



I. Packing list

Standard Accessory Kit

Battery

Battery pack *1	Documents *1	Base *2	Side cover *2	Label sticker *1
Grounding wire *1	BAT-BAT connecting plate *4	Fixed support *2	Bolt (M6x16) *8	Expansion bolt (M6x100) *2
Bolt (M4x12) *7				

Optional Accessory Kit

Leveling Foot (M12*H60*D40)

Leveling foot *4				

BCable

Connector assembly *1	Communication cable A *1	Bolt (M4x12) *8 For fixing the connector assembly	Nut (M10) *2	Nut (M12) *2

Parallel Base

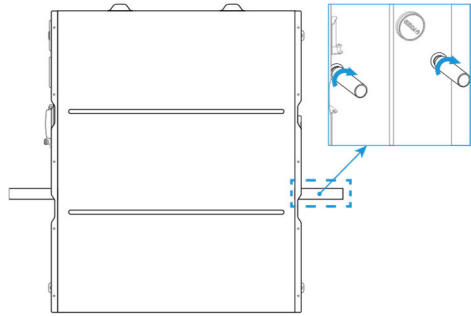
Parallel base (with brackets) *1	Left cover *1	Right cover *1	Rear cover *1	Telescopic slide rail *1
Connector assembly *1	Communication cable B *1	BAT-Base connecting plate *2	Bolt (M4x12) *8	Screw (M4x8) *8
Expansion bolt (M10x100) *4	Bolt (M4x12) *9 For fixing the connector assembly	Nut (M10) *2	Nut (M12) *2	

II. Installation

Common Installation Procedures (Applicable to all installation modes)

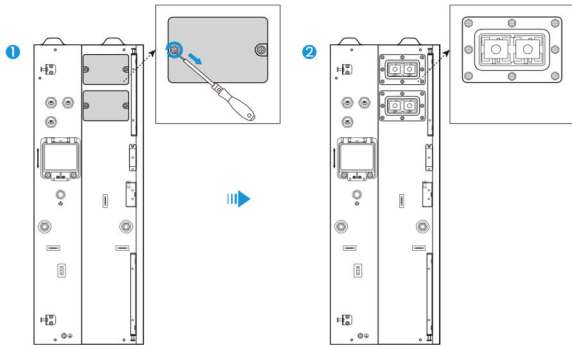
✧ Battery Pack Handling

- Take out 4 handles from the inverter accessory kit.
- Screw them clockwise into the reserved handle mounting points on both sides of the battery pack.
- After the battery pack is fully positioned, remove the handles counterclockwise.



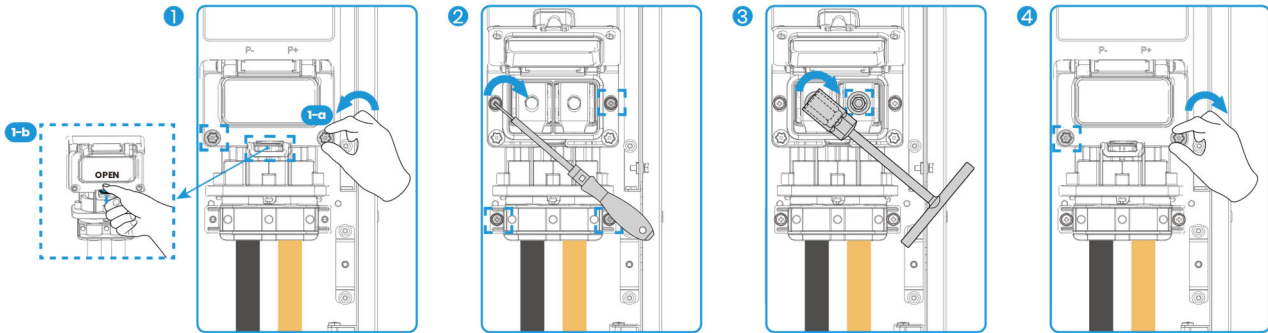
✧ Battery / Parallel Base Connection

First remove the terminal cover to expose the P+ and P- connection terminals.



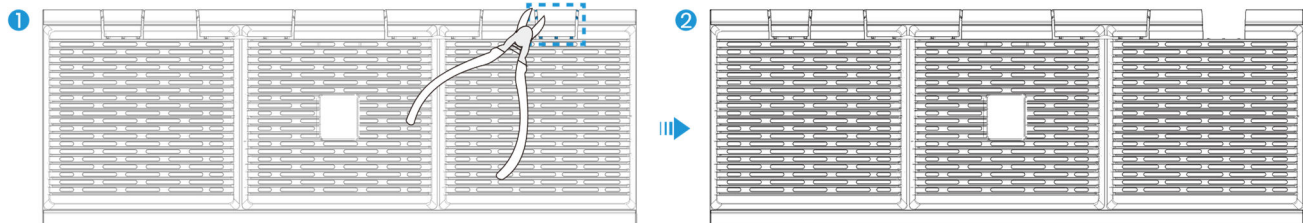
- Counter-clockwise loosen the 2 screws on the connector-assembly protective cover, press the latch and flip the cover open.
- Align connector-assembly crimp terminals with P+ / P- points on battery pack (or base); fix the connector assembly to battery pack (or base) with screwdriver and M4x12 screws. Recommended torque: 1.5 N·m for M4x12 bolt.
- Secure with M12 / M10 nuts using the T-type socket wrench from the inverter accessory kit. **M12** nut applies to "P+"; **M10** nut applies to "P-". Orange cable is positive wire, black cable is negative wire. Ensure correct mating to P+ and P- connection terminals. Recommended torque: 24.5 N·m for M10; 42 N·m for M12.
- Close the cover and tighten its 2 screws clockwise.

Repeat the above steps for the opposite (up / down) end of the connector assembly.



✧ Side Cover Trimming

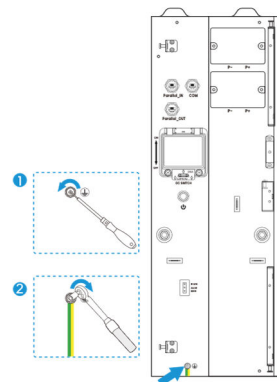
Trim the side cover according to the figure below for clearance against the side fixed supports.





System Grounding

The bottom battery pack of each stack must be reliably grounded.



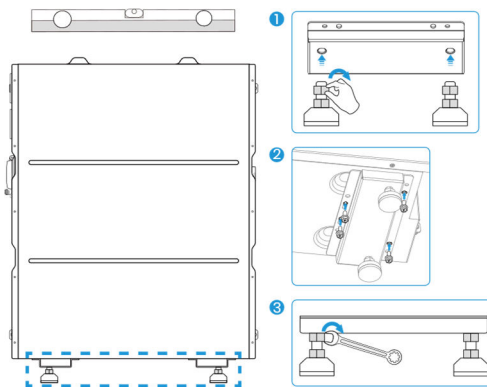
1. Use a torque wrench to remove the M4×12 grounding screw at the base grounding point.
2. Attach the yellow-green grounding cable, then re-tighten the M4×12 grounding screw at the grounding point. Recommended torque for M4×12 screw: 1.5 N·m
3. Connect the other end of the grounding cable to a reliable earth ground.

