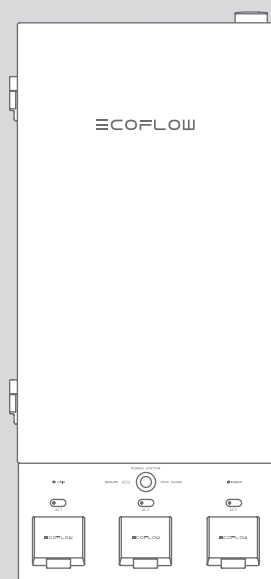


ECOFLOW SMART HOME PANEL 2



Documents



App

Q For the latest installation guide, owner's manual, and tutorial video, please scan the QR code or visit:
<https://manuals.ecoflow.com/product/smart-home-panel-2>

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Safety Instructions

Disclaimer

Please read the product document and ensure that you understand it fully before using the product. After reading this document, keep it for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you understand, approve and accept all the terms and content in this document. EcoFlow is not liable for any loss caused by the user's failure to use the product in compliance with the product document.

In compliance with laws and regulations, EcoFlow reserves the right to the final interpretation of this document and all documents related to the product. This document is subject to changes (updates, revisions, or termination) without prior notice. Please visit EcoFlow's official website to obtain the latest product information: <https://www.ecoflow.com/>.

Symbol Conventions

Symbol	Description
 WARNING	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
 NOTICE	Indicates important or additional information.
	The position for connecting the protection ground cable.
	CAUTION, RISK OF ELECTRIC SHOCK.
	Caution, risk of danger.
	Refer to the operation instructions.

WARNING

- Only qualified electrical personnel should install or service the product.
- Please read the Installation Guide carefully before installing, operating, or servicing this product.
- Installation of this product must conform to local standards, national electrical safety standards, and the manufacturer's instructions.
- Specifications of self-provided cables should meet the requirements of the Installation Guide and local regulations.
- The AC cables are high voltage cables. Risk of death or serious injury due to electric shock.
- There is a high possibility of electric shock or serious burns due to the high voltage in the product.
- Use appropriate personal protective equipment (PPE) and follow safe electrical work practices.
- Do not touch exposed wires with your hands.
- Be cautious to prevent injury when moving heavy objects. Wear personal protective equipment such as protective gloves and shoes when manually moving the product.
- Do not install or operate the equipment in extreme weather events such as lightning, snow, heavy rain, strong wind, etc.
- Do not install or operate the product in an area where flammable or explosive materials are stored.
- Inspect the product and cables for damage before installing. Do not install the product or cables if damaged in any way.
- Turn off all power supplying this product before installation. Disconnect each circuit individually before servicing.
- Always use a properly rated voltage sensing device to confirm that the power is off.
- During the drilling process, cover the interior product to prevent debris from falling into the product, and clear the debris after drilling to prevent interference with the equipment.
- Do not damage, smear or cover any warning labels on the device. All labels must be visible after installation.
- Before operating the product, check the electrical connections to ensure that the product is reliably and permanently grounded.
- Do not place any kind of objects on top of the product during operation.
- To completely de-energize the product, you must turn off the upstream breakers as well as physically unplug all EcoFlow DELTA Pro series. Failure to do so may present a shock hazard.
- Do not place or install flammable or potentially explosive objects near the product or in explosive atmospheres.
- Do not insert foreign objects into any part of the equipment.
- Do not connect life-support systems, medical equipment, or any other equipment use where product failure could lead to injury to persons or loss of life to circuits which can be remotely switched.
- Install the product in a location that prevents damage from flooding. Ensure that no water sources are above or near the product, including downspouts, sprinklers, or faucets.
- If needed, replace all devices, doors, and covers before turning on the power.

CAUTION

- In the case of cable damage, it must be replaced by the manufacturer, customer service or qualified personnel to prevent a safety hazard.
- Do not use solvents to clean the product.
- The product must be disposed of according to local codes and regulations.
- This product is not intended to be used as a service disconnect.
- Do not use parts or accessories other than those specified for use with the product.
- When installing the product, the screws need to be tightened according to the specification torque using a special tool.
- Keep out of reach of children or animals.
- This product is designed for residential use only.

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the product and receiver.
 - Connect the product into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

IC Warning

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

IC RF Statement:

When using the product, maintain a distance of 20 cm from the body to ensure compliance with RF exposure requirements.

Technical Specifications

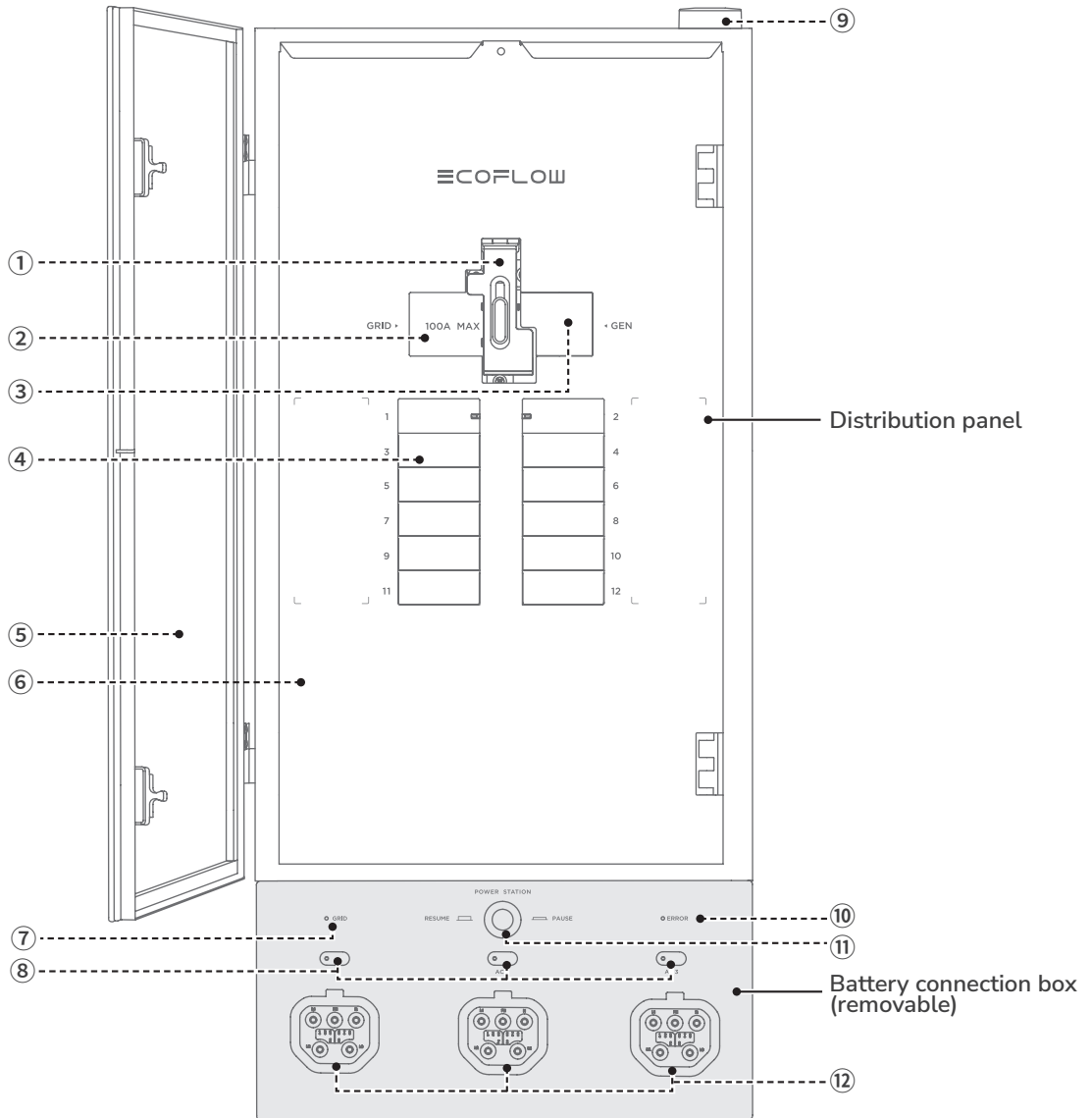
AC voltage (nominal)	120V/240V
Feed-in type	Split phase
Maximum current rating	100A panel / 90A storage
Busbar rating	120A
Maximum input short-circuit current	10kA
Operating temperature	-22°F to 122°F (-30°C to 50°C)
Operating humidity	Up to 100% RH, condensing
Altitude	≤ 2,000 m (6,562 ft)
Overvoltage category	IV
Enclosure type	NEMA TYPE 3R rainproof (distribution panel) NEMA TYPE 1 (battery connection box)
Number of load branches	12
Communication	Ethernet, Wi-Fi, and Bluetooth®
Wi-Fi	Frequency range: 20M: 2412 - 2472 MHz 40M: 2422- 2462 MHz Maximum output power: ≤ 16.5 dBm
Bluetooth®	Frequency range: 2402-2480MHz Maximum output power: ≤ 8.76 dBm
Weight	52.9 lb (24 kg)
Dimensions	32.4 x 14.9 x 6.7 in. (823.7 x 379 x 170 mm)
Compatible generator	120V single phase / 240V split phase (3-12kW)

Product Overview

NOTICE

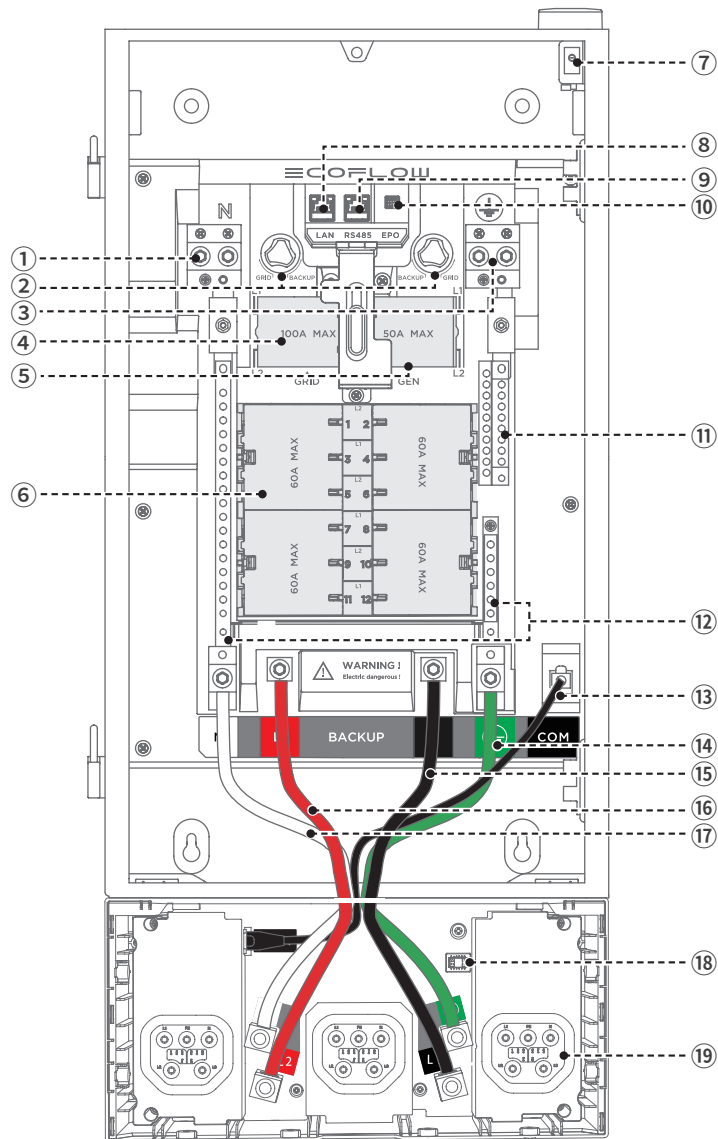
- The figures are for reference only, please refer to the actual product.

