

Quick Installation Guide _for Parallel System



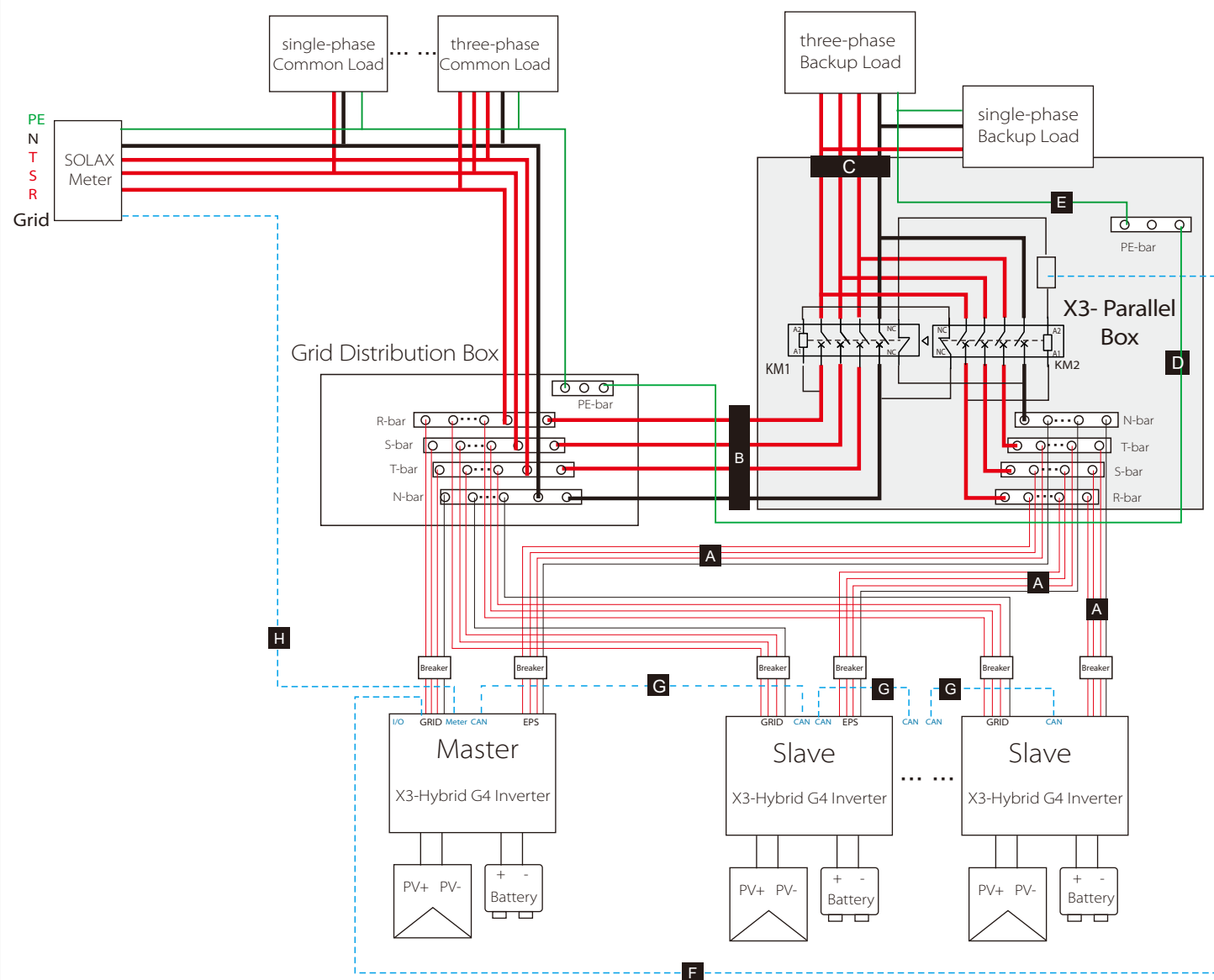
Part 1 Preparation

1.1

System Diagram

Cables marked with majuscule in below system diagram will be introduced in this manual.

- A** EPS connection between Inverter and parallel box (refer to Part 2)
- B** Grid connection between Grid Distribution Box and parallel box (refer to Part 2)
- C** EPS Load connection between EPS load and parallel box (refer to Part 2)
- D** Earth connection between parallel box and external earth bar (refer to Part 2)
- E** Earth connection between parallel box and EPS Load (refer to Part 2)
- F** Communication connection between parallel box and Master Inverter (refer to Part 2)
- G** Communication connection between Inverters (refer to Part 3)
- H** Communication connection between Master Inverter and SOLAX meter (refer to Part 3)



1.2

Packing List

Expansion bolt * 4,	Gasket(M8) * 4	Cold-pressed terminal (35-6) * 1, (70-10) * 8	Cold-pressed terminal(S-5) * 44	RJ 45 terminals * 1	Communication terminal (green) * 1 (choose a suitable one when installing)
Board marking paper *1	Bracket * 1	M4 inner hexagon bolt * 2	Ground terminal (length, 450mm) * 1	Warranty card * 1	Quick Installation Guide * 1

1.3

Cable Preparation

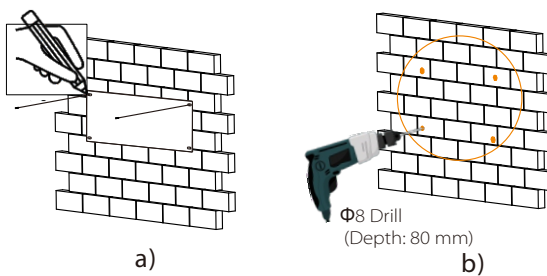
- Press the terminal harness.