Configuration-Specific Installation Procedures

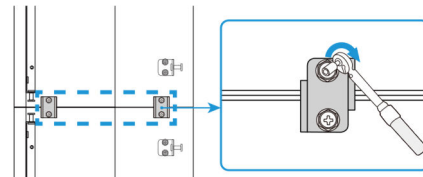
Single-Stack Installation (for 1-2 battery packs)

Step 1:

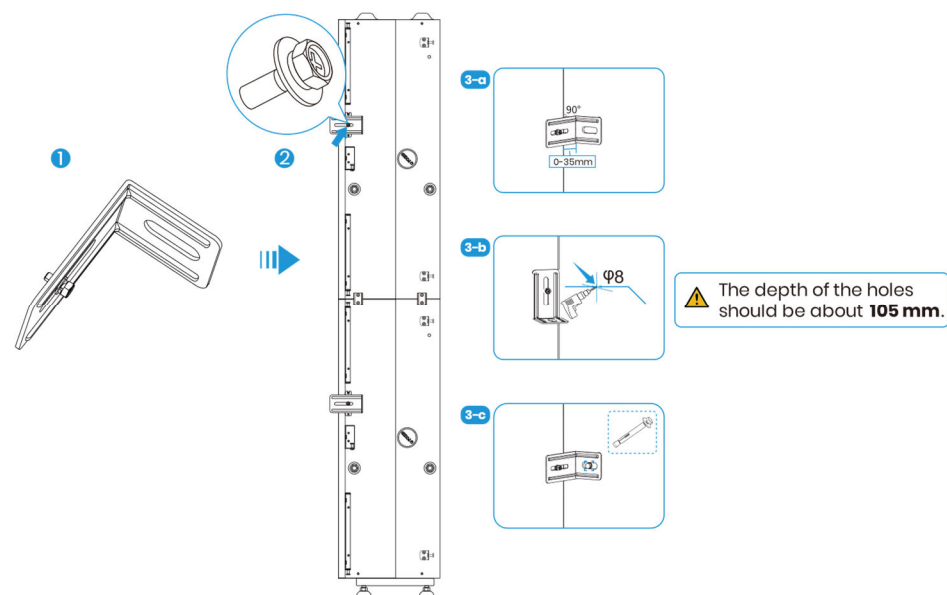
1. Attach leveling feet to the base to form the base assembly.
(Optional. Without leveling feet, the unit shall be installed on flat concrete floor or concrete-brick surface.)
2. Install the base (or base assembly) to the bottom of Battery 1 with 4 pcs M6×16 bolts, refer to ② in the figure. Recommended torque: 5.2 N·m for M6×16 bolt.
3. Place Battery 1 against the wall with a clearance of 0-35 mm.
4. Level the battery pack by adjusting the leveling feet.
5. Stack Battery 2 on top of Battery 1.



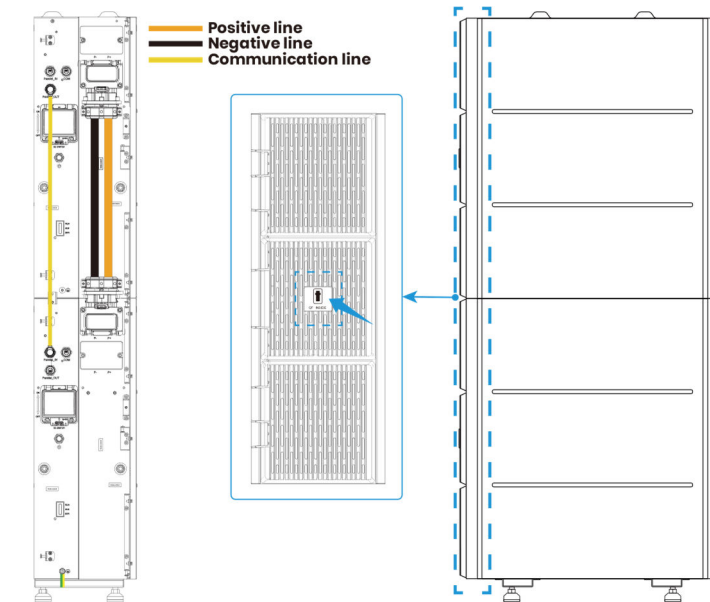
Step 2: Secure upper and lower packs with 2 connecting plates per side (4 pcs total) and 4 M4×12 bolts. Recommended torque: 1.5 N·m for M4×12 bolt.



Step 3: Fasten the fixed supports to the left and right sides of the battery stack using M4×12 bolts and M6×100 expansion bolts. Recommended torque: 1.5 N·m for M4×12 bolt; 5.2 N·m for M6×100.



Step 4: Install the connector assembly onto the battery packs, connect the communication cable A between packs, mount the trimmed side covers, and affix the label to mark the circuit breaker position.



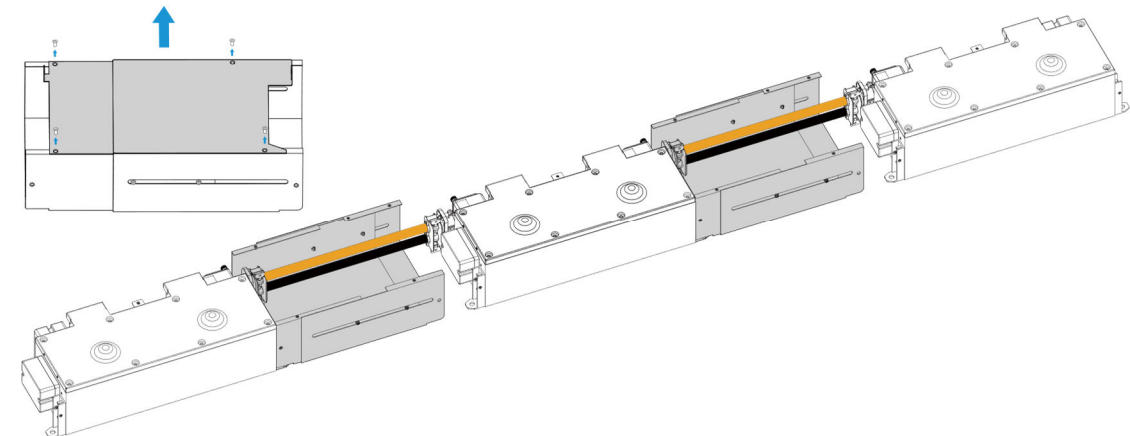
Multi-Stack / Parallel Installation (for 3-6 battery packs, 6 units as example)

The Parallel Base Kit is mandatory for this configuration.

