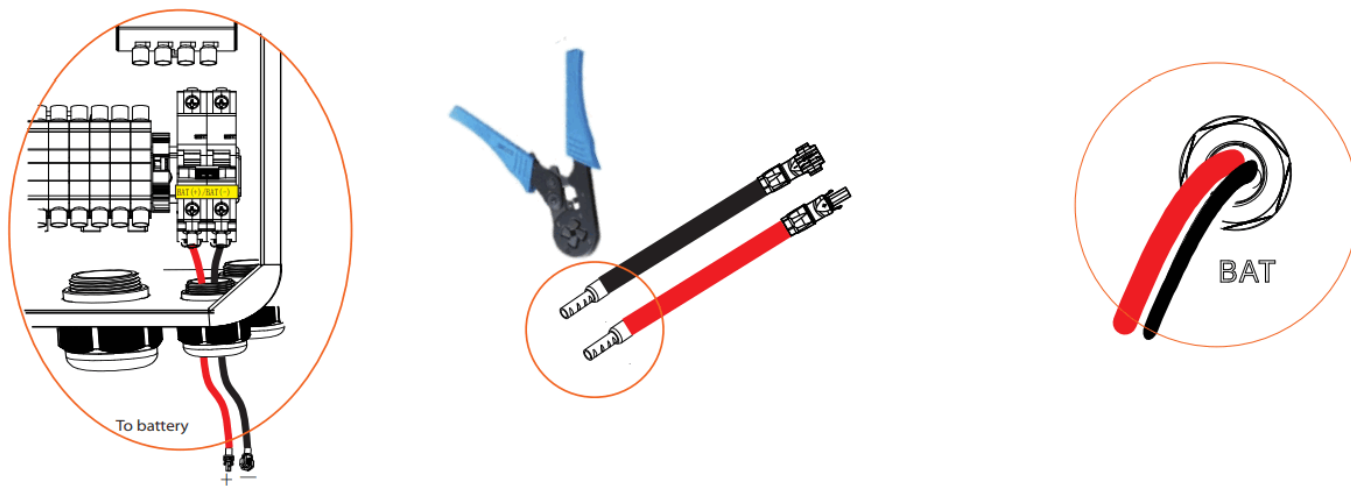
b) Grid(PE) strip the grounding cable insulation(lengthily”), insert the stripped cable into the R type terminal, and then clamp it.



3) Pass the Grid/Load line through the Grid/Load port of the X3-Matebox advanced, then find the Grid(R/S/T/N) port and Load (R/S/T/N) ports in the X3-Matebox advanced, insert each line, and use the screwdriver to lock the screws.

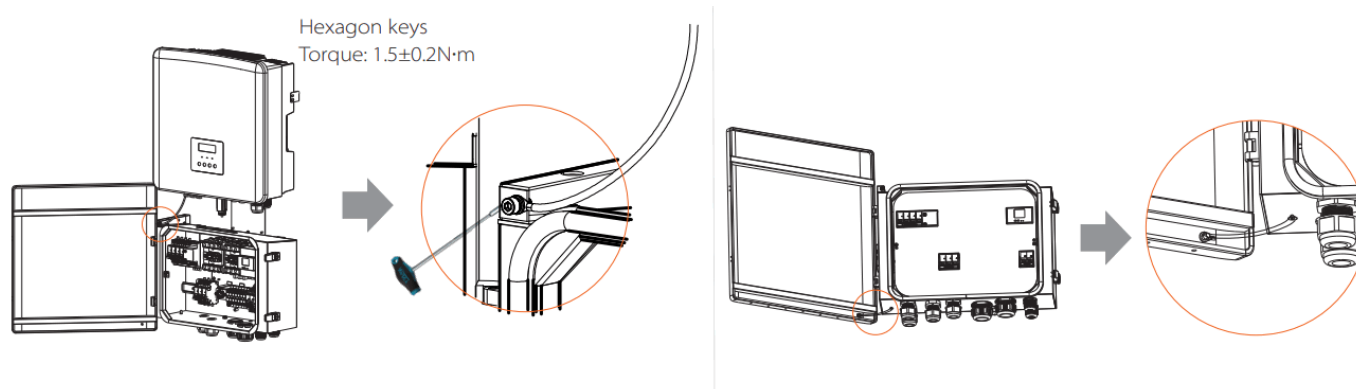


4) Pass the battery power wire through the BAT port of The X3-Matebox advanced, then find the BAT+ and BAT- ports in the X3-Matebox advanced, insert each wire accordingly, and use the screwdriver to lock the screws.



### 6.3 Ground wire connections

The box needs to be grounded as follows.

