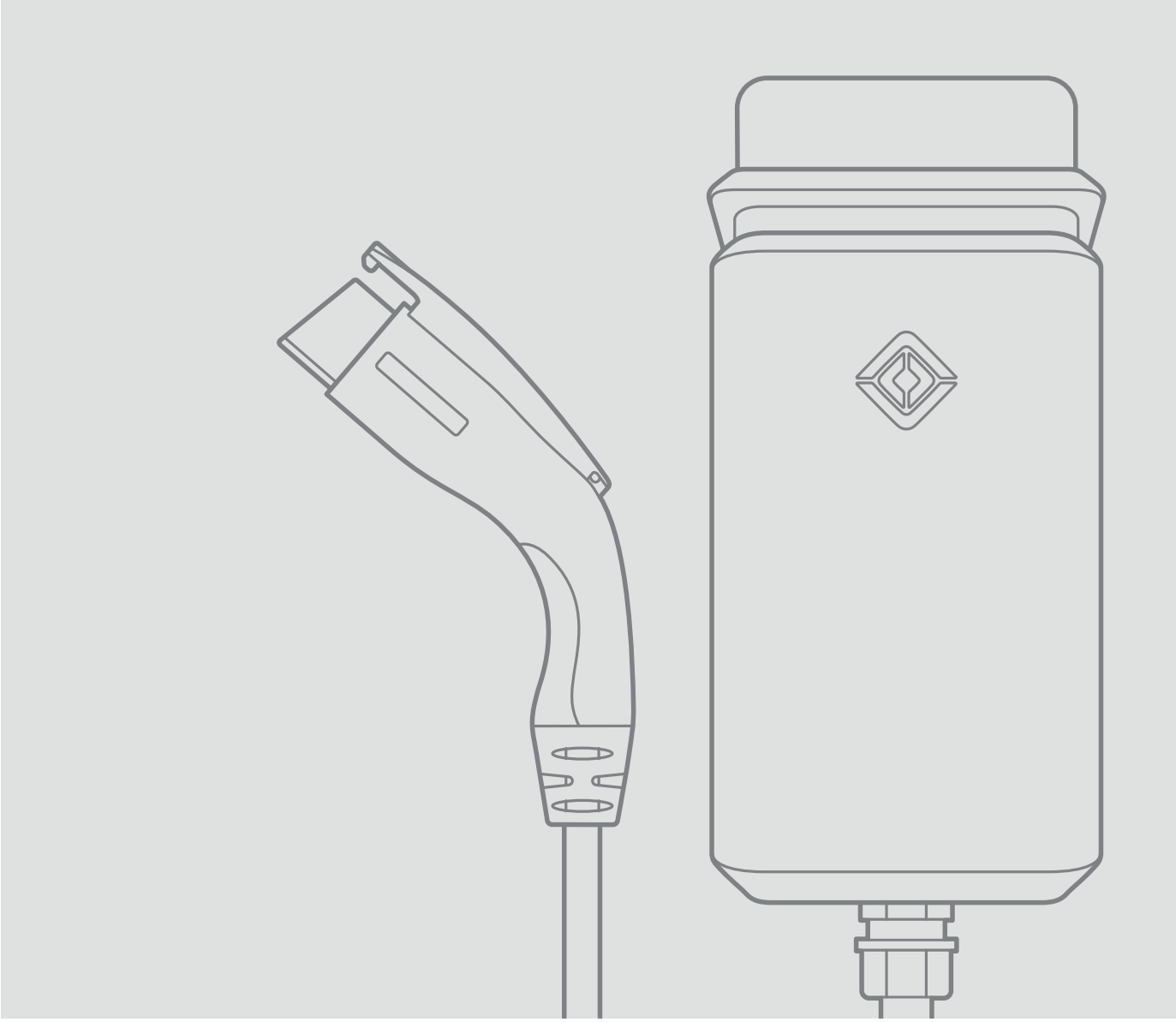
RIVIAN

MAY 2023

WALL CHARGER

Installation Guide



PRODUCT NUMBER PT00057325

The images provided in this document are for illustrative purposes only. Depending on the product details and market region, the information in this document may appear slightly different from your product.

Contents

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

DANGER

Read all the instructions before installing the Rivian Wall Charger. Follow the safety instructions and warnings in this guide when installing the Wall Charger. Failure to do so may result in fire, electrical shock, serious injury, or death.

PRECAUTIONS

The following safety symbols are used in this document.

DANGER

Risk of electric shock

DANGER

Risk of personal injury

CAUTION

Risk of damage to equipment

RISK OF ELECTRIC SHOCK

DANGER

- Improper installation can result in electric shock or severe personal injury. Only a licensed electrician should perform installation or service on this equipment in accordance with the provisions of national electrical codes and standards.
- No user-serviceable parts inside. Refer servicing to qualified service personnel.
- Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the product is properly grounded.
- Do not touch live electrical parts. Incorrect connections may cause electric shock.
- Do not put fingers into the coupler.

- Do not use this equipment if the flexible power cord or cable is frayed, has broken insulation, or shows any other signs of damage.
- Do not use this equipment if the enclosure or the coupler is broken, cracked, open, or shows any other indication of damage.
- Do not allow unsupervised children in the area during installation of the Wall Charger.
- Before connecting the Wall Charger to a power supply, check that the power supply voltage and current rating corresponds with the power supply details shown on the product rating label.
- Use appropriate protection when connecting to a main switchboard.
- Ground the Wall Charger through a permanent wiring system using the equipment grounding conductor.
- To reduce the risk of fire, connect only to a circuit provided with no more than 60 amperes maximum branch circuit over-current protection in accordance with the National Electrical Code, ANSI/NFPA 70, and the Canadian Electrical Code, Part I, C22.2.
- When a breaker smaller than 60 amperes is used, ensure that the conductor sizes used comply with the minimum sizes prescribed by national and local electrical codes and standards.

RISK OF PERSONAL INJURY

DANGER

- Switch off the power supply before installing or repairing the Wall Charger. Failure to do so may result in physical injury or damage to the power supply system and the Wall Charger.
- Keep any packing materials away from children. These materials are a potential source of danger, and can cause suffocation.

RISK OF EQUIPMENT DAMAGE

CAUTION

- Use anti-static gloves, wrist bands connected to ground, and insulated tools for installation and removal of the faceplate.
- Do not operate this equipment in temperatures outside its operating range of -22°F to +122°F (-30°C to +50°C).
- Store this equipment in a clean and dry location between -40°F and +176°F (-40°C and +80°C).
- Do not use extender cables to increase the length of the charging cable.