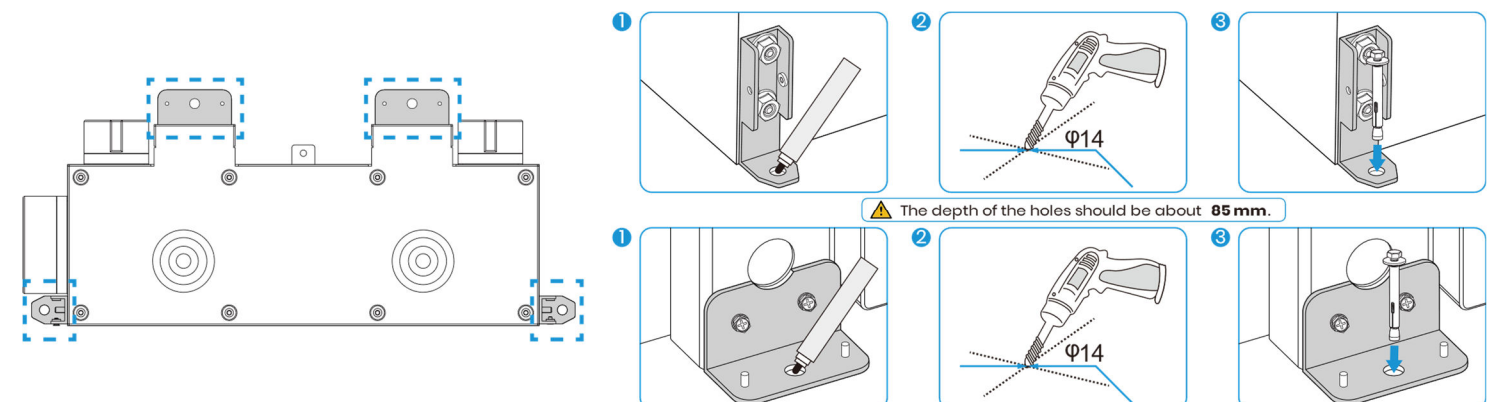
Units fitted with Parallel bases shall be installed on a flat concrete floor or concrete-brick surface.

Mode 1: Side-by-Side Arrangement (left - middle - right)

Step 1: Place the Parallel bases and the retracted telescopic slide rail (with covers removed) in an open area first. Keep the removed covers and M4×12 screws for later use. Connect the 3 Parallel bases with 2 connector assemblies. Then move them against the wall with a clearance of 0-35 mm.



Step 2: Mark the fixing positions of the Parallel base mounting feet on the floor with a marker. Remove the Parallel bases, drill the mounting holes, then reposition the bases. Secure the Parallel bases to the floor with M10×100 expansion bolts. Recommended torque: 24.5 N·m for M10×100 Expansion bolt.





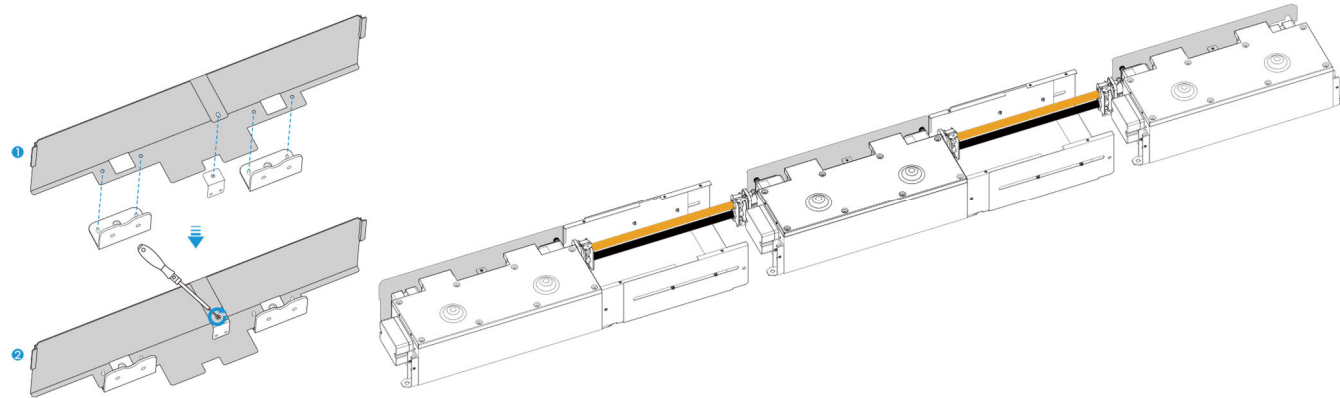
Battery



All-in-One ESS

Scan for Users Manual

Step 3: Place the rear covers between the Parallel bases and the wall. Align with the positioning posts on the Parallel base mounting feet, and secure each rear cover to the base with 1 M4×8 screw.



Step 4:

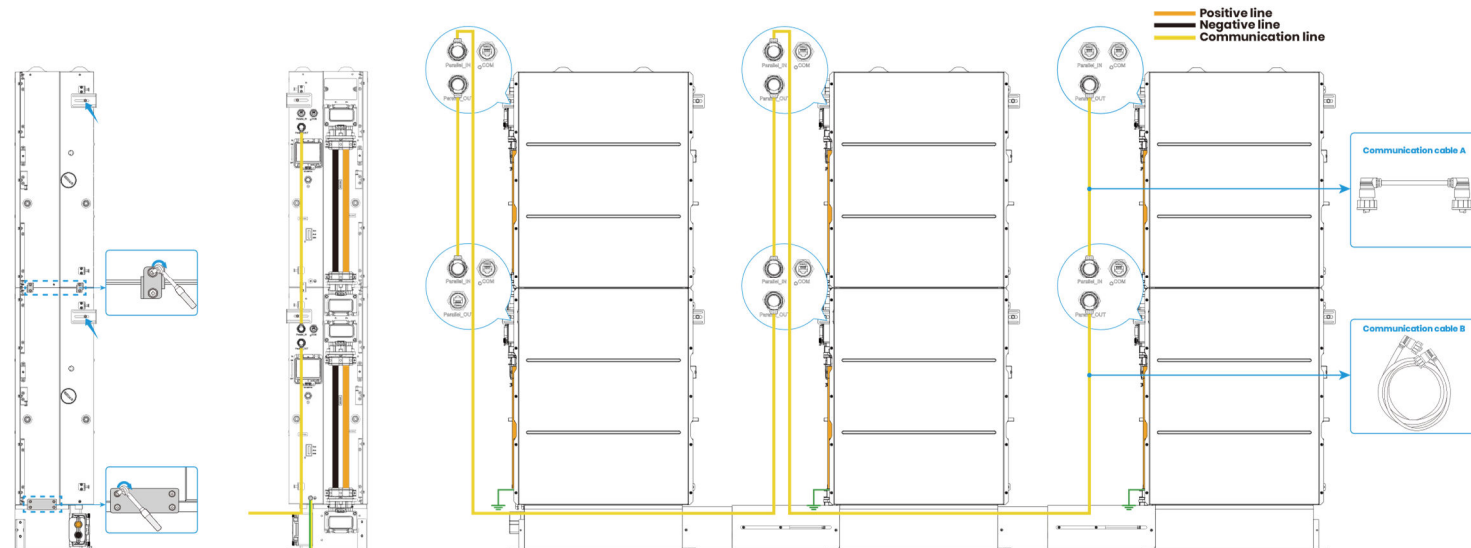
Stack battery packs onto the Parallel bases:

- Connect two battery packs on the same base with 4 BAT-BAT connecting plates.
- Connect each battery stack to its base with 2 BAT-Base connecting plates.
- All 16 bolts for fixing the connecting plates are M4×12. Recommended torque: 1.5 N·m for M4×12 bolt.

Fasten fixed supports to the left and right sides of all battery packs using M4×12 bolts and M6×100 expansion bolts. Recommended torque: 1.5 N·m for M4×12 bolt; 5.2 N·m for M6×100.

Install the connector assemblies onto the battery packs and connect the communication cables between packs.

- Connect two battery packs on the same base: connector assembly and communication cable A are from the BCable Accessory Kit. (Optional)
- Connect two battery stacks: communication cable B is from the Parallel Base Accessory Kit (Optional).
- Connect two Parallel Bases: connector assembly is from the Parallel Base Accessory Kit (Optional).



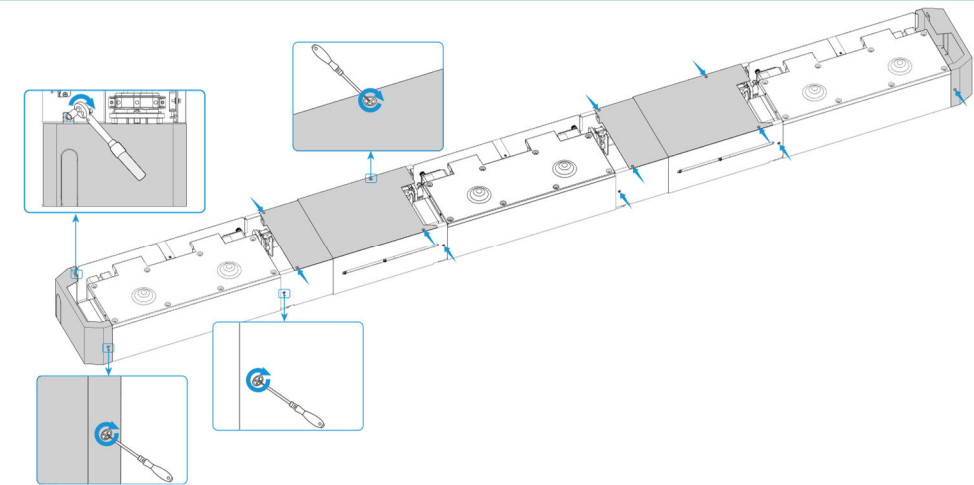
Step 5:

Extend the telescopic slide rail between the bases, and fasten both sides of the rail to the Parallel bases with 2 M4×8 screws each. Recommended torque: 1.5 N·m for M4×8 screw.

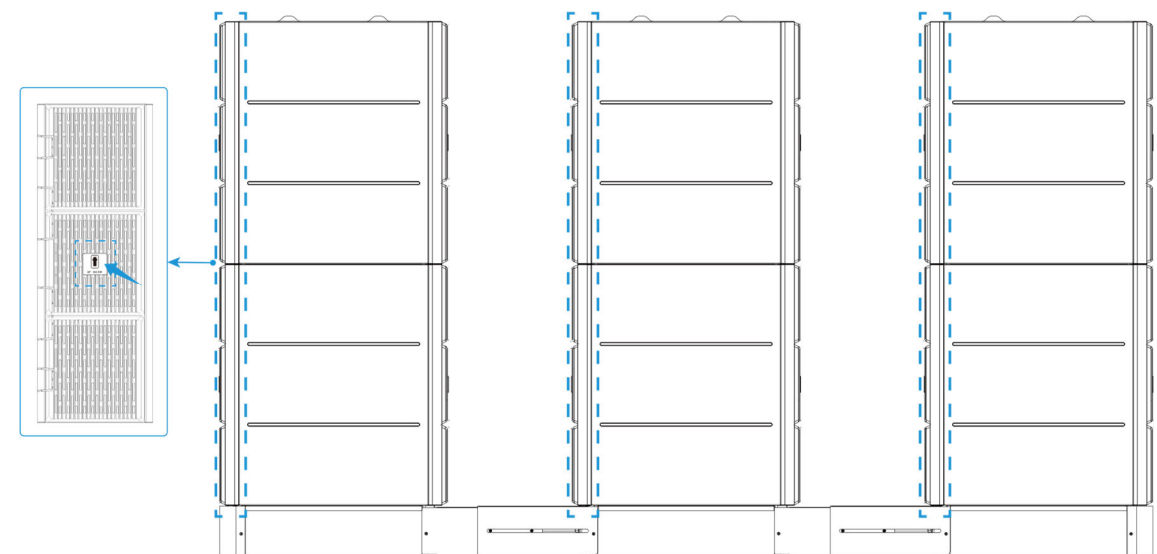
Reinstall the covers on the telescopic slide rail and tighten with the original M4×12 screws. Recommended torque: 1.5 N·m.

Install the left and right covers onto both sides of each Parallel base assembly, and fasten the covers to the battery packs and bases with M4×12 bolts. Recommended torque: 1.5 N·m for M4×12 screw / bolts.

(For illustration, the figure below only shows the Parallel base assembly.)



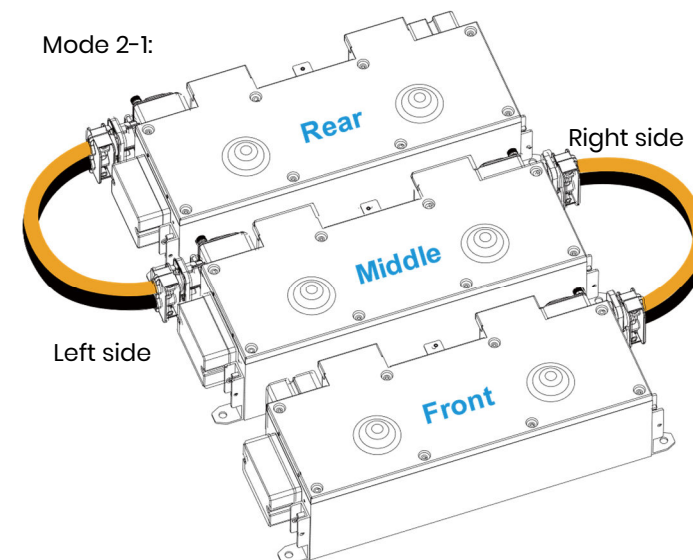
Step 6: Mount the trimmed side covers and affix the label to mark the circuit breaker position.