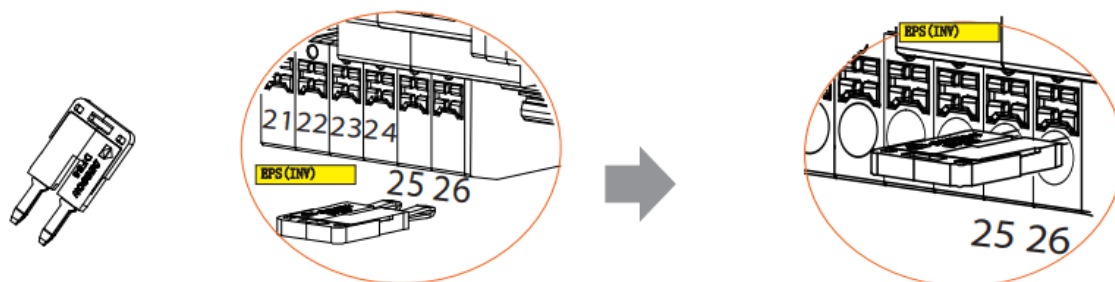


### 6.4 The N-line on the Grid side is short circuited to the N-line on the EPS side

-If the user requires wiring rules for neutral wires the standby power supply cannot be isolated or switched (for wiring Australia and New Zealand regulations AS/NZS\_3000:2012)

Refer to 6.2

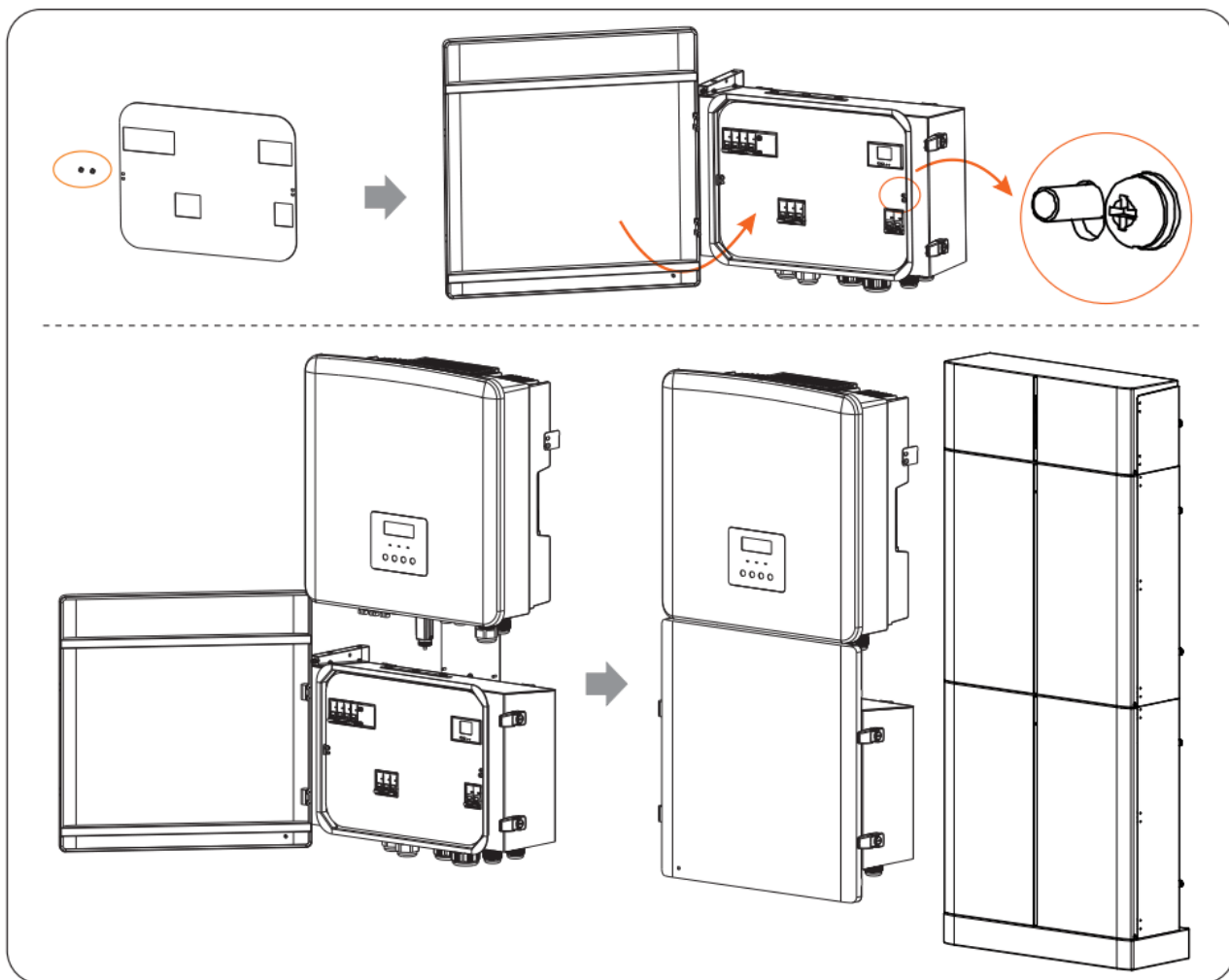
B



II

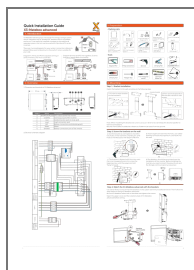


6.5 Finally, use the screwdriver to install the baffle back, close the upper cover and lock the buckle with a key.



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## Documents / Resources



[SOLAX POWER X3 Matebox Advanced 3 Phase Switching Device](#) [pdf] Installation Guide  
X3 Matebox Advanced, 3 Phase Switching Device, X3 Matebox Advanced 3 Phase Switching Device, Switching Device