Connectors	Application	Connectors	Application	Connectors	Application	Connectors	Application
R/S/T/N EPS Connector X 10 pairs		Grid R/S/T/N/PE Connector X 1 pcs		RJ 45 terminals 1 pcs		Switching communication connection X1 pcs	

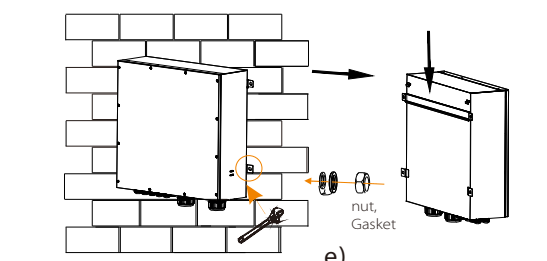
1.4

Mounting

- Use the attachment bag of control cardboard drill four $\Phi 8$ holes.
- Depth: at least 80mm

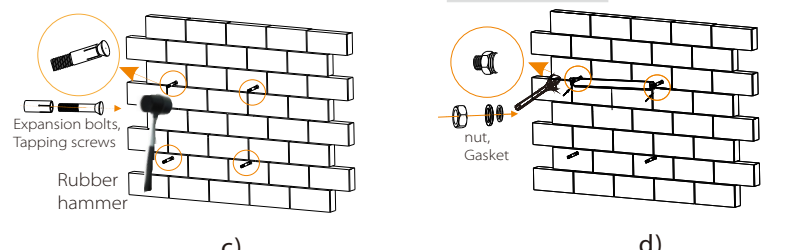


- Hang the box on the bracket on the wall.
- Fix the bottom of the box in the same way of how the bracket is fixed. (Torque: 8.0 N·m)
- The picture on the right shows the back of well-fixed box.

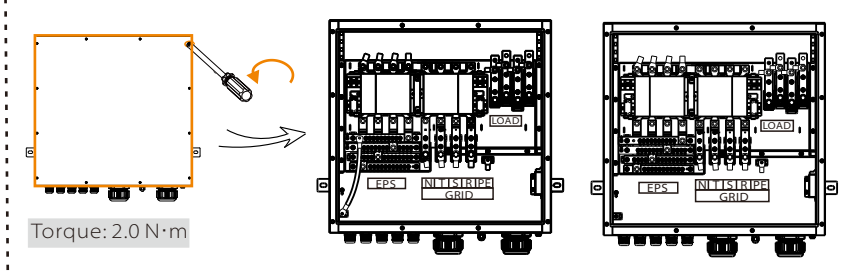


Note: Please refer to the turning radius of the prepared cables about the distance between the bottom of parallel box and the floor.

- Tighten the four expansion tubes.
- Pass the expansion screws through the M6 washers, and then screw the top two expansion screws to fix the bracket on the wall. (Torque: 8.0 N·m)



- Remove the safety bezel.



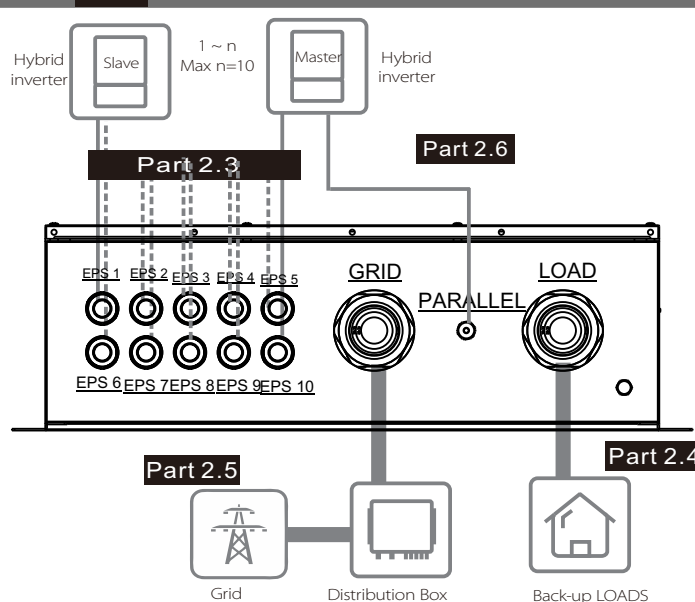
For Other Areas

For Australia

Part 2 Installation of Parallel BOX

2.1

Connection Overview of Parallel BOX



Important Warning!

Every cable must be connected according to correct line sequence (R-R, S-S, T-T, N-N), otherwise any small misoperation may cause the system running failed.