- If this unit is installed outdoors, the components and fittings must be rated for outdoor installation. The outlet must be installed properly to maintain the proper NEMA rating of the enclosure.
- Avoid direct hand contact with components on the network board.
- For storage or shipping of the front panel or network board, use a bubble wrap bag with ESD (electrostatic discharge) protection.
- The Wall Charger has a charging circuit interrupting device (CCID20) that provides built-in ground fault circuit interruption (GFCI) protection. Do not use a GFCI breaker in the panel. Using a GFCI breaker can cause nuisance tripping, which impacts the reliability of the Wall Charger. Installation must be hardwired only.
- Do not use adapters with the Rivian Wall Charger.

SAFETY SYMBOLS ON HARDWARE LABELS

The following safety symbols may appear on labels located on hardware used in this installation.

Icon	Description
	Risk of Electric Shock
	Danger
	Phase
	Equipment Ground
	Instruction Manual
	UL Logo

Introduction

DANGER

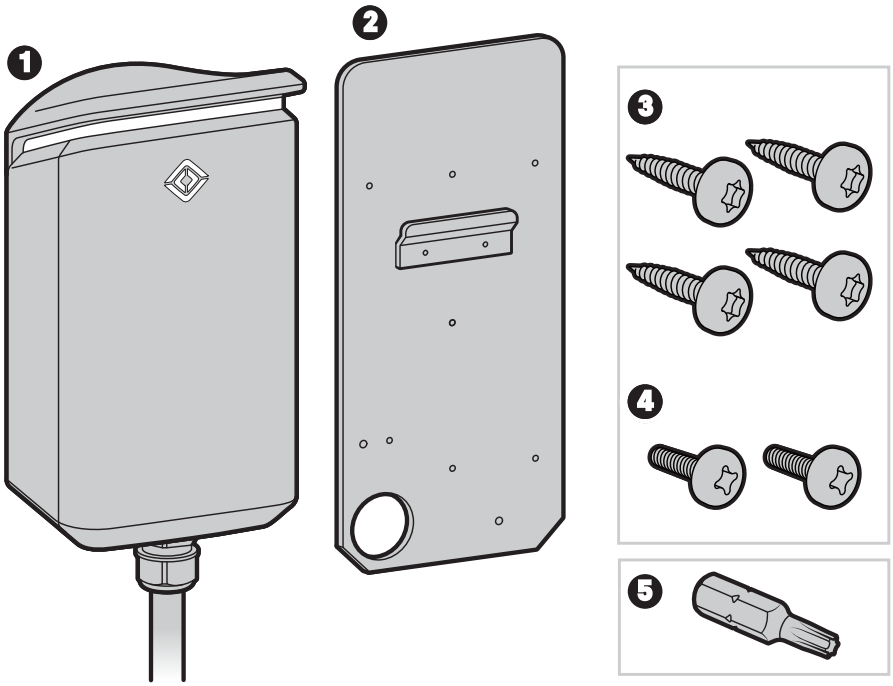
Improper installation can result in electric shock or severe personal injury. Only a licensed electrician should perform this installation in accordance with the provisions of national electrical codes and standards.

This document provides installation instructions for the Rivian Wall Charger. It also includes instructions on how to connect the Wall Charger to Wi-Fi® and to a Rivian account.

IMPORTANT

To maintain coverage under warranty, this installation must be performed by a licensed electrician in accordance with the provisions of national electrical codes and standards. Conducting the installation without a licensed electrician will void the Wall Charger Limited Warranty.

Identify Parts



Item	Description
1	Wall Charger
2	Mounting plate
3	Four T20 anchor screws (to attach the mounting plate to a wall)
4	Two 13 mm M4 Phillips screws (to attach the charger to the mounting plate)
5	T20 Security bit

Tools

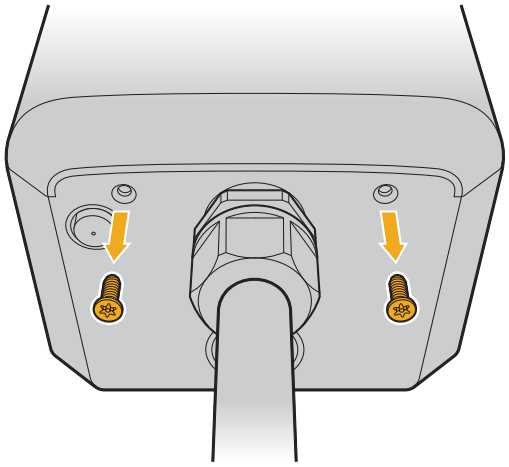
Required	Optional
#2 Phillips screwdriver	Hole saw
Security T20 Torx screwdriver	Stud finder
Flathead screwdriver, 7/32 in (5.5 mm) width	Level
Adjustable torque screwdriver, 10 in-lb (1.1 Nm) to 40 in-lb (4.5 Nm)	
Multimeter	

Remove the Faceplate

CAUTION

- Use anti-static gloves, wrist bands connected to ground, and insulated tools for installation and removal of the faceplate.
- Avoid direct hand contact with components on the network board.

1. Remove the two Security T20 Torx screws from the bottom of the Wall Charger.



2. Push the faceplate up and remove it.

Install the Wall Charger

IMPORTANT

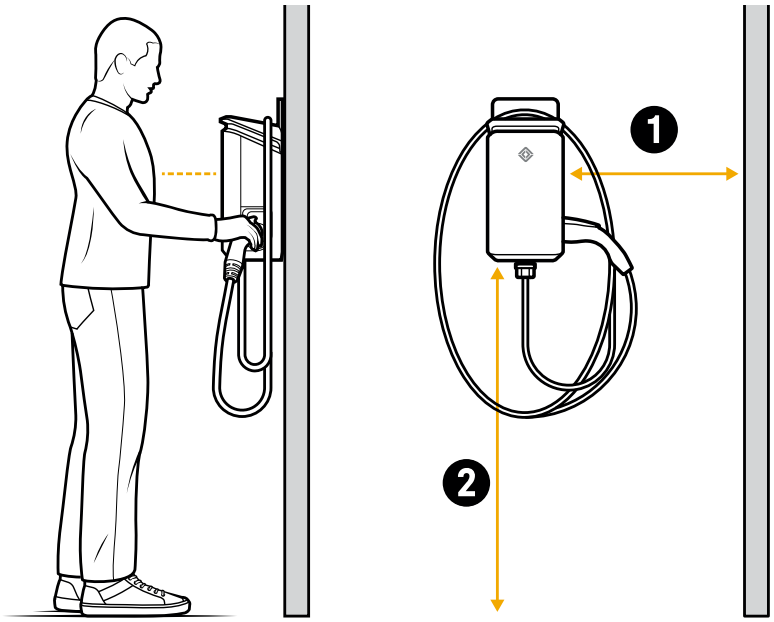
The Wall Charger must be hardwired. It is not a plug-in product.