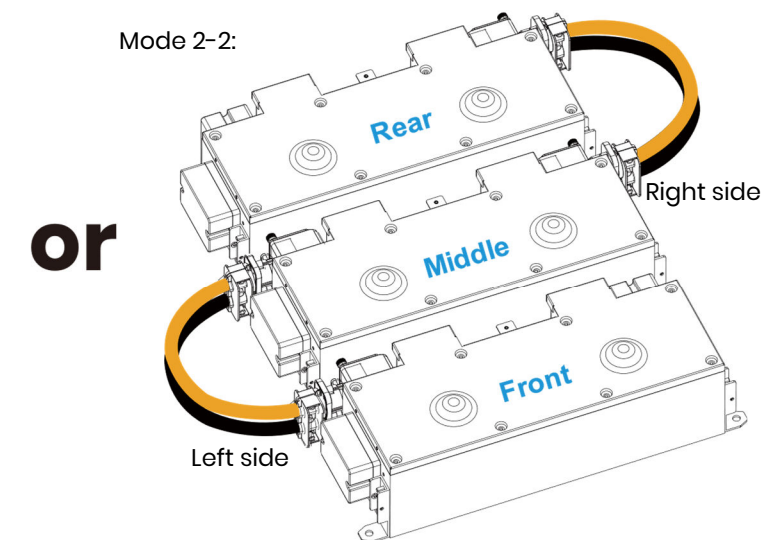
Mode 2: Front-to-Rear Arrangement (front – middle – rear)

Step 1: Arrange the Parallel bases front-to-rear in an open area first, and connect them sequentially with connector assemblies. To match the polarity, one end of each connector assembly must be disassembled, the cables crossed, then reassembled, finally the connector assembly should be bent to complete the connection. Move them against the wall with a clearance of 0–35 mm. Final status shall be as shown in the figure below:

Mode 2-1:

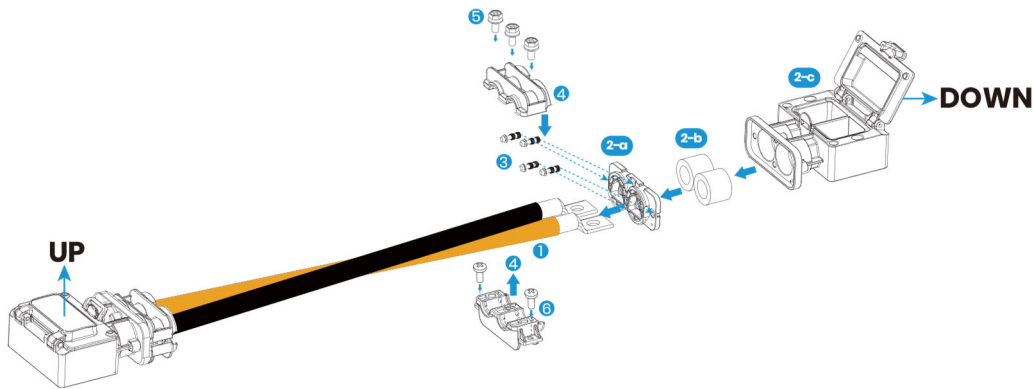


Mode 2-2:

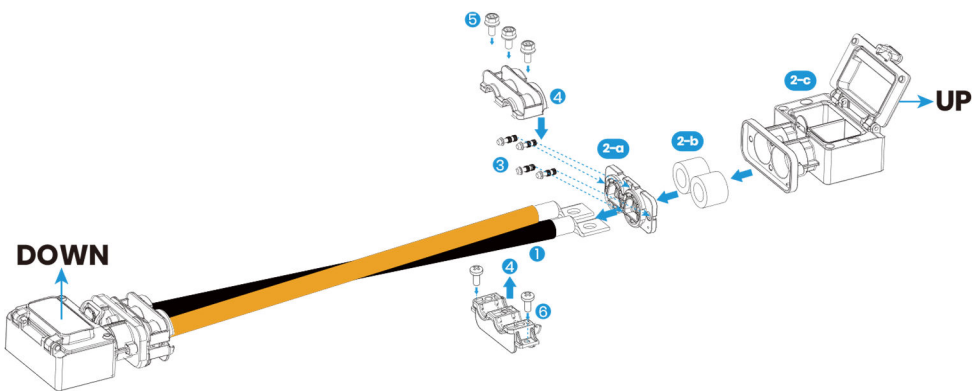




- **Left side** (Middle-Rear @Mode 2-1 & Front-Middle @Mode 2-2): Disassemble the **DOWN** end of the connector assembly.

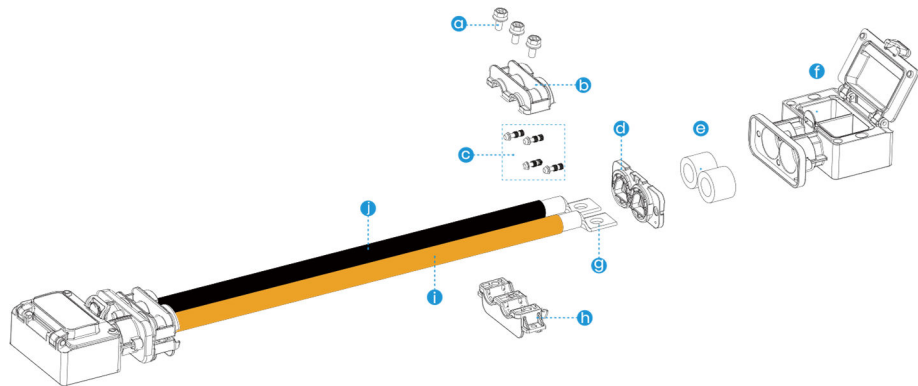


- **Right side** (Front-Middle @Mode 2-1 & Middle-Rear @Mode 2-2): Disassemble the **UP** end of the connector assembly.