2.3 EPS Connection

2.4 Back-up Load Connection

2.5 GRID Connection

2.6 Communication Connection

2.2

Cable Size Recommended

Note: Soft cables are suggested for ease of installation.

EPS	R-cable, S-cable, T-cable, N-cable	4-6mm ² * 4 PCS for one EPS port
	Outer Diameter of EPS Cable	12.5 -18 mm
	4 cables needed for one EPS port (one inverter) 8 cables needed for two EPS ports (two inverters paralleled) 40 cables needed for ten EPS ports maximummly (Ten inverters paralleled)	
Back-up Load	R-cable, S-cable, T-cable, N-cable	70mm ² * 4 PCS
	Outer Diameter of LOAD Cable	18-44 mm.
Grid	R-cable, S-cable, T-cable, N-cable	70mm ² * 4 PCS
	PE-cable	35mm ² * 1 PCS
	Outer Diameter of GRID Cable	23-56mm
Communication	Communication cable	≥0.2mm ² * 2 PCS for one communication port
	Outer Diameter of Communication Cable	6-8 mm

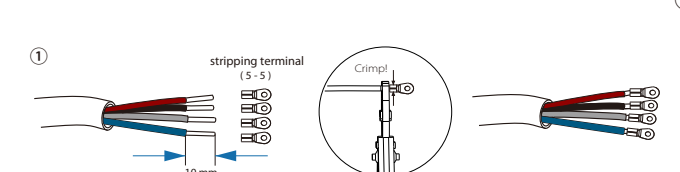
2.3

EPS Connection

Connection of EPS Parallel Box side

Make EPS cables

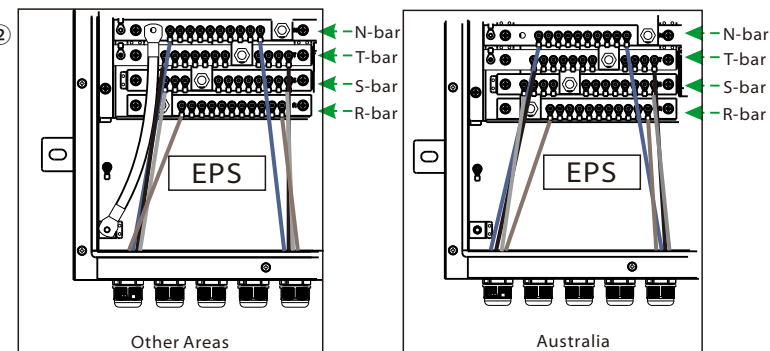
Remove 10mm insulation from cable ends, and then insert the stripping terminal. Press the terminal head with the blank holder.



Screw cables

Screw cables through the EPS port on the bottom of the BOX to corresponding EPS ports (R-bar, S-bar, T-bar, N-bar, G-bar) by screwdriver. (refer to picture as right)

Torque: 1.0 N·m



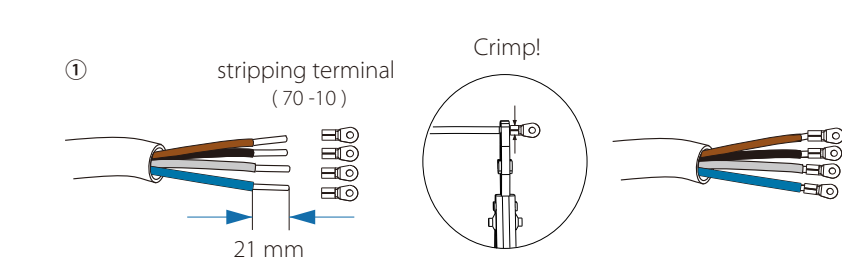
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Back-up Load Connection

Connection of Parallel Box side

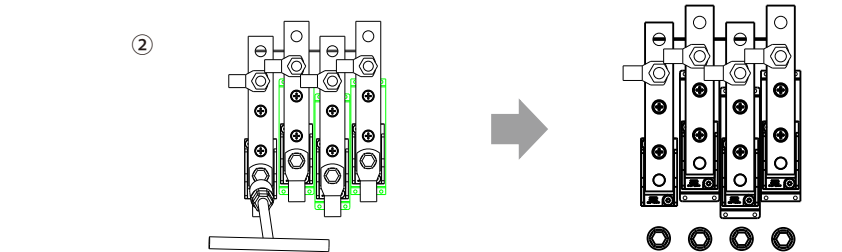
Make Load cables

Remove 21 mm insulation from cable ends, and then Insert the stripping terminal. Press the terminal head with the blank holder.



Screw cables

Pass the completed wiring harness through the Load port and follow the corresponding wiring ports (R-bar, S-bar), (T-bar, N-bar) install it and tighten the screws. Torque: 22.0 N·m (refer to picture as right)



Connection of back-up load side

Selecting appropriate Back-up loads

The requirement shown as below must be satisfied:

- Algebraic apparent power of back-up loads **must be less than** Algebraic apparent power of hybrid system * 0.9
- Algebraic RCD apparent power of RCD back-up loads **must be less than** Algebraic apparent power of hybrid system * 0.6

Back-up Load connection of loads side should be analyzed and operated depending on specific loads. Here will not be described into details.