SELECT AN INSTALLATION LOCATION

CAUTION

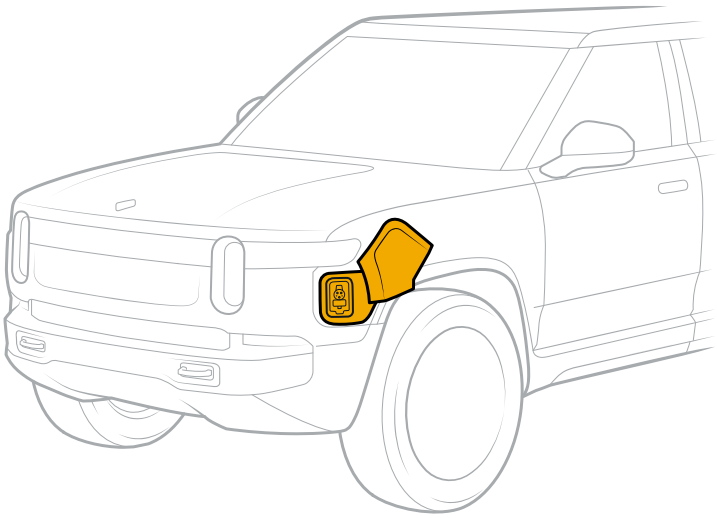
- For indoor installations, install the Wall Charger at least 18 in (46 cm) from the ground to bottom of charger.
- For outdoor installations, install the Wall Charger at least 24 in (61 cm) from the ground to bottom of charger.

For ease of use, install the Wall Charger around chest height, within easy cable reach of the vehicle charge port, and with at least 12 in (30.5 cm) of clearance on the right side to accommodate coupler docking and cable management.



Item	Description
1	At least 12 in (30.5 cm)
2	At least 18 in (46 cm) (indoor installations) At least 24 in (61 cm) (outdoor installations)

Note the location of the vehicle charge port, as illustrated in the image below.



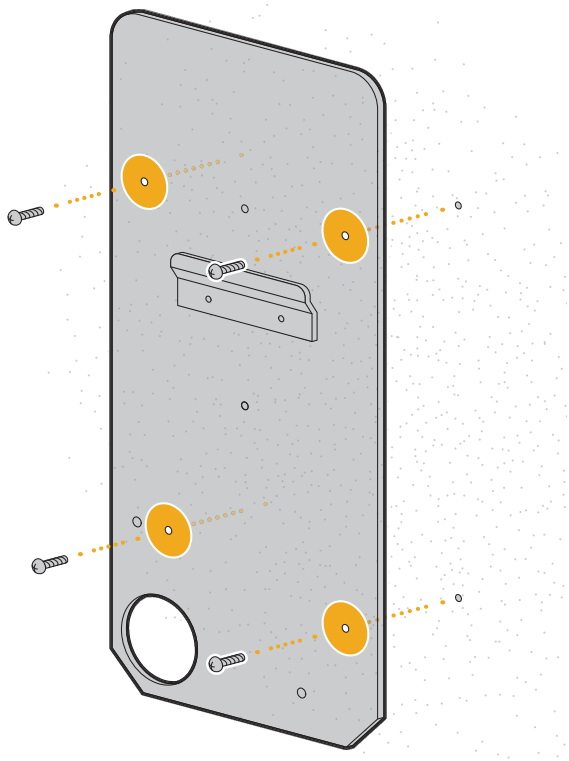
ATTACH THE MOUNTING PLATE

NOTE

- Feed conduit only from the bottom when mounting the Wall Charger at an outdoor site.
- When installing on a concrete wall, select a fastener suitable for installation on concrete or stucco. Do not use the T20 fasteners provided with the product.

To a Concrete Wall

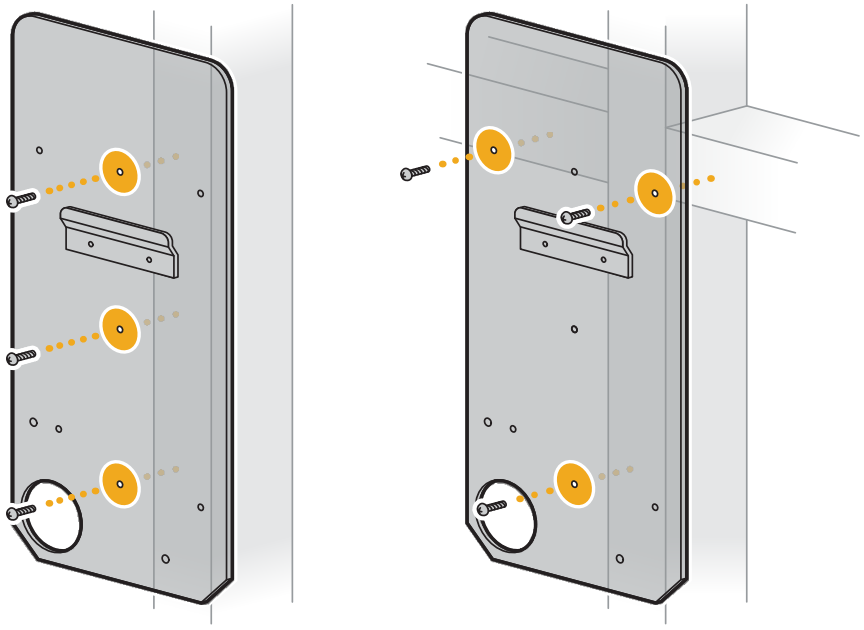
1. With the flat side of the mounting plate against the wall, and the large hole positioned in the lower-left, install a fastener in each of the four locations shown.



2. Use a level to confirm the plate is level.
3. Tighten the screws to secure the mounting plate to the wall. Ensure that the screws and the wall are not damaged during installation.

To a Finished Wall Supported by Wooden Studs

1. Use a stud finder to locate the stud(s).
2. With the flat side of the mounting plate against the stud, and the large hole positioned in the lower left corner, install the T20 screws in the locations shown.
   - For a vertical stud, install a screw in each of the three center holes.
   - For a horizontal stud:
     a. Select a location where the horizontal and vertical studs meet.
     b. Place the three holes in the upper third of the mounting plate against the horizontal stud and the three holes down the center of the mounting plate against the vertical stud.
     c. Install a screw in each of the two outer holes in the upper third of the mounting plate.
     d. Install a third screw in the lower center location of the mounting plate.