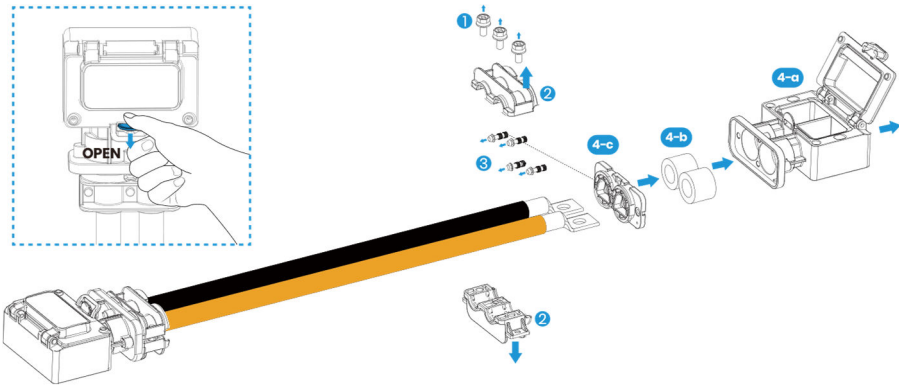
- **Connector Assembly Disassembly & Reassembly Procedures**

◆ **Components Identification**



No.	Name	No.	Name
a	M4×12 Screw	f	Protective Housing
b	Upper Pressure Plate	g	Crimp Terminal
c	M4×12 Screw	h	Lower Pressure Plate
d	Pressure Plate	i	Positive Cable
e	Cable Gland	j	Negative Cable

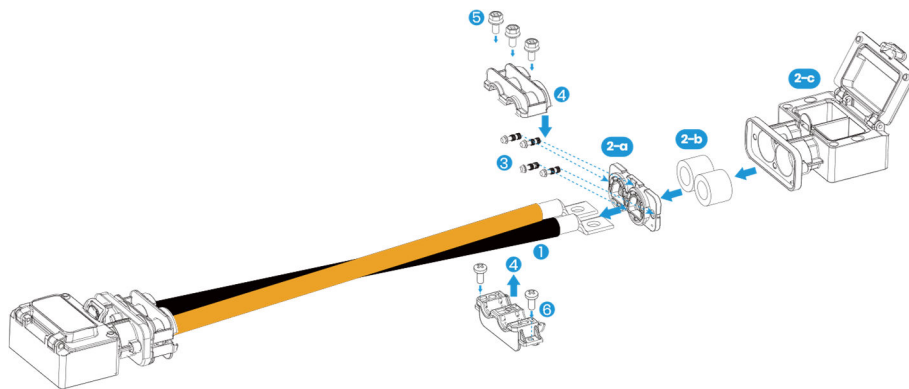
◆ **Disassembly**



Before disassembly, press the latch and flip the cover open.

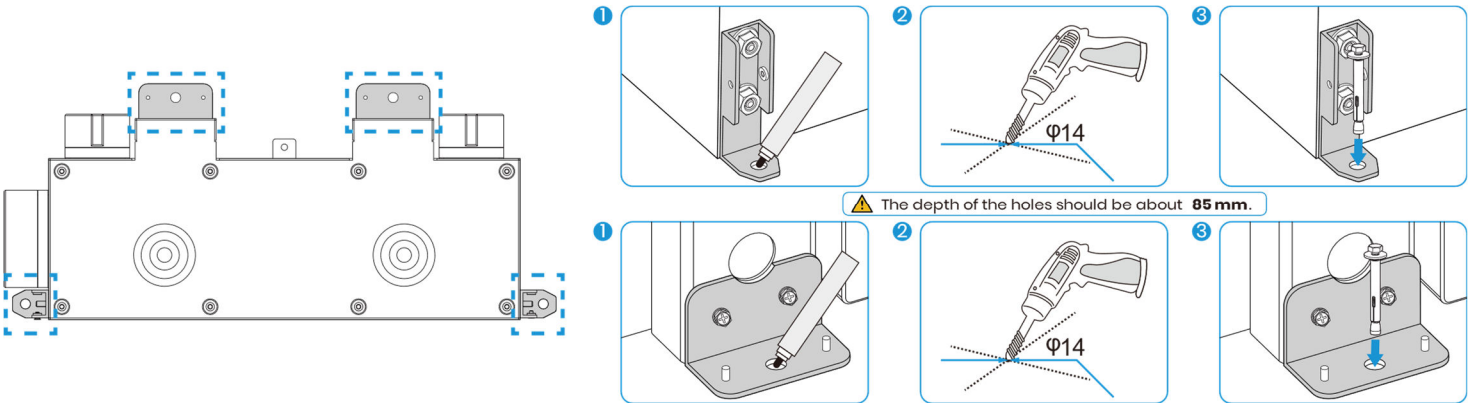
1. Loosen the M4×12 Screw (a).
2. Separate Upper Pressure Plate (b) and Lower Pressure Plate (h).
3. Loosen the M4×12 Screw (c).
4. Remove Protective Housing (f), Cable Gland (e) and Pressure Plate (d) sequentially from the cables.

◆ **Reassembly**



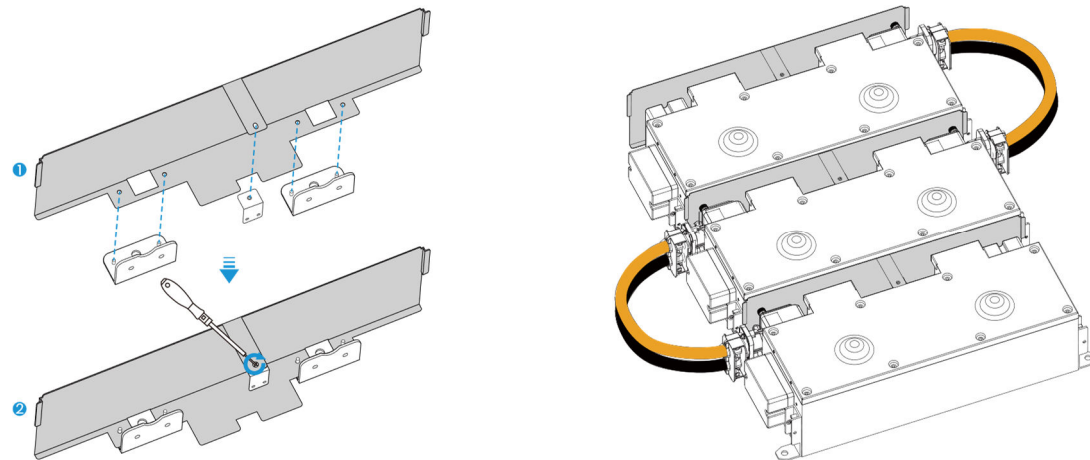
1. Cross the Positive Cable (i) and Negative Cable (j).
2. Mount Pressure Plate (d), Cable Gland (e) and Protective Housing (f) back onto the cable harness in sequence.
3. Fasten M4×12 Screw to secure Pressure Plate (d). Recommended torque for M4×12 Screw: 1.5 N.m
4. Close Upper Pressure Plate (b) and Lower Pressure Plate (h).
5. Fix the combined pressure plates with M4×12 Screw (a). Recommended torque for M4×12 Screw: 1.5 N.m

Step 2: Mark the fixing positions of the Parallel base mounting feet on the floor with a marker. Remove the Parallel bases, drill the mounting holes, then reposition the bases. Secure the Parallel bases to the floor with M10×100 expansion bolts. Recommended torque: 24.5 N·m for M10×100 Expansion bolt.