With Deadfront Cover Installed



- ① Interlock (can be slid up/down to ensure that only one main circuit breaker to be in the ON position at any time)
- ② Main circuit breaker (grid)
- ③ Main circuit breaker (generator)
- ④ Branch circuit breaker
- ⑤ Glass door

- ⑥ Deadfront cover
- ⑦ Grid indicator
- ⑧ Power input/output button and storage indicator
- ⑨ Antenna (works with the EcoFlow app)
- ⑩ Error indicator
- ⑪ Emergency stop button
- ⑫ Power input/output port



- | | |
|---|--------------------------------------|
| ① Grid & generator neutral lugs | ⑩ EPO port |
| ② Relay switching knob | ⑪ Load ground bus bar |
| ③ Grid & generator ground lugs | ⑫ Load neutral bus bar |
| ④ Grid supply (L1, L2) | ⑬ Internal communication (COM) cable |
| ⑤ Generator supply (L1, L2) | ⑭ Backup ground power cable |
| ⑥ 12 Loads (branch circuits) (L1, L2) | ⑮ Backup L1 power cable |
| ⑦ Deadfront switch (triggered to power on/off the "power input/output port" when installing/removing deadfront cover) | ⑯ Backup L2 power cable |
| ⑧ Ethernet port | ⑰ Backup neutral power cable |
| ⑨ RS485 port (used for internal debugging) | ⑱ Auxiliary power port |
| | ⑲ Power input/output port |

What's
In The Box

NOTICE

- After unpacking, check that the deliverables are intact and complete. If any item is missing or damaged, contact the supplier.

A

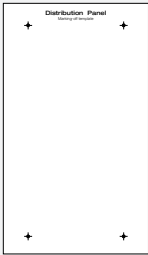
x1



Smart Home Panel 2
(glass door and deadfront cover packaged separately)

B

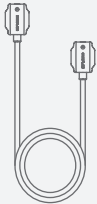
x1



Marking-off template

C

x1



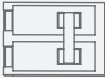
EcoFlow Power Input/Output Cable

Preparing
Tools and Instruments



- Use appropriate personal protective equipment (PPE) and follow safe electrical work practices.

Essentials



Main circuit breaker: 100A for grid, 50A for generator
Branch circuit breaker: Max. 60A, 1 in., AFCI/GFCI supported, plug-on neutral unsupported
See "Circuit Breaker Compatibility" for details.

Optionals

If you need to install the battery connection box individually:
Power cables:  2 AWG,  6 AWG
CAT6, T568B straight-through, marked as STP or SFTP, network cable: ≤787 in. (20 m)
Conduit fitting: 1-1/2 in.

Cables for grid supply:  1 AWG,  4 AWG
Cables for home loads:  14 AWG - 4 AWG,  14 AWG - 6 AWG
Cable for Ethernet communication : CAT6, T568B straight-through, marked as STP or SFTP

If you need to connect a generator:
Generator main circuit breaker: 50A
Cables for generator supply:  4 AWG,  8 AWG
Inlet box 


Hydraulic hole puncher
(used for cable entry)


Screw ST5.5x32
(used for mounting Smart Home Panel 2)


Sealing washer
(outside diameter 0.79 in. and inside diameter 0.24 in.)

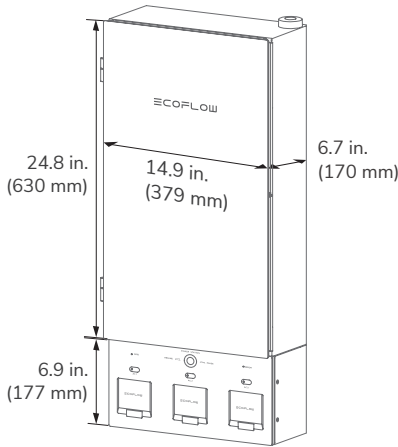
How to
Install

Installation Procedure

No.	Step	Section in the Installation Guide
1	Site survey Understand each part of the system, check the network communications in the owner's home, and select an installation scenario based on the actual situation.	Product Overview, System Overview, Technical Specifications Installation Scenarios Internet Access
2	Prepare tools and instruments Check the materials and tools required.	Preparing Tools and Instruments
3	Set cable entry This panel does not have factory-preset knockouts. Set the required cable entry to meet the allowable area requirements.	Cable Entry Setting
4	Mount the panel There are 2 methods for mounting.	Mounting Option 1: Installing the Entire SHP2 Indoors Mounting Option 2: Installing the Panel and Battery Connection Box Individually
5	Wiring Install or relocate circuit breakers, mark the circuits of home loads, and connect the conductors of grid, generator, and home load. Last but not least, check all the connection.	Wiring Connecting and Using Generator

6	Completing panel installation Install interlock, deadfront cover, and glass door. Mark the circuits on labels on the dead front cover.	Completing Installation
7	Install the portable power station Install the portable power station and connect the power station to Smart Home Panel 2. Press the power input/output button on the battery connection box (marked as AC 1/AC 2/AC 3) to turn on the port.	Connecting With Battery Storage
8	System commission Complete the system commission via the EcoFlow app.	System commission

Dimension

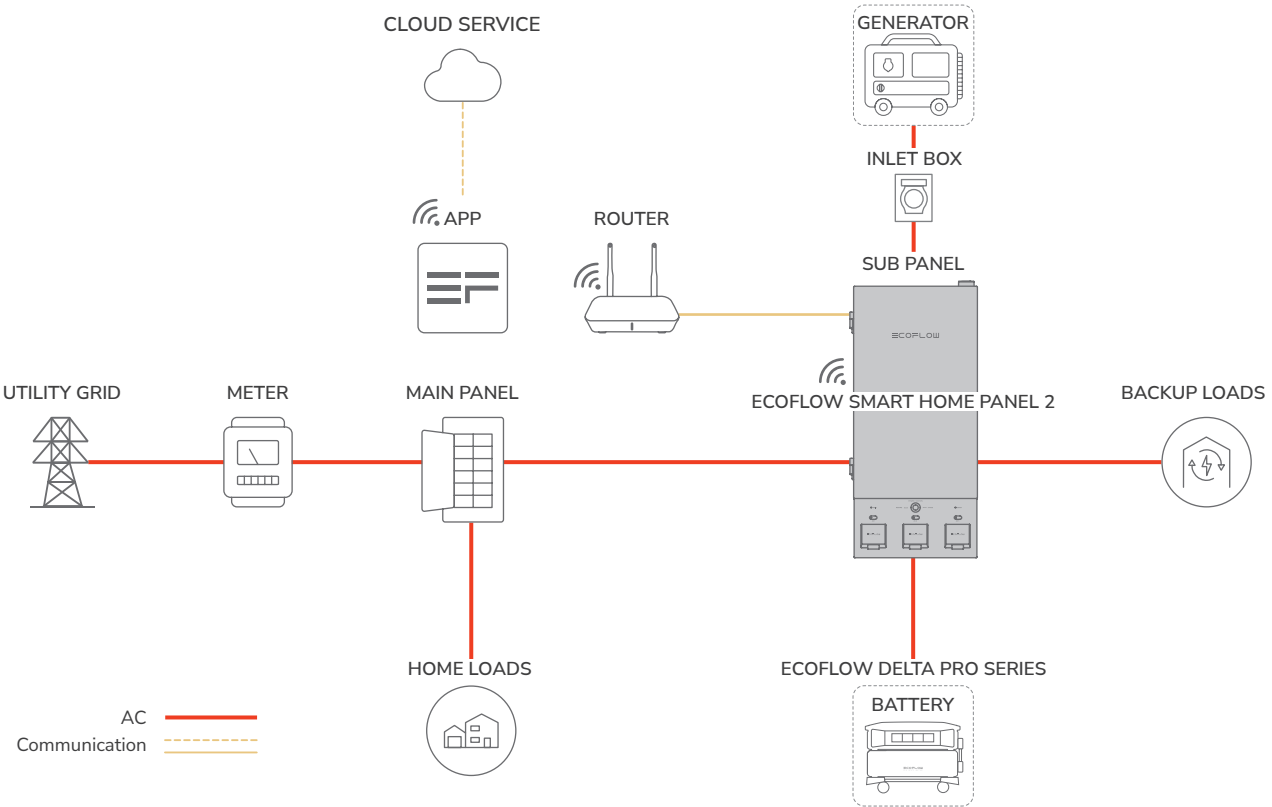


System Overview

- NOTICE

 - An off-grid configuration (not connected to the power grid) is not recommended, because the system must be connected to the power grid to ensure a constant power supply for firmware updates.

Smart Home Panel 2 is used as a sub panel to connect with the main panel to access grid power. It can also be connected to a generator, with an inlet box that allows you to connect your generator to SHP2 easily, and to DELTA Pro Series for energy storage.