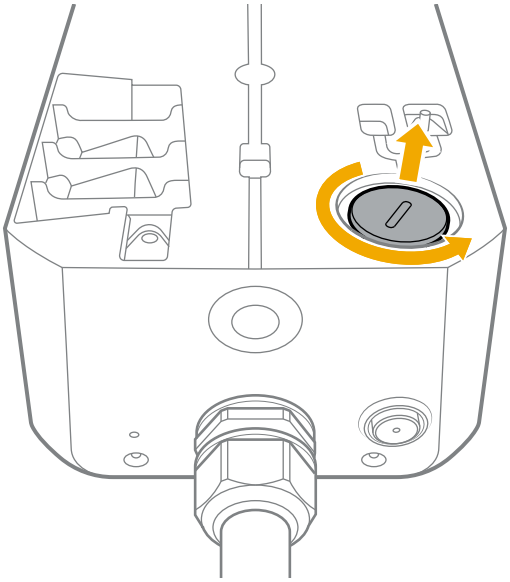


Vertical Stud Installation **Horizontal Stud Installation**

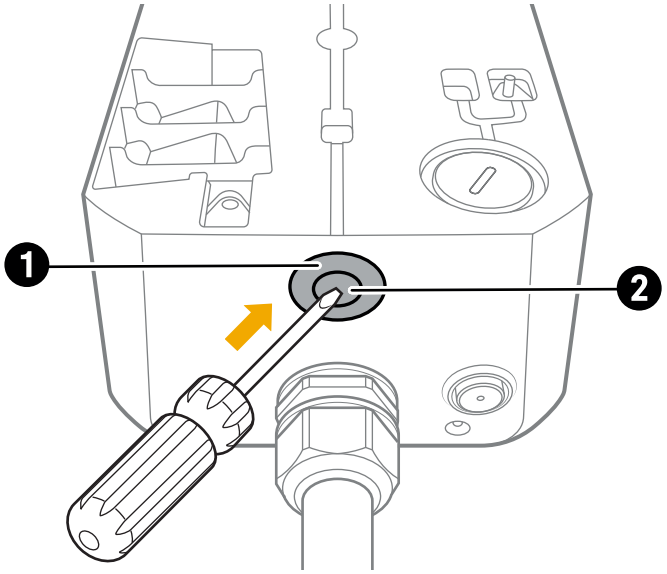
3. Tighten the screws. Ensure that the screws and the wall are not damaged during installation.

ATTACH THE WALL CHARGER TO THE MOUNTING PLATE

1. Determine which wire entry point to use in the Wall Charger—rear or bottom—and remove the wire entry cover.
   - **For indoor installations where wire will run inside the wall**, turn the rear wire entry cover counterclockwise to release it from the Wall Charger.

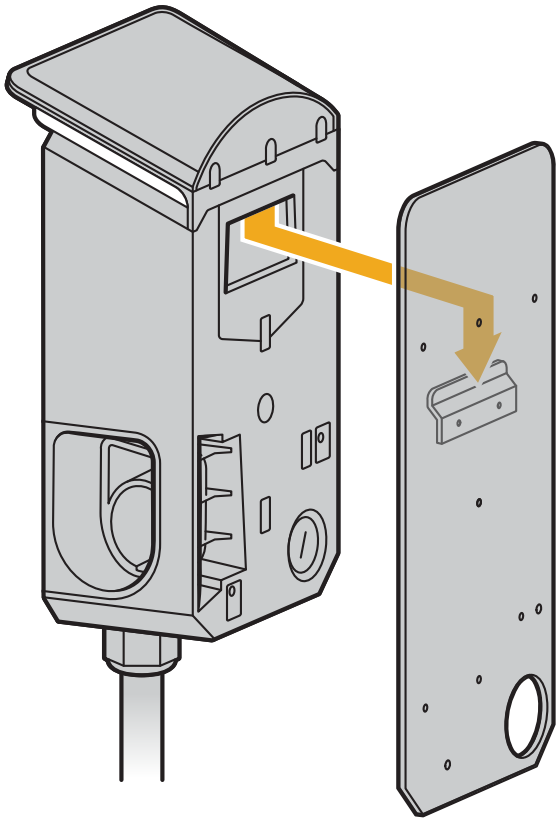


- **For outdoor installations or indoor installations on concrete**, knock out the 1 in (2.5 cm) or 3/4 in (1.9 cm) wire entry cover on the bottom of the Wall Charger. Remove the knock-out debris from the interior of the charger.

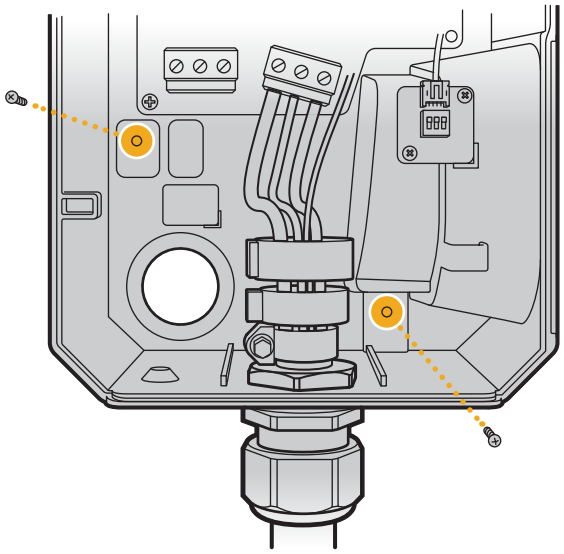


Item	Description
1	1 in (2.5 cm) trade-size knock-out
2	3/4 in (1.9 cm) trade-size knock-out

2. Hang the Wall Charger on the installed mounting plate.



3. Use a #2 Phillips screwdriver to install the two 13 mm M4 screws through the interior of the Wall Charger into the mounting plate.



4. Torque each screw to 12 in-lb (1.36 Nm).

SET THE OPERATING CURRENT

Configure the dip switches to set the operating current.

IMPORTANT

Use only copper conductors in sizes #14 to #6 as specified in the table.

NOTE

- In the illustrations below, white indicates the position of the switch. Down is OFF and up is ON.
- Typical conductor sizes are based on the 90°C column in the National Electrical Code.

Current	Circuit Breaker Specification	Typical Conductor Specification	Dip Switch			Setting
			1	2	3	
6 A	7.5 A	12-14 AWG	OFF	OFF	OFF	
12 A	15 A	12-14 AWG	OFF	OFF	**ON**	
16 A	20 A	12-10 AWG	OFF	**ON**	OFF	
20 A	25 A	10 AWG	OFF	**ON**	**ON**	
24 A	30 A	10 AWG	**ON**	OFF	OFF	
32 A	40 A	8 AWG	**ON**	OFF	**ON**	
40 A	50 A	8 AWG	**ON**	**ON**	OFF	
48 A (default)	60 A	6 AWG	**ON**	**ON**	**ON**	

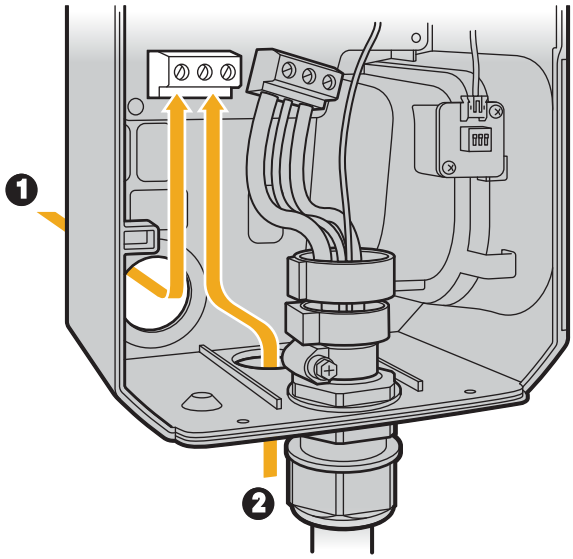
CONNECT CONDUCTORS

Consult a licensed electrician to select a conductor size appropriate to the breaker size and to the maximum current set.

> **NOTE**
> The Wall Charger is not compatible with conductor sizes larger than #6 AWG.

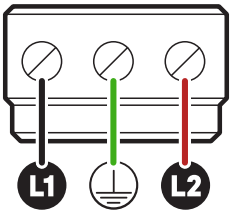
1. Depending on the type of installation, thread conduit or conductor fittings into the rear (1) or bottom (2) entry point in the Wall Charger. Ensure that the fittings are rated for the type and size of conductor used.

   > **NOTE**
   > For outdoor wall installations, insert through the bottom entry point only.



2. Strip the ends of the conductors 0.4 in (11 mm).

3. Fully insert the conductors into the corresponding terminals (L1, Ground, L2).



DANGER

Do not overtighten the terminals.

4. Torque each terminal to 10.6 in-lb (1.2 Nm).
5. Perform a tug test on input wires after attaching to the terminals. Reinstall if loose.
6. Switch power on at the circuit breaker.
7. Use a multimeter to test the voltages on the input terminal to confirm the Wall Charger receives power.
8. Switch power off at the circuit breaker before installing the faceplate.

INSTALL THE FACEPLATE

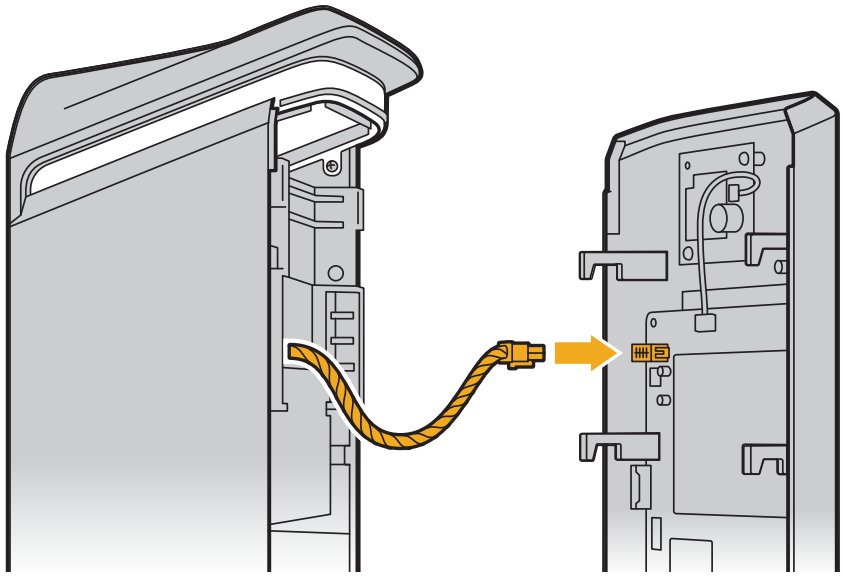
DANGER

Before connecting the network cable to the faceplate, confirm power is shut off at the circuit breaker. Connecting the cable when the charger is energized can cause physical injury.

CAUTION

- Use anti-static gloves, wrist bands connected to ground, and insulated tools for installation and removal of the faceplate.
- Avoid direct hand contact with components on the network board.
- Don't connect the network cable to the faceplate if the charger is energized. This can damage the circuit board.

1. Position the faceplate near the front of the Wall Charger.
2. Connect the cable from the Wall Charger to the network board on the interior of the faceplate.



3. Slide the faceplate down onto the Wall Charger.
4. Install the two Security T20 Torx screws.
5. Torque each Security T20 Torx screw to 12 in-lb (1.36 Nm).

Complete the Installation

POWER UP AND CONFIRM CHARGER READY STATUS

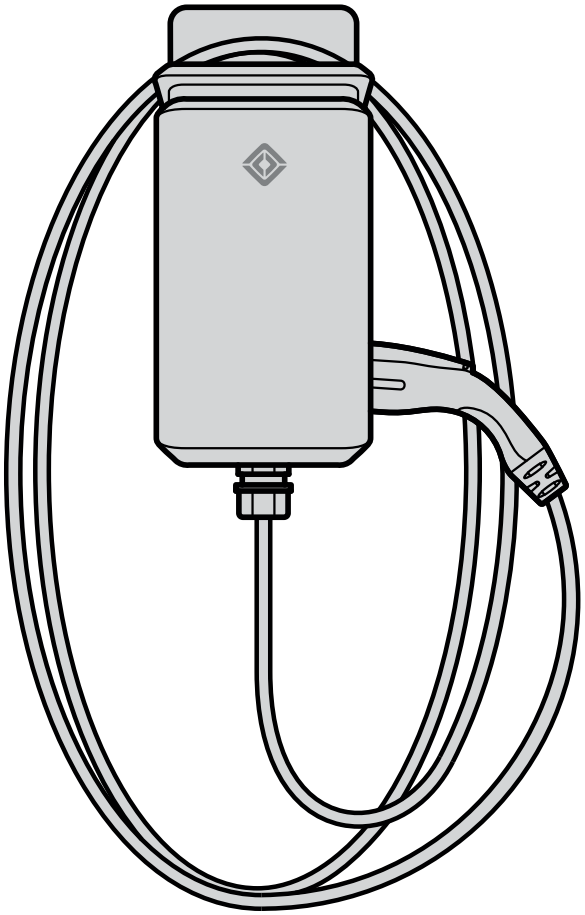
1. Switch power on at the circuit breaker.
2. After the power-up sequence, confirm the center light on the charger light bar pulses white to indicate it is ready to charge.