Step 3: Place rear covers between the Parallel bases and the wall, and between adjacent Parallel bases. Align with the positioning posts on the Parallel base mounting feet, and secure each rear cover to the base with 1 M4×8 screw. Recommended torque: 1.5 N·m for M4×8 screw.



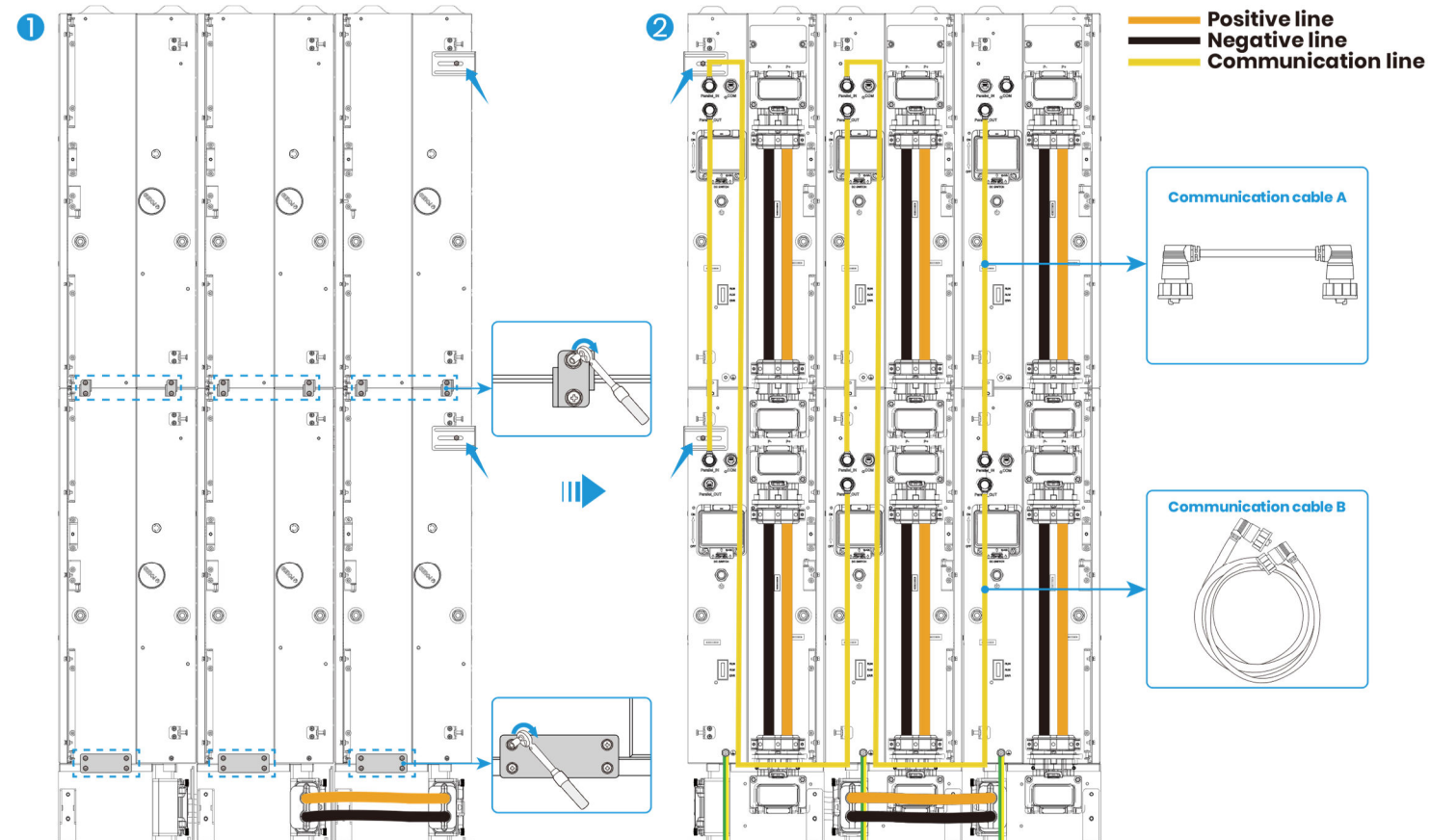
Step 4:

Stack battery packs onto the Parallel bases:

- Connect two battery packs on the same base with 4 BAT-BAT connecting plates.
- Connect each battery stack to its base with 2 BAT-Base connecting plates.
- All 16 bolts for fixing the connecting plates are M4×12. Recommended torque: 1.5 N·m for M4×12 bolt.

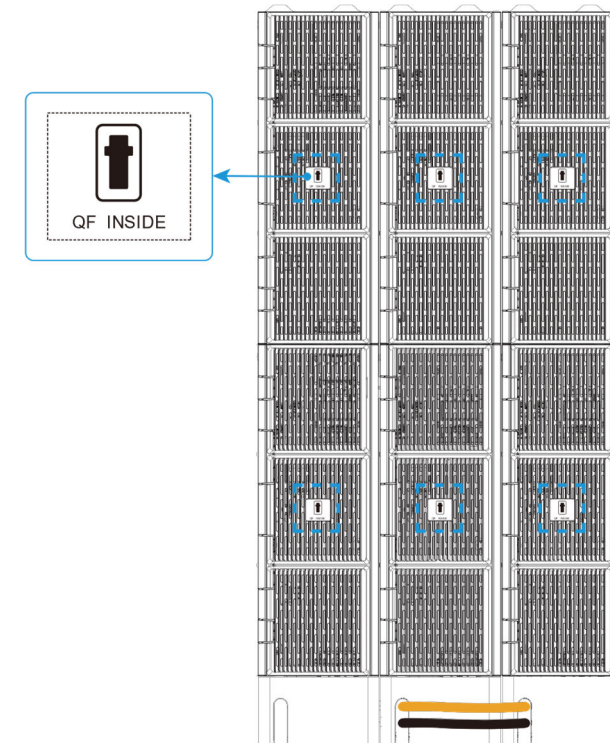
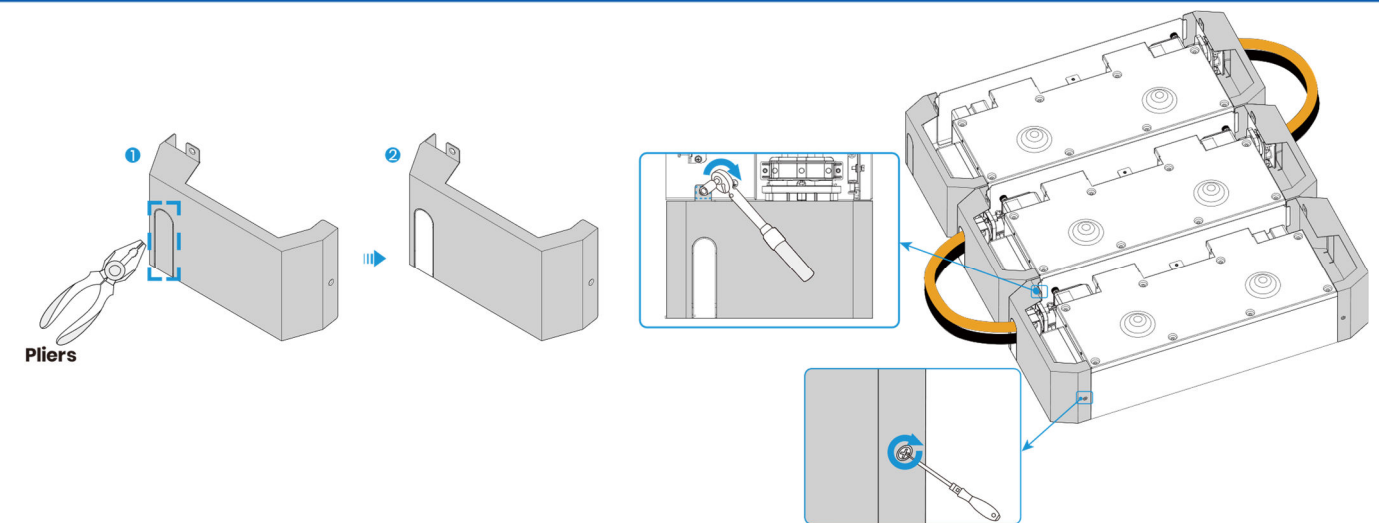
Fasten fixed supports to the left and right sides of the two wall-side battery packs using M4×12 bolts and M6×100 expansion bolts. Recommended torque: 1.5 N·m for M4×12 bolt; 5.2 N·m for M6×100.