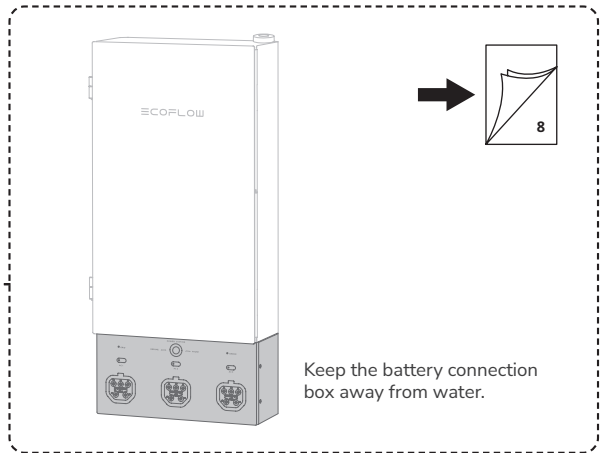
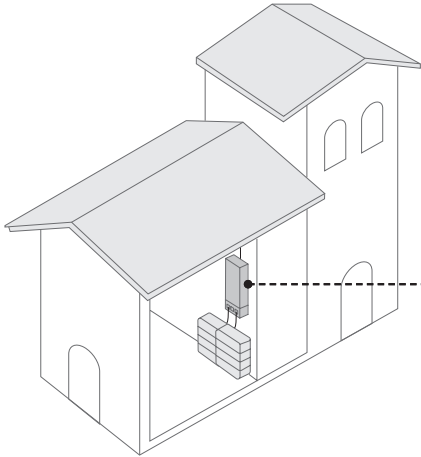
Installation Scenarios

1. Install the entire SHP2 indoors

NOTICE

- Ensure that the glass door may swing open to 90°.

Minimum clearance: 3 in. above, 21.7 in. - 52 in. below (taking connecting with EcoFlow DELTA Pro Ultra as an example), 1.5 in. for the left side, and 3 ft for front clearance.



2. Install the panel and the battery connection box individually

WARNING

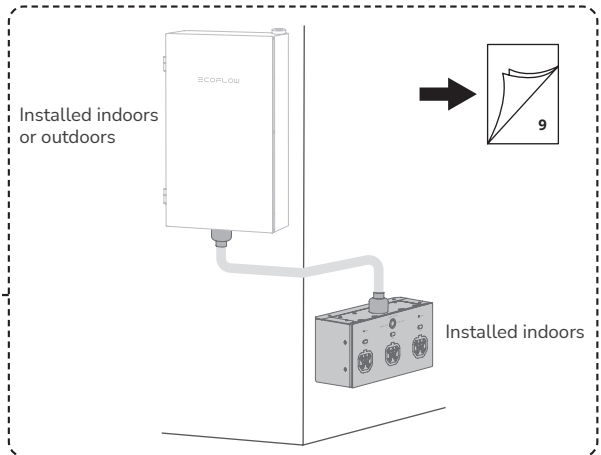
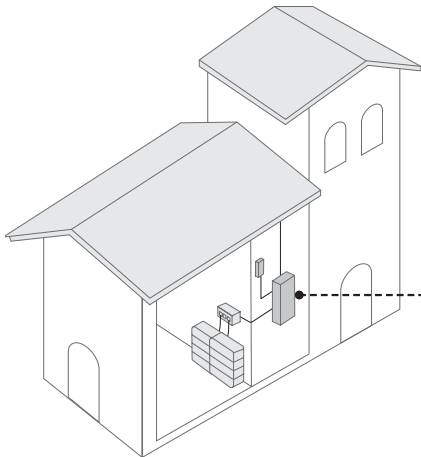
- The battery connection box is not waterproof. Therefore, it should be installed indoors to avoid water.

NOTICE

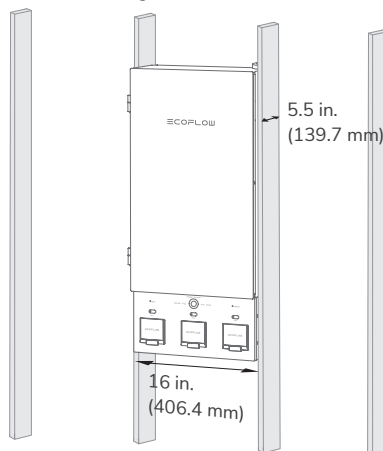
- Ensure that the glass door may swing open to 90°.

Minimum clearance for the distribution panel: 3 in. above and below, 3 ft for front clearance, 1.5 in. for the left side

Minimum clearance for the battery connection box: 3 in. above, 21.7 in. - 52 in. below (taking connecting with EcoFlow DELTA Pro Ultra as an example).



Surface mounting and flush mounting are supported. Flush-mounting is shown below.

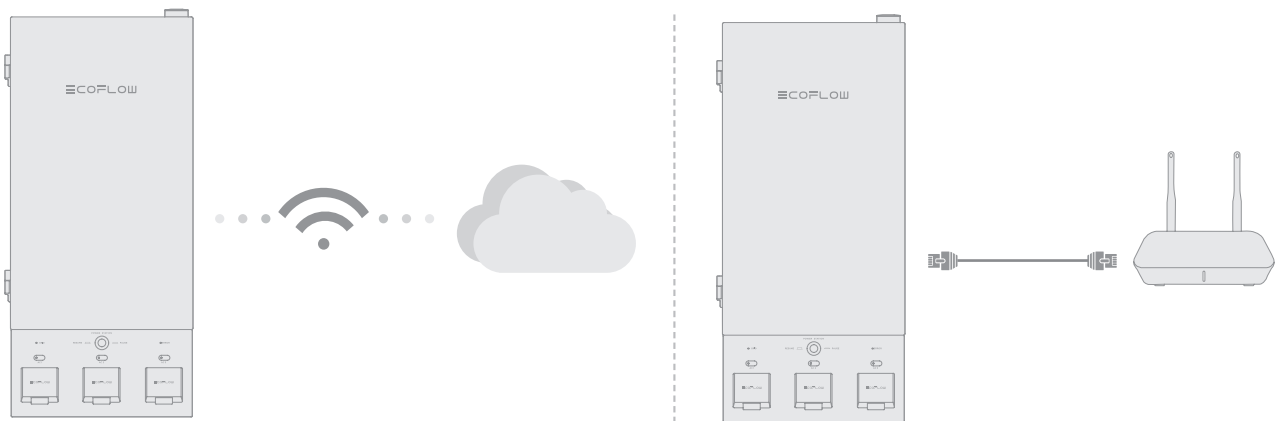


Internet Access

You can use Wi-Fi or wired connection to access Internet.

Identify the location of the router and decide whether to use a wireless or wired connection.

For wired connection, prepare a CAT6, T568B straight-through cable, marked as STP or SFTP, and set the corresponding cable entry.



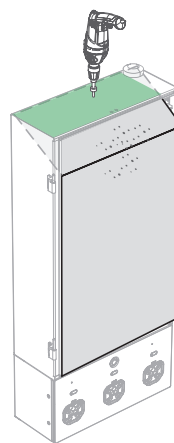
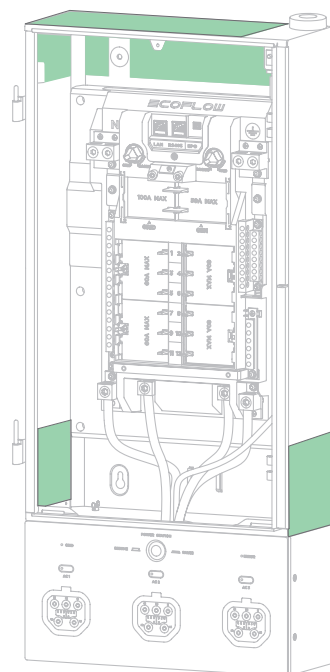
Cable Entry Setting



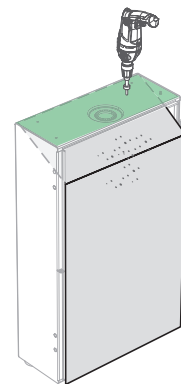
WARNING

- Before drilling cable entry, cover the interior equipment to prevent debris from falling into the equipment, as shown in the 4 orientations below. If the device you receive is covered with protective film, you can skip this step.
- Ensure that all the protective film has been fully removed after drilling. Otherwise, heat dissipation will be affected.
- Clear the debris after drilling to prevent interference with the equipment. A hydraulic hole puncher is recommended.

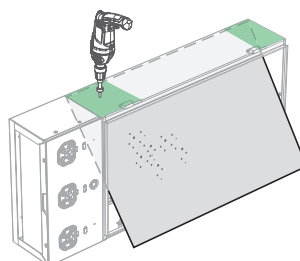
Allowable entry locations
 Protection



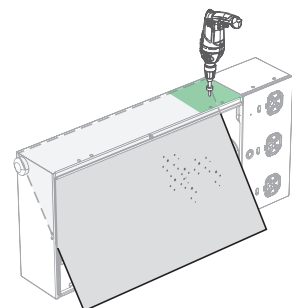
Top



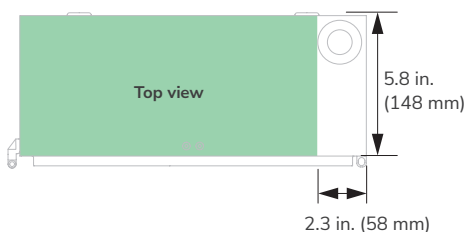
Bottom



Left



Right

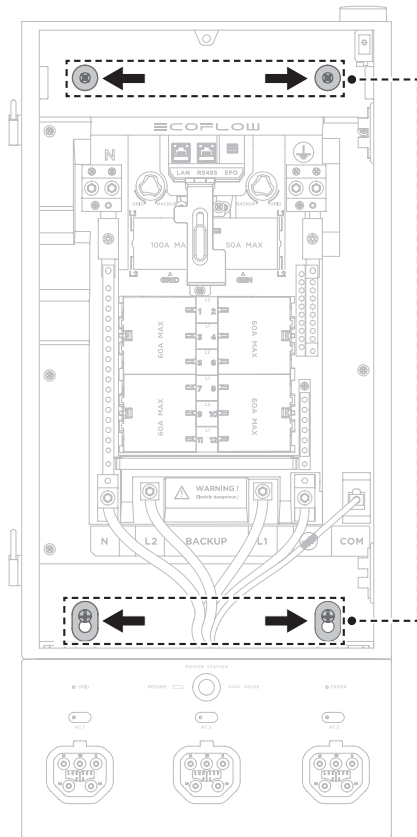
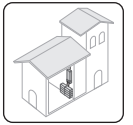


Mounting Option 1: Installing the Entire SHP2 Indoors



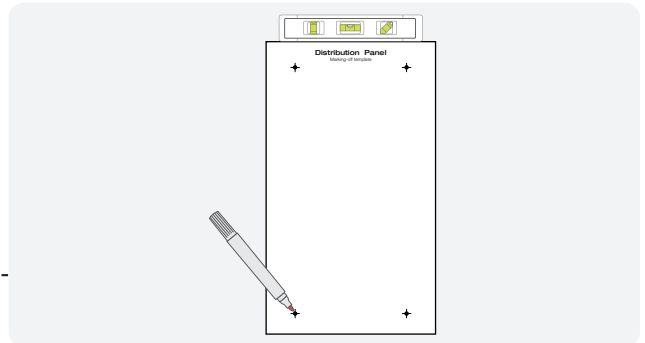
WARNING

- The battery connection box is not waterproof. Therefore, it should be installed indoors and avoid water.

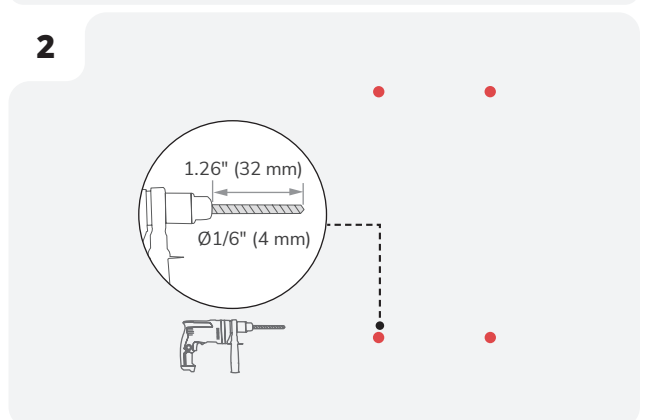


1

B ×1



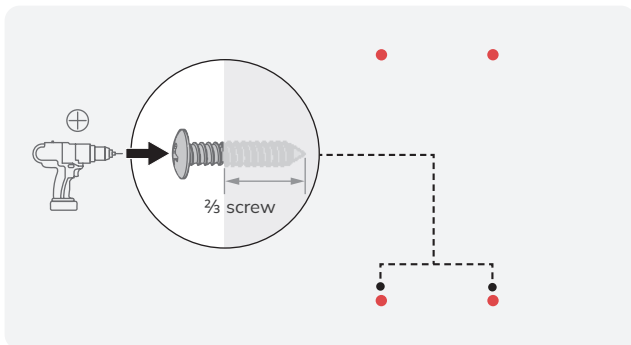
2



3

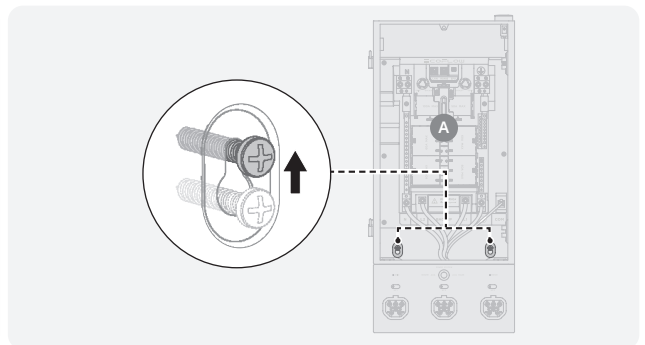


(ST5.5x32) ×2

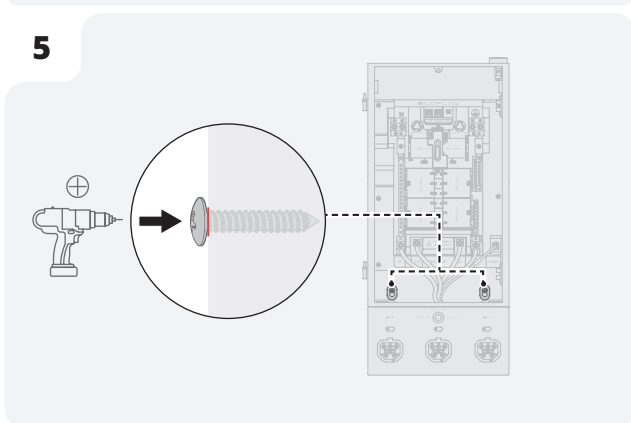


4

A ×1



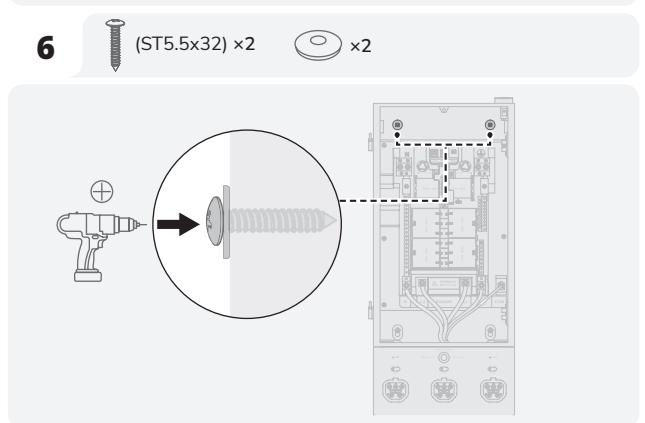
5



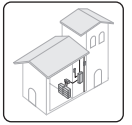
6

(ST5.5x32) ×2

×2

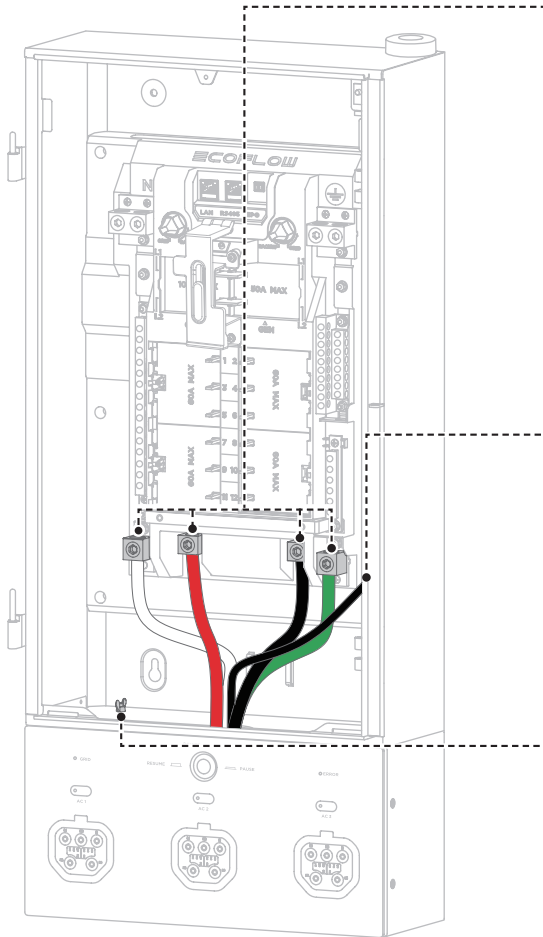


Mounting Option 2: Installing the Panel and Battery Connection Box Individually



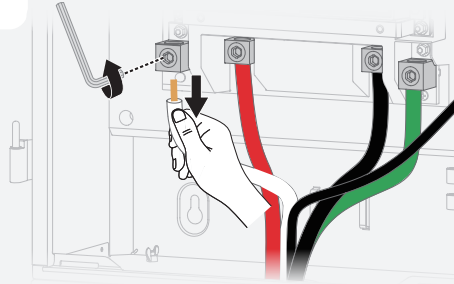
Step 1: Remove the battery connection box from the panel.
Step 2: Mount the panel on the wall.
Step 3: Mount the battery connection box on the wall.

• Removing the battery connection box



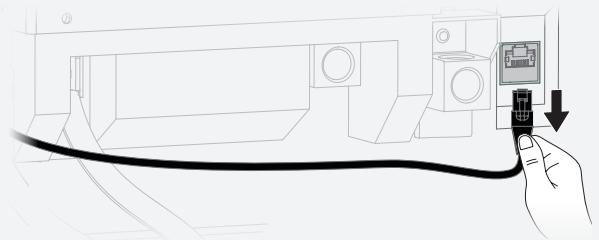
1

Loosen the nuts on backup lugs.



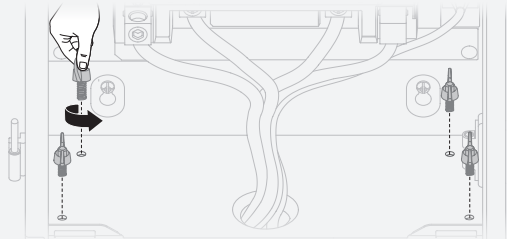
2

Disconnect the internal communication cable.



3

Remove the screws that secure the battery connection box, and take off the box.



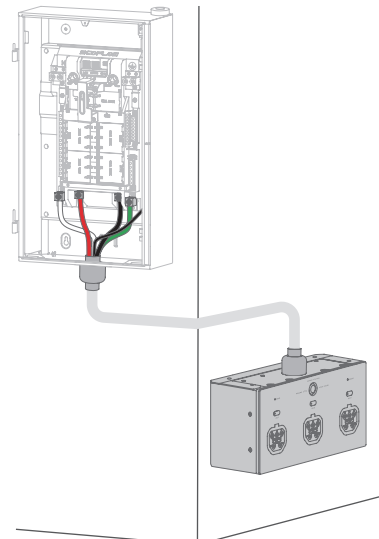
• Mounting the panel and the battery connection box

NOTICE

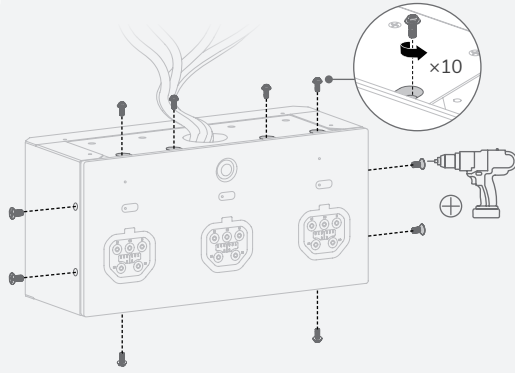
- Make new 2-AWG power cables (N, L1, L2), 6-AWG for the GND cable, and a new network cable, CAT6, T568B, marked as STP or SFTP, ≤787 in. (20 m), for connection.
- Mounting the battery connection box upside down is not recommended.
- Torque value: 50 in-lbs (5.6 N·m) for 2 AWG, 45 in-lbs (5.1 N·m) for 6 AWG.
- Conduit fitting: 1-1/2 in.

To mount the panel, see "Scenario 1: Installing the Entire SHP2 Indoors" on page 8 for detailed steps.

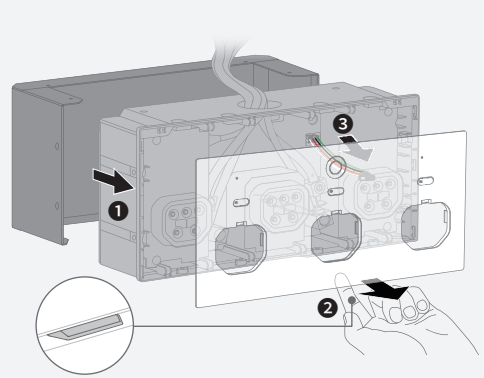
Follow the steps on the next page to mount the battery connection box.



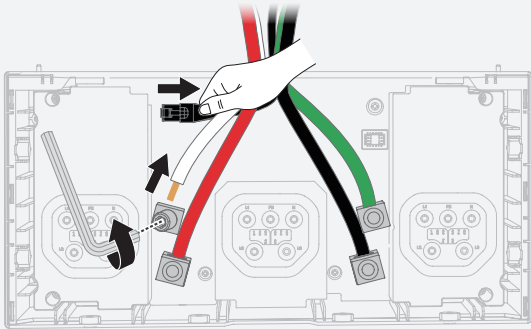
- 1** Unscrew the top, side, and bottom screws.



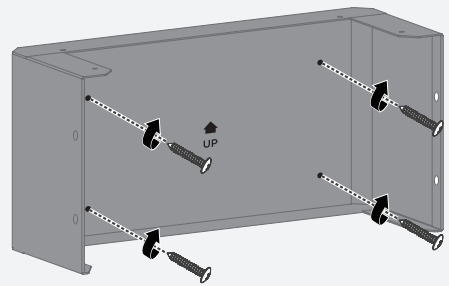
- 2** Take out the cover and remove the auxiliary power cable.



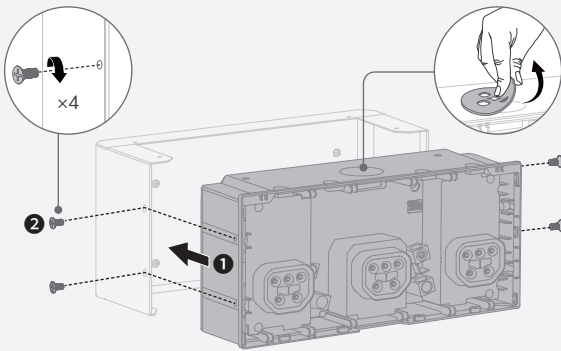
- 3** Loosen the screws on backup lugs, and unravel the internal COM cable.



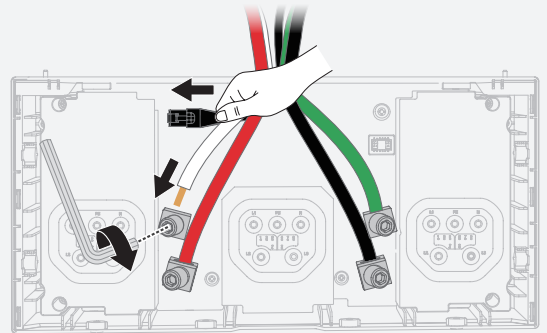
- 4** Mount the enclosure of battery connection box on the wall.



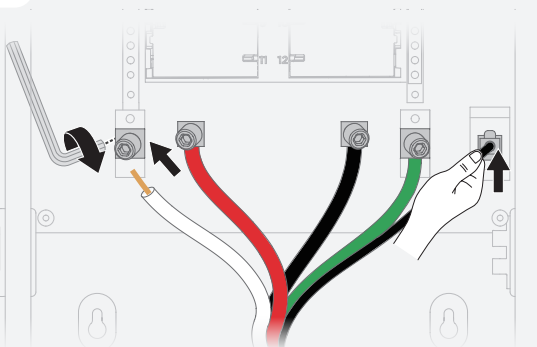
- 5** Install the battery connection box back to its enclosure. Remove the protective pad before installing the conduit fitting.



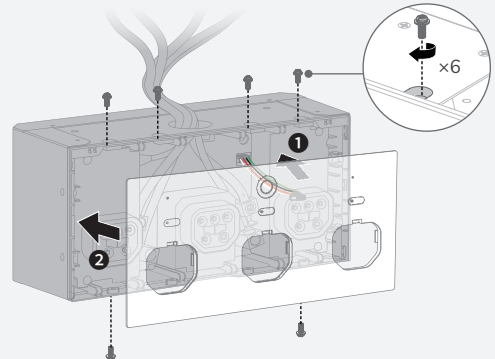
- 6** Make new power and COM cables. Connect their ends to the battery connection box's matching lugs.



- 7** Connect the other ends to the panel's matching lugs.



- 8** Close the box.



Wiring

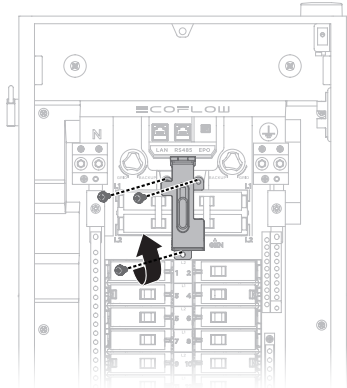


WARNING

- Risk of electric shock. Before wiring, make sure the power is off. Ensure that main and branch circuit breakers are in the OFF position.
- Ensure that the grounding cables of the grid supply, generator, and home load are connected securely.
- Install conduit fittings when wiring.

Removing the Interlock

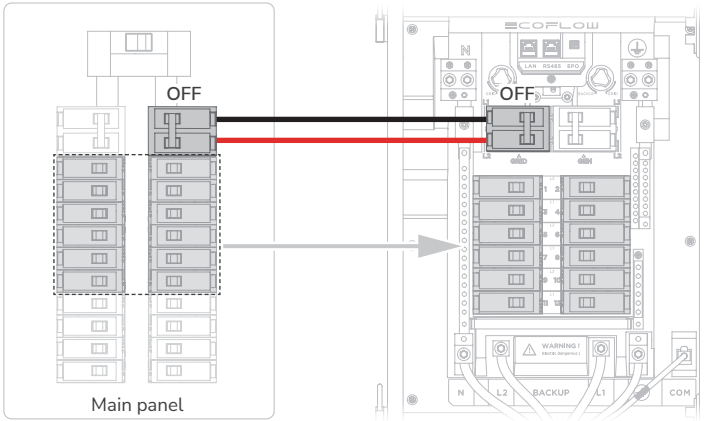
The interlock has been pre-installed when shipped, so remove it before installing main circuit breakers.



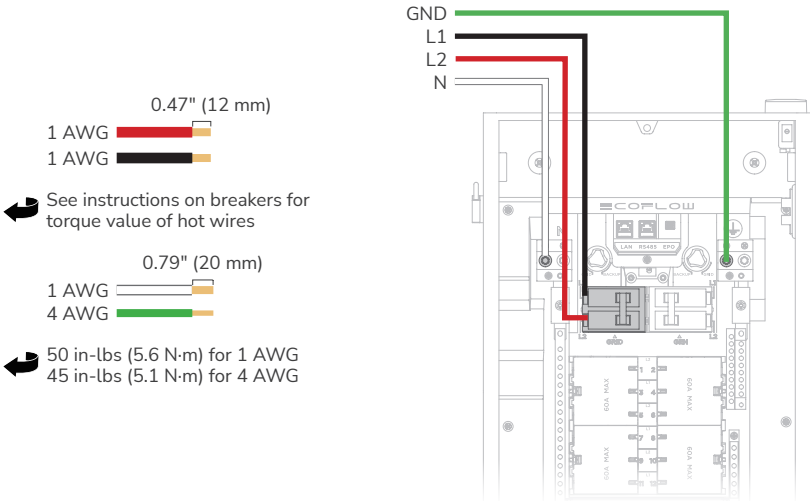
Installing Circuit Breakers

One 50A main circuit breaker for the generator (optional), two 100A for the grid (one installed in the branch breaker slot of the main panel, one installed in the main breaker slot of Smart Home Panel 2), to be purchased separately.

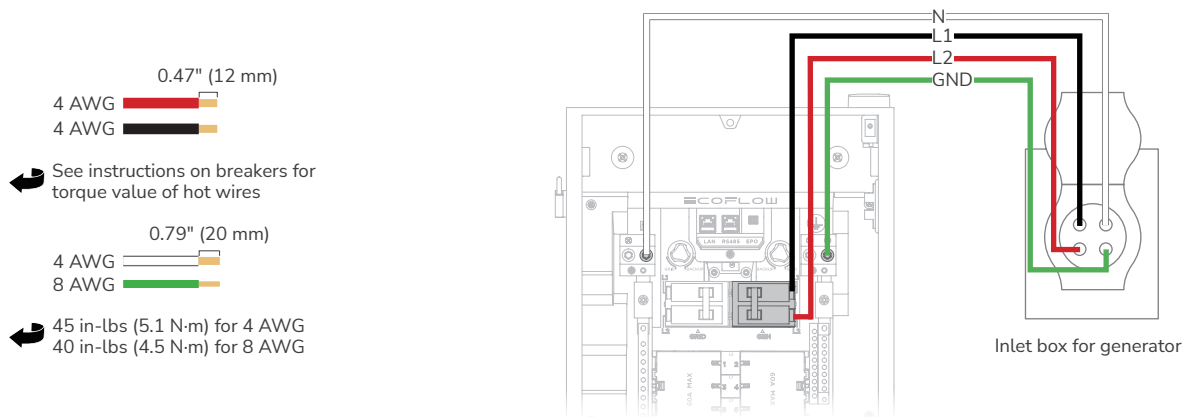
Branch circuit breaker: Max. 60A, 1 inch, AFCI/GFCI supported, relocated from the main panel



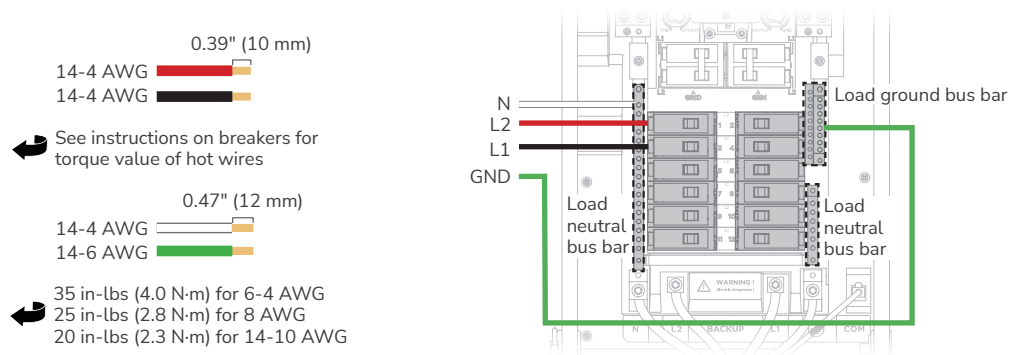
Connecting the Grid Conductors



Connecting the Generator Conductors

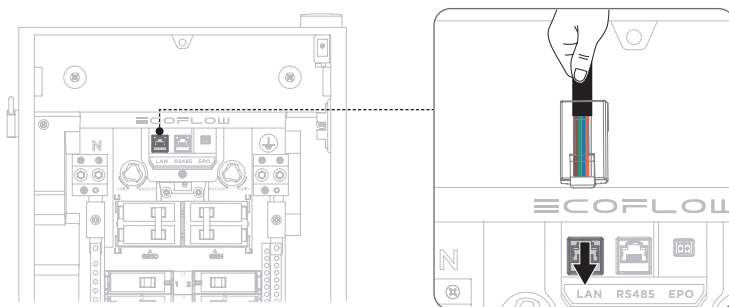


Connecting the Home Load Conductors



Connecting Communications Cables (If Needed)

For Ethernet connection, plug a CAT6, T568B straight-through cable (marked as STP or SFTP) to the Ethernet port.



Checking Connection

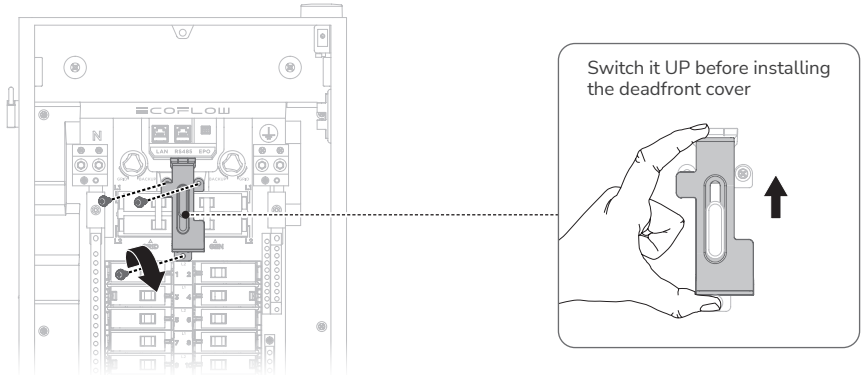
Before installing the defront cover and glass door, check the following connection items.

No.	Check Item
1	Confirm that all connections are correct, properly grounded, and secure.
2	Confirm that all screws are tightened.
3	Use a multimeter in continuity setting to make sure that the hot wire is not short circuited to neutral.
4	Use a multimeter in continuity setting to make sure that the hot wire is not short circuited to ground.
5	If you want to check the battery connection, use something like tape to hold down the switch on the right top to enable the battery power, and then measure the voltage.

Completing Panel
Installation

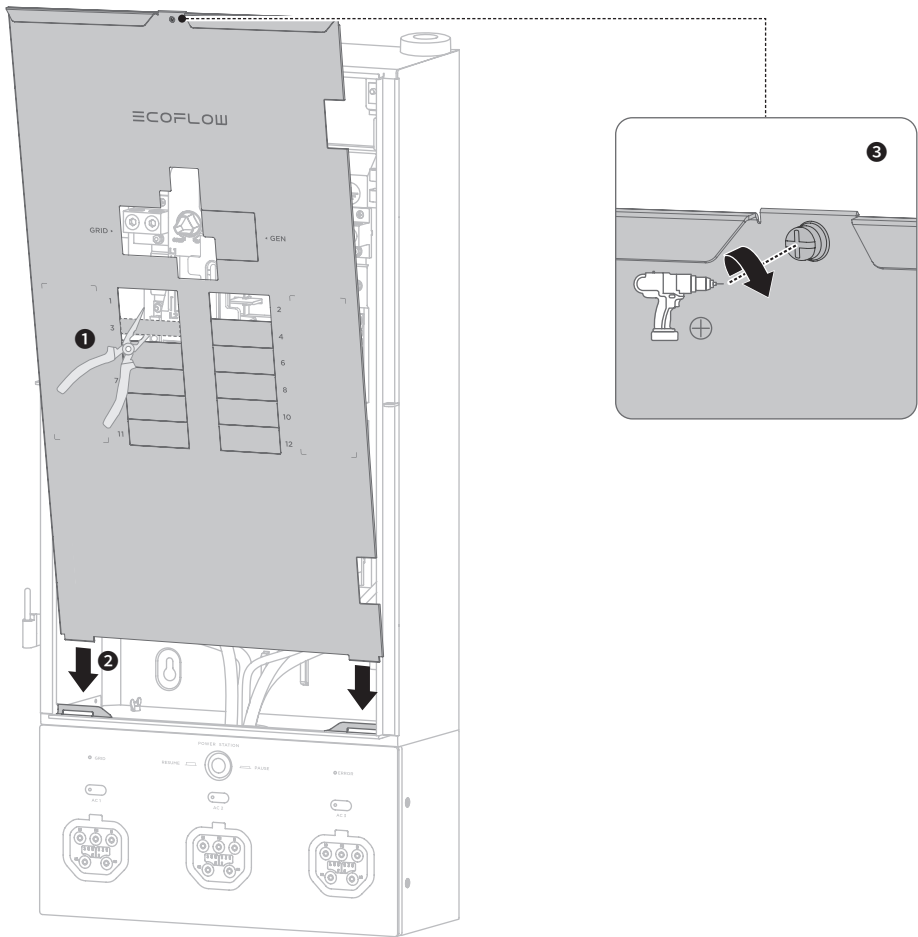
| Installing
the Interlock

Install the interlock onto the panel before installing the deadfront cover.



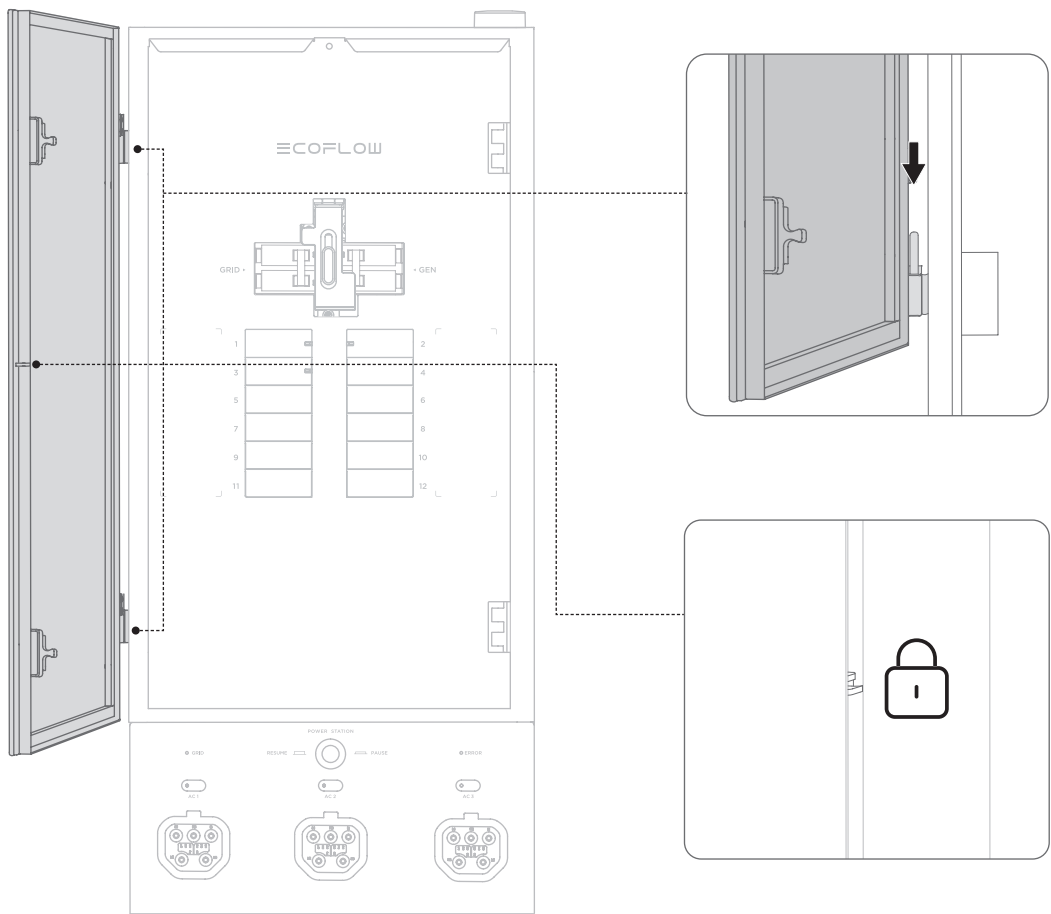
| Installing the
Deadfront Cover

Remove twist-outs for home loads. If you connect with a generator, remove the twist-out for the generator main circuit breaker. Fill any unused open spaces on the cover.



Installing the Glass Door

Slide down the glass door onto the hinges. Lock the panel if necessary.



Energizing



WARNING

- Before energizing, ensure that main and branch circuit breakers are in the OFF position.

To energize, first turn ON the main breaker, and then turn ON each individual branch circuit breaker.

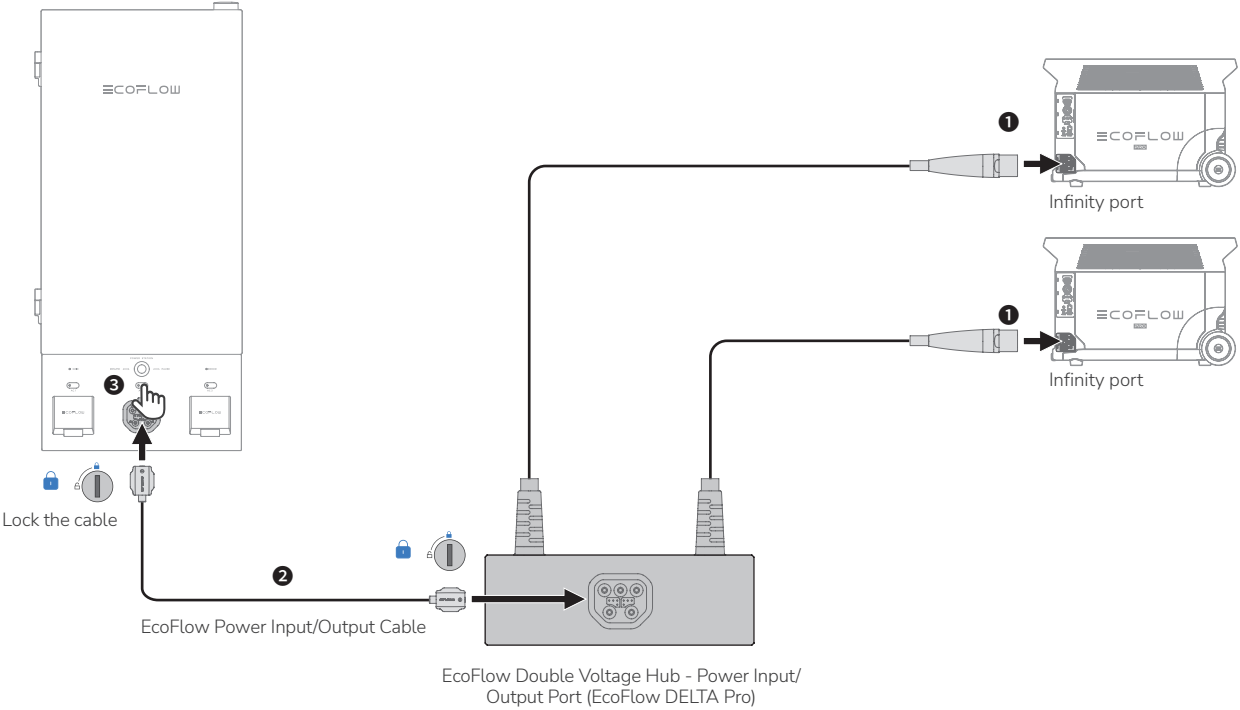
SHP2 starts self-test. Check the LED indicator, the grid indicator should be white and always on, the error indicator is off. please view the error description and eliminate it in the EcoFlow app.

Connecting With Battery Storage

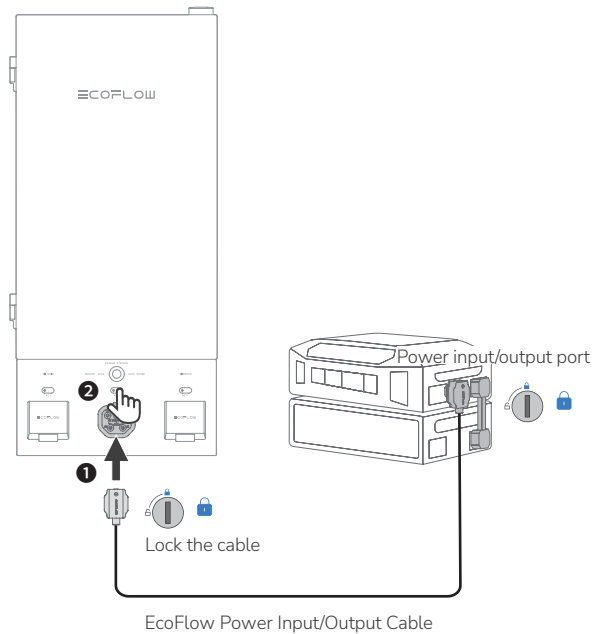
NOTICE

- If you only connect 1 EcoFlow DELTA Pro, DELTA Pro will undergo charging, but not discharging.
- If you connect both EcoFlow DELTA Pro Ultra and DELTA Pro, both of them will undergo both charging and discharging.
- Refer to EcoFlow Smart Home Panel 2 Owner's Manual for more details: <https://manuals.ecoflow.com/product/smart-home-panel-2>
- After connection, lock the Power Input/Output Cable using a slotted screwdriver.

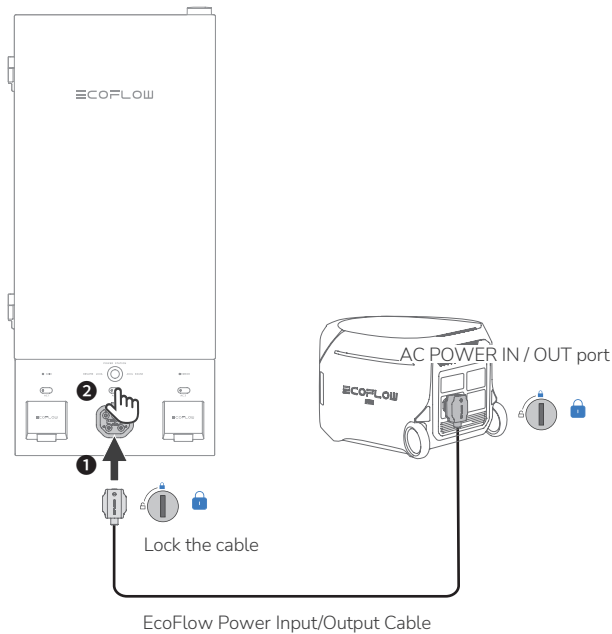
For EcoFlow DELTA Pro (max. 2 units)



For EcoFlow DELTA Pro Ultra (max. 3 units)



For EcoFlow DELTA Pro 3 (max. 3 units)



Installation & Operation



WARNING

- If the generator has a bonded neutral, you should remove the ground-neutral bond from the generator. Otherwise, GFCI/AFCI will malfunction.

Connecting And Using Generator

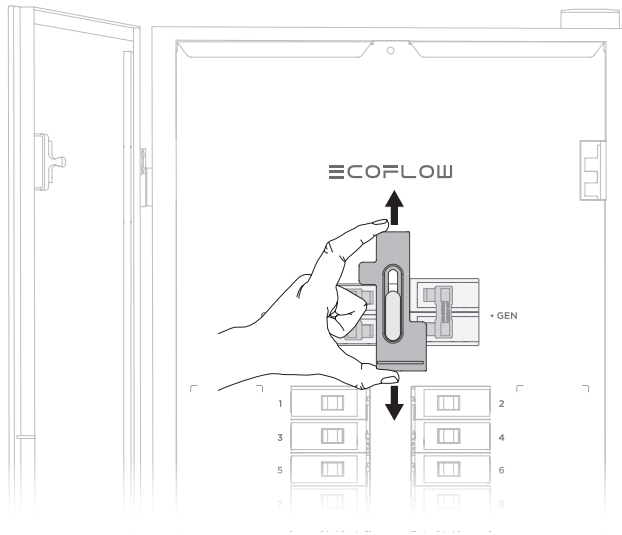
Install an inlet box between the generator and the panel.
To connect with a generator, see "Connecting the Generator Conductors".
To install the interlock, see "Installing the Interlock".
Remove the twin-out for generator main breaker.

Using Interlock

NOTICE

- After connecting the generator and turning on the power, it takes 25s for the house to get electricity.

Switch up for grid supply or switch down for generator supply.
When on grid supply, you can only turn on/off the main circuit breaker (grid).
When on generator supply, you can only turn on/off the main circuit breaker (generator).

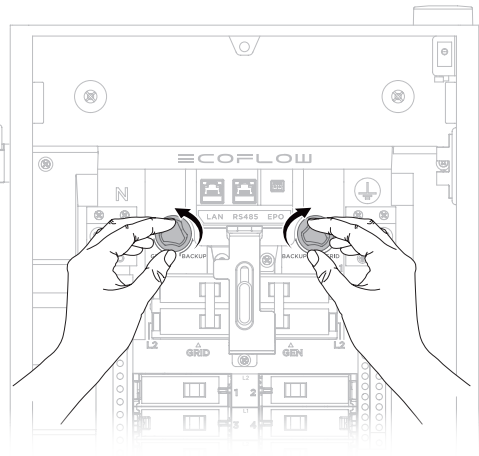
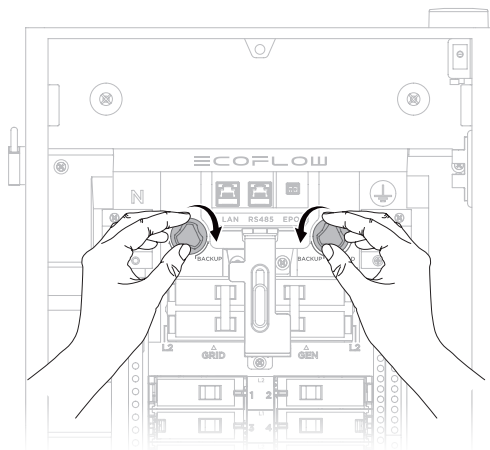


Using Interlock

If you fail to switch between grid supply and backup power using the EcoFlow app, you can manually turn the both relay switching knobs in the distribution panel. However, only qualified electrical personnel should perform this manual switch.

Switch to grid supply

Switch to backup power

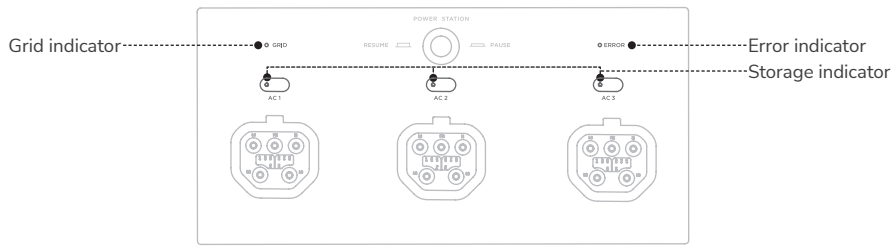


CAUTION

- Two knobs must be turned for switching.

System
Commissioning

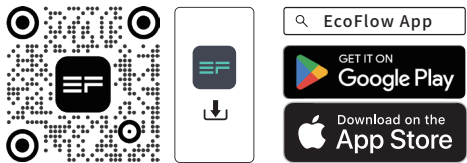
| LED Indication



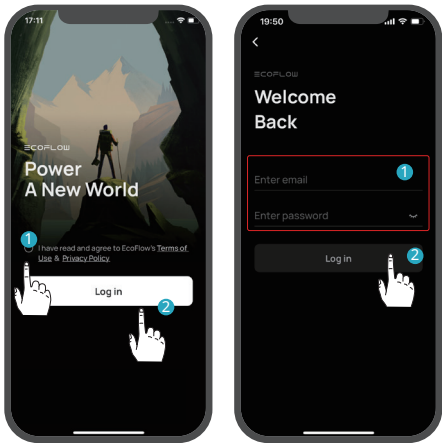
Indicator	Status			Description
Grid indicator		White	Solid	Power grid is on
		Red and white	Alternate blinking	Power grid is faulty
		Red	Solid	Grid voltage is not detected
Storage indicator (AC1/AC2/AC3)		Green	Solid	Feeding electricity to loads
		Green	Breathing	Standby
		Yellow	Solid	Charging
		Red	Solid	Error
Error indicator		Dim	Off	No system error
		Red	Solid	System error

| System Commissioning via App

1. Download the EcoFlow app on the homeowner's phone. Scan the QR code or download at: <https://download.ecoflow.com/app>



2. Create an account and log in
After the account is created, enter the account and password.



3. Add system and set up Internet
3.1 Add the portable power station and smart home panel 2 manually or using Bluetooth.

3.2 Internet setup

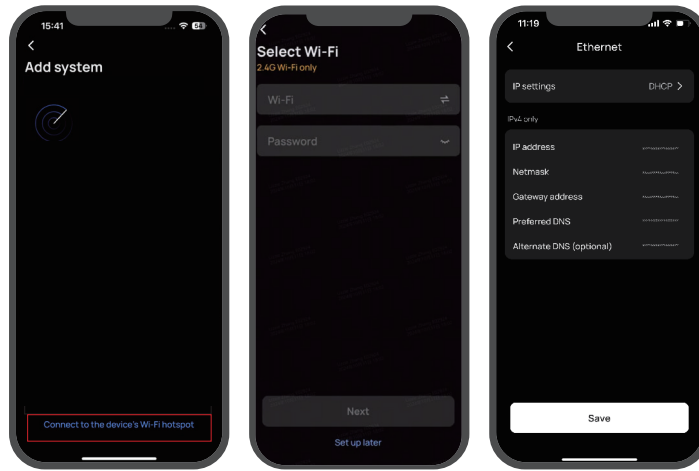
- Wi-Fi

Select Wi-Fi select the appropriate network and enter the password.

- Ethernet

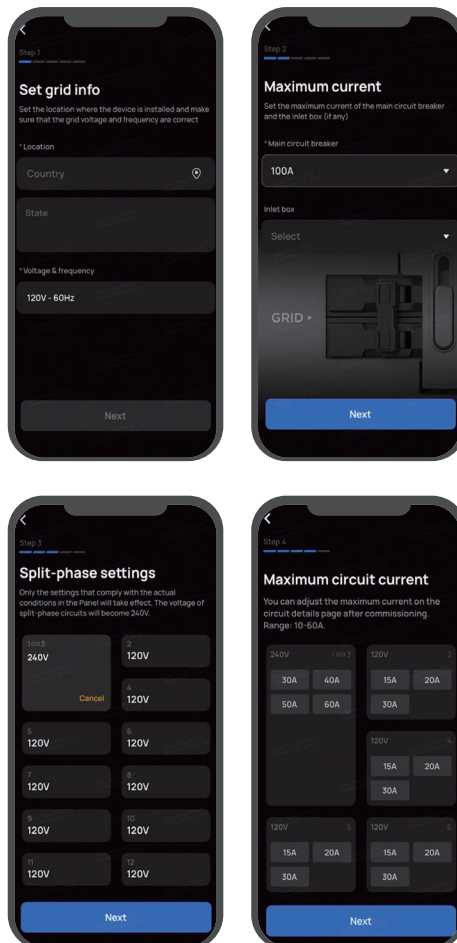
Connect the system to a router using a network cable in the DHCP or Static mode.

- In the default DHCP mode, the device obtains IP address automatically (recommended).
- In the Static mode, network administrator (homeowner) should set a valid IP address to the device. To avoid IP address conflict, check the IP addresses of other devices on the network by accessing router's settings.



4. Commissioning

There are 5 steps for commissioning. Steps 1-4 are shown below, and step 5 is setting check. Settings include home location, grid voltage and frequency, current of the main circuit, split-phase circuits, the maximum circuit current of each circuit.



5. After configuring and entering the system main page, check for the latest firmware update. If any, make sure the firmware is up to date.

6. Check whether the EcoFlow app can control the system properly, or whether the operation mode can be switched.

Troubleshooting

If there are any error codes in the app, follow the instructions to solve the problems, or check the following table for solutions.

Problem	Solution
The panel doesn't work as intended.	1. Check the app for any error codes and solve the problem. 2. Check the voltage of the main breaker and branch breaker. 3. Ensure the firmware of batteries and Smart Home Panel 2 is up to date. 4. Ensure the main panel is wired properly. 5. Ensure the circuit breakers work properly. 6. Check if the rated power of the load exceeds the maximum output of the batteries.
Error occurs to batteries.	1. Check the app for any error codes and solve the problem. 2. Ensure the battery firmware is up to date. 3. Restart the batteries: Press the main power button for 2-3 seconds to turn off the batteries, and long press the main power button for 1 second to turn on. 4. Restart IoT connection: After the batteries are turned off, press 5-10 seconds till the LCD screen lights up to reset all Bluetooth and Wi-Fi connections. 5. Restart Smart Home Panel 2: Flip the main breaker of the main electrical panel to the OFF position, and disconnect the cables connected to batteries. Flip the main breaker to the ON position and reconnect the cables to the batteries.
Branch circuits have no voltage detected.	1. Ensure circuit breakers are flipped to the ON position, and the circuits are switched on in the EcoFlow app. 2. Ensure the toggle switch of the dead front cover is fully pressed.
The app connection failed both via Bluetooth and Wi-Fi.	1. Ensure the app version is up to date. 2. Use your phone's cellular hotspot instead of Wi-Fi first for app connection.
All AC outlets on batteries stop working.	The system restricts the use of all AC outlets on the battery when you connect batteries to the SHP2 to protect the battery from overdischarge or overcharge, which could lead to battery damage or system tripping. However, DC input and output are not affected.
There is power displayed on a circuit in the app, but the appliance can not be turned on.	Check whether there is a loose connection in the wiring of the circuit.

Circuit Breaker Compatibility

NOTICE

- EcoFlow Smart Home Panel 2 has been evaluated for use with the branch circuit breaker types listed below in accordance with the UL Standard for Panelboards.
- Plug-on neutral circuit breakers are not supported yet.

Eaton

Type	Amp	Catalog number	Pole
General circuit breakers type BR	10-90	BR or BRH; followed by 110 to 290	1-pole and 2-pole
Duplex (tandem) circuit breakers type BD	10-50	BD followed by 1010 to 5050	1-pole
Quadplex (tandem) circuit breakers type BQ and BQC	15-50	BQ followed by 215215 to 2502120	1-pole and 2-pole
Combination arc fault circuit interrupter circuit breakers type BR	10-20	BRC, BRN or BRL followed by 110 to 120; followed by AF or CAF (pigtail only)	1-pole and 2-pole
Ground fault circuit interrupter circuit breakers type GFTCB and GFEP	10-60	BRN, GFTCB, BRHN, or GFTCBH followed by 110 to 260; may be followed by GF (pigtail only)	1-pole and 2-pole
Ground fault equipment protection circuit breakers type GFEP	15-50	BRN or GFEP followed by 115 to 250; may be followed by EP (pigtail only)	1-pole and 2-pole
Dual function combination ground fault and arc-fault protection circuit breakers type BR	10-20	BRN or BRAFGF followed by 110 to 120; may be followed by DF (pigtail only)	1-pole

Square D

Type	Amp	Catalog number	Pole
General circuit breakers type HOM	10-90	HOM followed by 110 to 290	1-pole and 2-pole
Tandem circuit breakers type HOMT	10-30	HOMT followed by 1010 to 3020	1-pole
Quad tandem circuit breakers type HOMT	15-50	HOMT followed by 1515215 to 2020250	1-pole and 2-pole
Quad tandem circuit breakers type HOMT	15-50	followed by 110 to 220; may be followed by P; followed by CAFI	2-pole
Combination arc-fault circuit interrupter circuit breakers type HOM-CAFI	10-20	HOM followed by 110 to 220; may be followed by P; followed by CAFI (pigtail only)	1-pole and 2-pole
Ground fault circuit interrupter circuit breakers type HOM-GFI	10-50	HOM followed by 110 to 250; may be followed by P; followed by GFI (pigtail only)	1-pole and 2-pole
Ground fault equipment protection circuit breakers type HOM-EPD	15-50	HOM followed by 115 to 250; followed by EPD (pigtail only)	1-pole and 2-pole
Dual function combination ground fault and arc-fault protection circuit breakers type HOM-DF	10-20	HOM followed by 110 to 120; may be followed by P; followed by DF (pigtail only)	1-pole

Siemens

Type	Amp	Catalog number	Pole
General circuit breakers type QP	10-90	Q followed by 110 to 290; may be followed by H	1-pole and 2-pole
Duplex (tandem) circuit breakers type QT	10-30	Q followed by 1010 to 3030 may be followed by NC	1-pole
Triplex (tandem) circuit breakers type QT	10-30	Q followed by 21010 to 23030; followed by CT	1-pole and 2-pole
Quadplex (tandem) circuit breakers type QT	15-40	Q followed by 21515 to 24040; followed by CT2	2-pole
Branch-feeder arc-fault circuit interrupter circuit breakers type QAF2	15-20	QA followed by 115 to 120; followed by AF; may be followed by H (pigtail only)	1-pole and 2-pole
Combination arc-fault circuit interrupter circuit breakers type QAF and QAF2	10-20	Q or QA followed by 115 to 120; followed by AFC; may be followed by H (pigtail only)	1-pole and 2-pole
Tandem combination arc-fault circuit interrupter circuit breakers type CAFCI	10-20	Q followed by 1010 to 2020; followed by AFC (pigtail only)	1-pole
Ground fault circuit interrupter circuit breakers type QPF and QPF2	10-60	QF followed by 110 to 260; followed by A; may be followed by H (pigtail only)	1-pole and 2-pole
Ground fault equipment protection circuit breakers type QE	15-60	QE followed by 115 to 260; may be followed by H (pigtail only)	1-pole and 2-pole
Dual function combination ground fault and arc-fault protection circuit breakers type QFGA2	10-20	Q followed by 110 to 120; followed by DF; may be followed by H (pigtail only)	1-pole

GE

Type	Amp	Catalog number	Pole
General circuit breakers type THQL	15-70	THQL followed by 115 to 170;	1-pole and 2-pole
Ground fault circuit interrupter circuit breakers type THQL	15-20	Followed by GF (pigtail only)	1-pole and 2-pole
Branch-feeder arc-fault circuit interrupter circuit breakers type THQL	15-30	Followed by AF (pigtail only)	1-pole and 2-pole