IMPORTANT

A red light indicates an error. To troubleshoot, see Troubleshooting (page 26).

WRAP AND DOCK THE CABLE

Wrap the cable loosely around the Wall Charger and store the coupler in the dock on the side.



CONNECT TO WI-FI

After installing the Wall Charger, add it to your Rivian account and connect it to your local Wi-Fi network. Doing this provides you with the ability to view charging status and allows the Wall Charger to:

- Receive automatic software updates
- Communicate helpful troubleshooting information directly to Rivian Customer Service

What You Need

To connect the Wall Charger to Wi-Fi, you will need the following:

- Mobile phone
- Rivian app downloaded and installed from the *App Store*® online store or on *Google Play*®
- Rivian account
- Stable 2.4 GHz Wi-Fi network within range of the Wall Charger

NOTES

- If the Wall Charger is located outside the range of the Wi-Fi signal, relocate the Wi-Fi modem or router within range or use a network extender.
- The Wall Charger may experience connection issues with certain wireless routers that blend 2.4 GHz and 5 GHz frequencies. Check your router settings to ensure 2.4 GHz is available. If you encounter a problem, contact Rivian.

Connect to the Wall Charger

1. Open the Rivian app on your phone and turn on Bluetooth.
2. Log in with your Rivian account name and password.
3. Open the Account menu and choose **Add gear**.
4. Choose **Wall Charger**.
5. After resetting the Wall Charger circuit breaker (as instructed in the app), stand near the Wall Charger with your phone.
6. When prompted, swipe up on the screen to start the pairing process. This may take up to 2 minutes.

> **NOTE**
>
> Bluetooth will time out at the Wall Charger after a period of inactivity (for example, if you walk away and do not complete the pairing process when prompted).

7. Continue following the instructions to complete the pairing and to connect to WiFi.

When you see the "Setup Complete" screen, the Wall Charger successfully connected to Wi-Fi and to your Rivian account.

> **NOTES**
>
> - You can associate the Wall Charger with only one Rivian account.
> - If you are unable to connect to the Wi-Fi network or do not see your network name in the list of available networks, ensure that the network is broadcasting on a 2.4 GHz band.

JOB CLOSEOUT FORM

For the installer: Please fill out this form for customer records.

Installation date: _____

Permit number: _____

Authority having jurisdiction (AHJ): _____

Information/Checks	For the Installer to Fill Out	
Nominal 208/240 volts at L1-L2 terminals confirmed with multimeter	Yes ☐	No ☐
Tug tested input terminals and confirmed torque	Yes ☐	No ☐
Wall Charger center light bar pulses white after power-on	Yes ☐	No ☐
House main disconnect size	_____ Amps	
Circuit breaker for this Wall Charger (in Amps)	_____ Amps	
Dip switches match circuit breaker.	Yes ☐	No ☐
Branch circuit connected to (panel)	Main ___	Sub ___
Length of circuit	_____ ft	
Type of conductor used	Material: _____ AWG # _____	

Light Bar States

Light Bar Color	State	What It Means
White (center light only)	Pulsing	Ready
White	Pulsing	Initializing
White	Solid	End of charge session
Green	Pulsing	Charging
Green	Solid	Charging complete
Blue	Fast pulsing	Bluetooth communicating
Blue	Slow pulsing	Software update in progress
Red	Solid or pulsing	Error

Troubleshooting

DANGER

- Improper installation can result in electric shock or severe personal injury. Only a licensed electrician should perform this installation in accordance with the provisions of national electrical codes and standards.
- No user-serviceable parts inside. Refer servicing to qualified service personnel.
- Only a licensed electrician should perform steps labeled **ELECTRICIAN ONLY**.

If the Wall Charger does not operate correctly, and the light bar on the charger appears red, use the following table to determine error states and possible solutions.

Red Light Bar State	Error	Possible Solution
Solid	Charger fault	1. Unplug the charger from the vehicle. 2. Switch power off and then on again at the circuit breaker. 3. Allow the Wall Charger to boot up. 4. Attempt to charge the vehicle. **ELECTRICIAN ONLY** 1. Unplug the charger from the vehicle. 2. Switch power off at the circuit breaker. 3. Remove the faceplate from the Wall Charger. 4. Confirm the dip switch configuration matches the installed circuit breaker. 5. Install the faceplate, making sure to **reconnect the cable to the network board**. 6. Switch power on at the circuit breaker. 7. Allow the Wall Charger to boot up. 8. Attempt to charge the vehicle. If the problem persists, contact Rivian.

Red Light Bar State	Error	Possible Solution
Single flash, continuous	Issue with ground fault circuit interrupter (GFCI)	1. Unplug the charger from the vehicle. 2. Switch power off and then on again at the circuit breaker. 3. Allow the Wall Charger to boot up. 4. Attempt to charge the vehicle. If the problem persists, contact Rivian.
Two-flash sequence	Charger not detecting ground connection	⚠ **ELECTRICIAN ONLY** 1. Unplug the charger from the vehicle. 2. Switch power off at the circuit breaker. 3. Remove the faceplate from the Wall Charger. 4. Check the ground wire connection between the charger and the electrical panel. Ensure the wire has a continuous path to the main panel. 5. Install the faceplate, making sure to **reconnect the cable to the network board**. 6. Switch power on at the circuit breaker. 7. Allow the Wall Charger to boot up. 8. Attempt to charge the vehicle. If the problem persists, contact Rivian.

Red Light Bar State	Error	Possible Solution
Three-flash sequence	Charger detecting excessively high or low temperatures	If charging in excessively high or low ambient temperatures, stop charging until temperatures have normalized. ⚠ **ELECTRICIAN ONLY** 1. Unplug the charger from the vehicle. 2. Switch power off at the circuit breaker. 3. Remove the faceplate from the Wall Charger. 4. Check wire terminal connection points and confirm conductor wire is sized correctly. 5. Install the faceplate, making sure to **reconnect the cable to the network board**. 6. Switch power on at the circuit breaker. 7. Allow the Wall Charger to boot up. 8. Attempt to charge the vehicle. If the problem persists, contact Rivian.
Four-flash sequence	Charger receiving too high or too low voltage	⚠ **ELECTRICIAN ONLY** 1. Unplug the charger from the vehicle. 2. Switch power off at the circuit breaker. 3. Remove the faceplate from the Wall Charger. 4. Use a multimeter to check voltage supply at L1, L2, and G terminals. Acceptable voltage ranges: • Line 1 to Ground: 100-125 volts • Line 2 to Ground: 100-125 volts • Line 1 to Line 2: 200-250 volts 5. Install the faceplate, making sure to **reconnect the cable to the network board**. 6. Switch power on at the circuit breaker. 7. Allow the Wall Charger to boot up. 8. Attempt to charge the vehicle. If the problem persists, contact Rivian.

Red Light Bar State	Error	Possible Solution
Five-flash sequence	Vehicle requesting more current than charger can provide	1. Unplug the charger from the vehicle. 2. Switch power off and then on again at the circuit breaker. 3. Allow the Wall Charger to boot up. 4. Attempt to charge the vehicle. If the problem persists, contact Rivian.
Six-flash sequence	Communication error between charger and vehicle	1. Unplug the charger from the vehicle. 2. Switch power off and then on again at the circuit breaker. 3. Allow the Wall Charger to boot up. 4. Attempt to charge the vehicle. If the problem persists, contact Rivian.
Seven-flash sequence	Vehicle requests ventilation, unable to charge	1. Unplug the charger from the vehicle. 2. Switch power off and then on again at the circuit breaker. 3. Allow the Wall Charger to boot up. 4. Attempt to charge the vehicle. If the problem persists, contact Rivian.

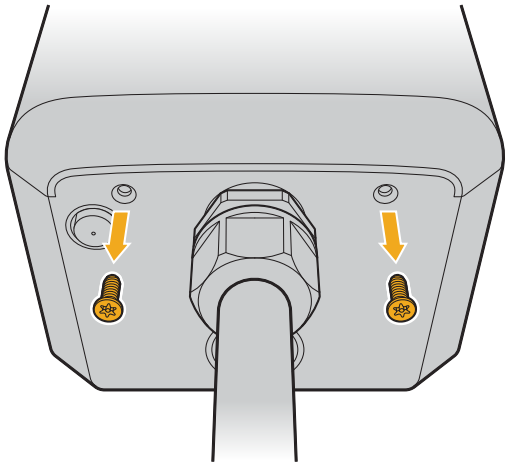
Uninstall the Wall Charger

DANGER

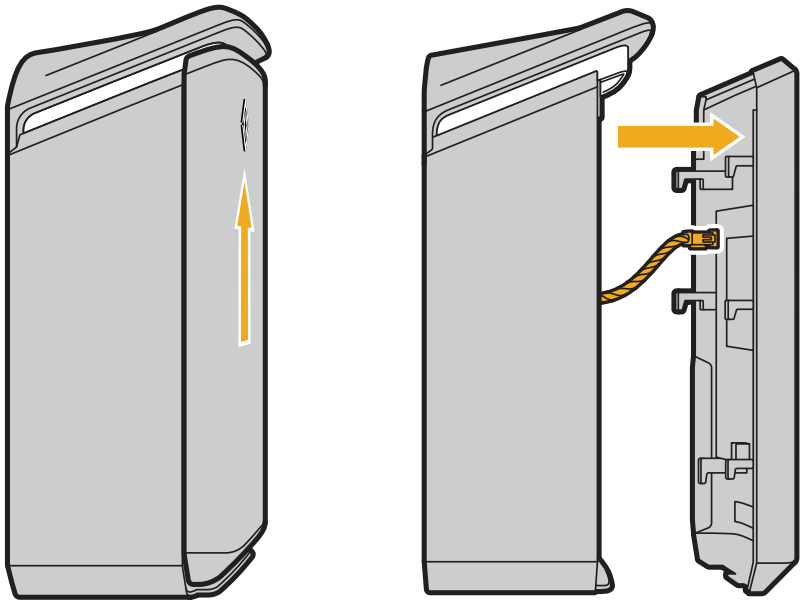
- Improper removal of the Wall Charger can result in electric shock or severe personal injury. Only a licensed electrician should perform this removal in accordance with the provisions of national electrical codes and standards.
- Shut power off at the circuit breaker before uninstalling the Wall Charger. Failure to do so may result in physical injury or damage to the Wall Charger.

If you need to uninstall the Wall Charger, provide the electrician with these instructions.

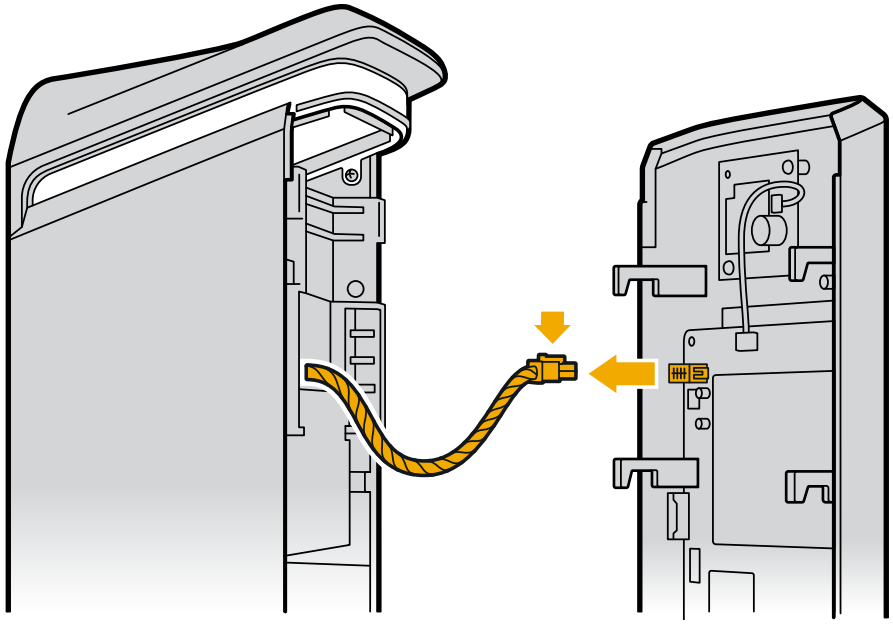
1. Switch power off at the circuit breaker.
2. Verify the absence of voltage.
3. Remove the two Security T20 Torx screws from the bottom of the Wall Charger.



4. Push the faceplate up, and then carefully pull it partially off of the charger. A cable is attached between the interior of the faceplate and the Wall Charger housing.

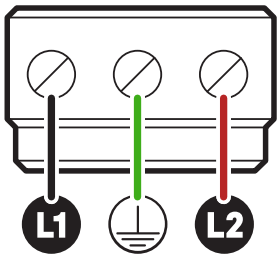


5. Press the locking tab of the cable connector to release the cable from the network board on the interior of the faceplate, and carefully pull the cable away from the network board.

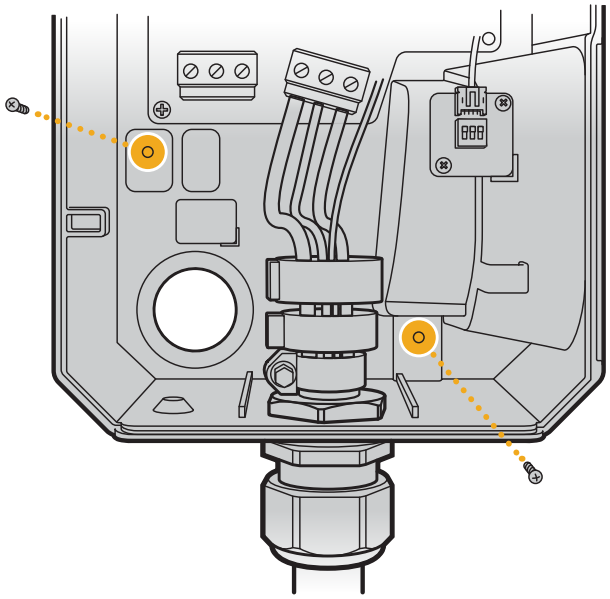


6. Remove the faceplate.
7. Use a voltage meter to confirm zero voltage at the terminals before proceeding.

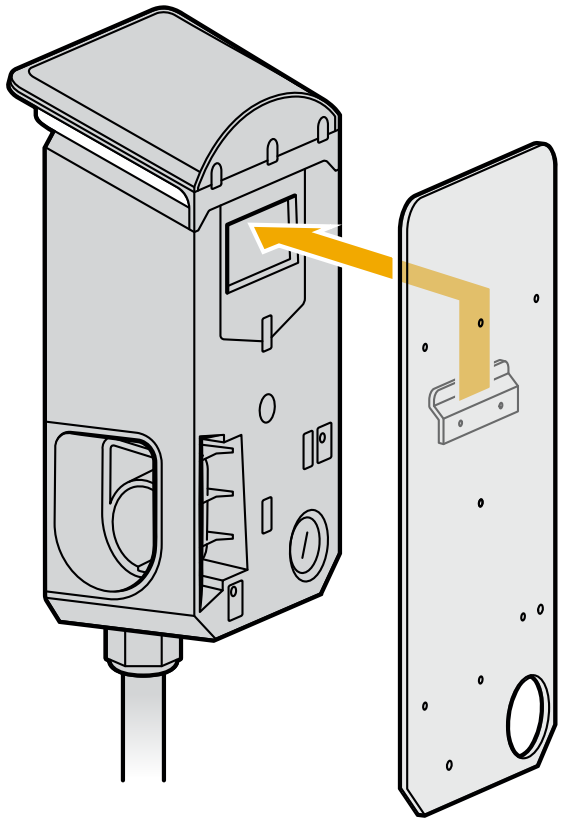
8. Use a 7/32" flat head screwdriver to loosen each of the three terminals (L1, Ground, and L2), and remove the conductors from the terminals.



9. Carefully remove the conduit and fittings from the Wall Charger.
10. Remove the two screws attaching the Wall Charger to the mounting plate.



11. Lift the Wall Charger off of the mounting plate.

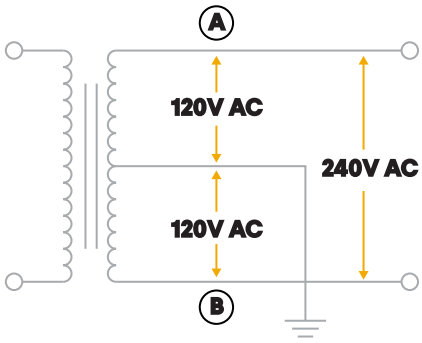


Specifications

Specification	Description
Voltage	208/240 VAC (-20% – +15%), single-phase
Frequency	60 Hz
Charging connector	SAE J1772
Charging cable length	24 ft (7.3 m)
Wi-Fi	IEEE 802.11 b/g/n
Network band	2.4 GHz
Real-time clock	Yes (7 days)
Bluetooth	Supports Bluetooth 5.0
Data protocol	OCPP 1.6
Metering accuracy	Embedded ± 1%
Operating temperature	-22°F to +122°F (-30°C to +50°C)
Storage temperature	-40°F to +176°F (-40°C to +80°C)
Wiring type	Hardwired
Acceptable conductor sizes	#14 to #6 AWG copper only (#6 AWG required for full 48 A continuous current)
Operating current	6 A, 12 A, 16 A, 20 A, 24 A, 32 A, 40 A, 48 A (default, maximum)
Ground fault circuit interrupter (GFCI)	CCID 20 - EVSE will interrupt charging if leakage exceeds 20 mA
IP performance	NEMA Type 3R
Impact resistance	IK8
Dimensions	Height: 16.3 in (41.4 cm) Width: 7.3 in (18.5 cm) Depth: 5.8 in (14.7 cm)
Weight	24.25 lb (11 kg) including 24 ft (7.3 m) cable
Certification	UL 1998/2231/2594; FCC Part 15B
UL file number	E520745
Product number	PT00057325

Supplemental Information for Electrical Service Wiring

240V SPLIT-PHASE SYSTEM



Federal Communication Commission Interference Statement

This equipment complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This equipment may not cause harmful interference, and (2) this equipment must accept any interference received, including interference that may cause undesired operation.

This equipment 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 equipment 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 equipment and receiver.
- Connect the equipment 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.

Changes or modifications not covered in this Guide must be approved in writing by the manufacturer's Regulatory Engineering Department. Changes or modifications made without written approval may void the user's authority to operate this equipment.

RF EXPOSURE INFORMATION

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. Keep a minimum distance of 8 in (20 cm) between you and the Wall Charger while installing or operating it.

Industry Canada Statement

This equipment complies with ISED's license-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this equipment must accept any interference received, including interference that may cause undesired operation.

RADIATION EXPOSURE STATEMENT

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. Keep a minimum distance of 8 in (20 cm) between you and the Wall Charger while installing or operating it.

Still need help? Connect with us.

Customer Service

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