Install the connector assemblies onto the battery packs and connect the communication cables between packs.



Step 5: Install the left and right covers onto both sides of each Parallel base, and fasten the covers to the battery packs and bases with M4×12 bolts. Recommended torque: 1.5 N·m for M4×12 bolts. Drill corresponding through holes on the left and right covers at the cable outlet positions as needed. (For illustration, the figure below only shows the Parallel base assembly.)

Step 6: Mount the trimmed side covers and affix the label to mark the circuit breaker position.





Battery



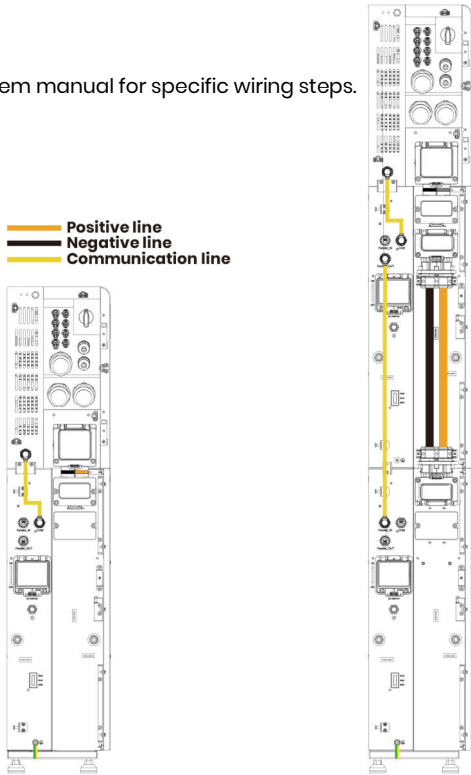
All-in-One ESS

Scan for Users Manual

III. Wiring

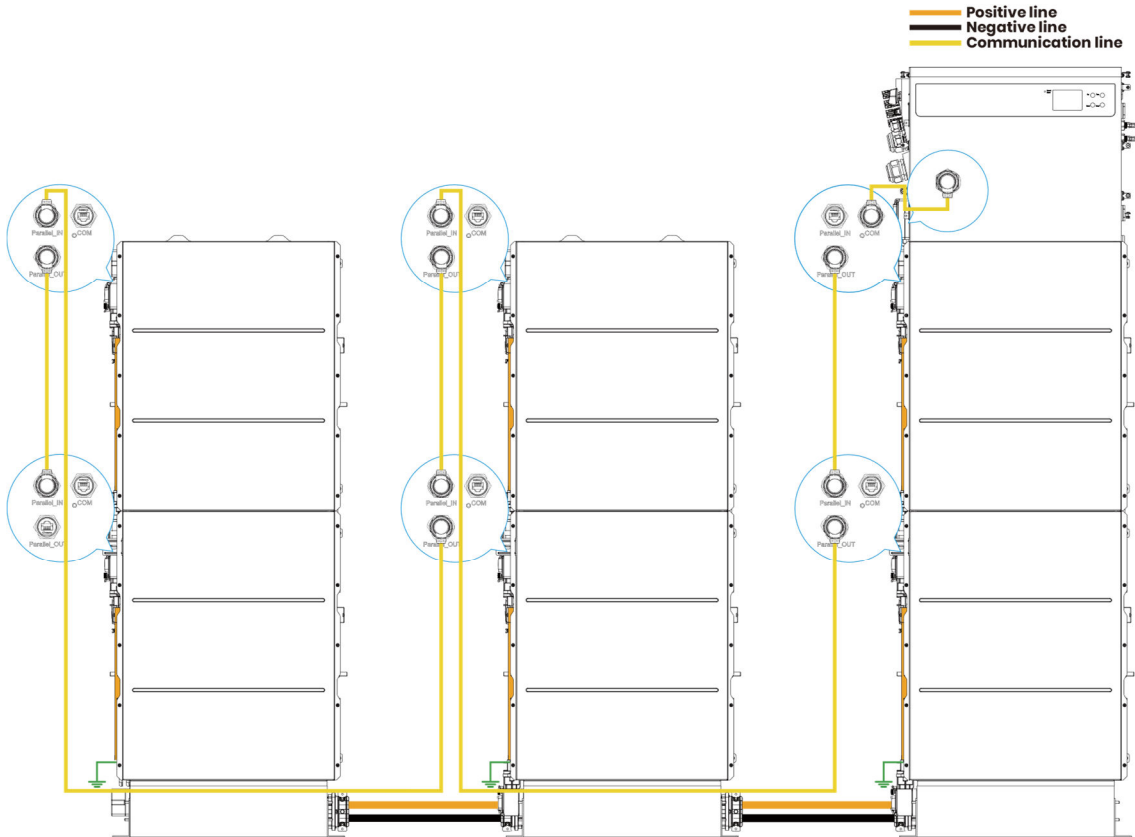
Single-stack wiring

CAUTION:
Please refer to the All-in-One Energy Storage System manual for specific wiring steps.



Multi- stack wiring

Mode 1:



Or

Mode 2:

