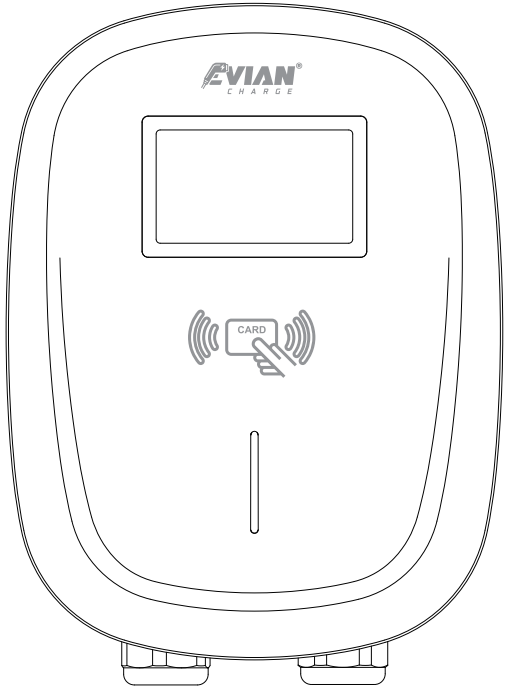


EV Charger
INSTALLATION AND USAGE GUIDE

TABLE OF CONTENTS

1.Safety Information.....2-4

2.Specifications.....3

3.Check Box Contents.....6

4.Tools Needed.....7

5.Installation Overview.....8-16

Step 1: How is the EV Charger Powered.....8

Step 2: Find a Place for the EV Charger.....9

Step 3:Mark the Mounting Bracket Location.....10

Step 4:Install the Mounting Bracket.....10

Step 5: Install the Gun Cradle Beside the Charger.....11

Step 6: Mount the EV Charger.....11

Step 7: Hardwired Instructions for Electricians.....12-15

Step 8:Complete Setup.....16

6.Charging your Vehicle.....16

7.Description of the Display.....17

8.EV Charger LED Lights.....18-19

9.Troubleshooting Tips.....20

10.FCC.....20

11.Maintenance and Repair.....21

12.Service.....22

Safety Information

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK!
Improper connection of the equipment- grounding conductor may result in a risk of electric shock, leading to death or serious injury. We recommends that installation be performed by a licensed electrician or other qualified professional in accordance with the regional electrical code where it is being installed to ensure the EV Charger is properly grounded. Do not modify the provided plug – if it will not fit the outlet, have a proper outlet installed by a licensed electrician or other qualified professional.

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING - Improper connection of the equipment-grounding conductor is able to result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product –if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

For Hardwired Installation:
This product must be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.

Models：
EvianC80-Wifi
EvianC80-4G
EvianC48-Wifi
EvianC48-4G
EvianC40-Wifi
EvianC40-4G
EvianC32-Wifi
EvianC32-4G

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK

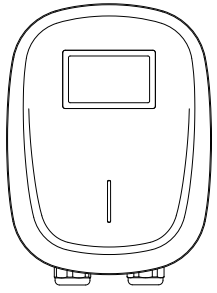
• Read all the instructions before using this product.
• This device should be supervised when used around children. Do not put fingers into the electric vehicle connector.
• The EV Charger is intended for use with electric vehicles only. Specifically, it is intended only for charging vehicles not requiring ventilation during charging.
• Do not use the EV Charger in any manner other than specified in this installation guide. Refer servicing to qualified service personnel.
• Do not attempt to disassemble or repair any of the components of the EV Charger. There are no user serviceable parts inside.
• Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
• Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
• Do not install the EV Charger in environments with explosive gas or vapors; nor where temperatures are outside its operating range of-22°F to 122°F (-30°C to 50°C).

Improper moving or storage of the EV Charger may result in damage to the product that could result in a risk of fire or electric shock during subsequent use.

Handle charger and packaging with care and avoid dropping it. When moving or lifting the EV Charger, always grasp the unit by the charging station enclosure. Never carry or lift the EV Charger by either the power cable or charging cord.

Store the EV Charger indoors and in its original packaging until it is ready to be installed. Storage temperature should be between -22°F to 176°F (-30°C to 80°C).

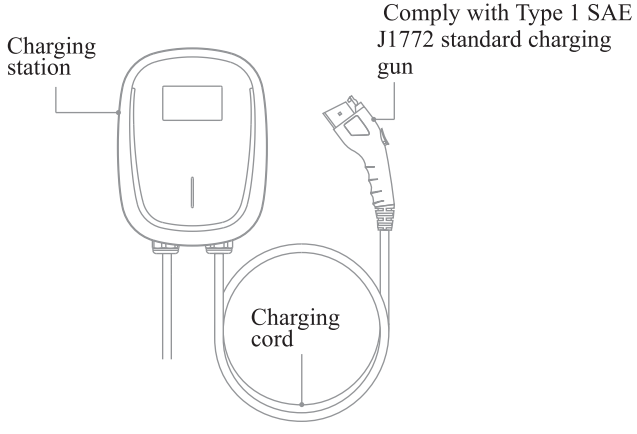
Specifications

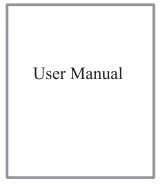


Electrical Characteristics	› Safety Rated: 80A Max › Single phase input: nominal voltage 208-240 VAC ~60 Hz › Power: 19.2 kW at 240 VAC
Input Cable	› Hardwired by licensed electrician
Output Cable & Connector	› 18 ft/5.5 m cable (25ft/7.5m optional) › SAE J1772 standard compliant
App	› Precision measurement of power, energy, voltage & current › Automated notifications: time-of-use in effect, start of charge, end of charge, unit offline, unit back online, car not plugged in by a set time
Smart Grid Connectivity	› Built-in WIFI (802.11 b/g/n/2.4GHz) / Bluetooth Connectivity
Firmware	› Over-the-air (OTA) upgradeable firmware
Emissions Reduction	› Available via optional software upgrade
Enclosure	› Dynamic LED lights show charging status: standby charging in progress, fault indicator, network connectivity › NEMA Enclosure Type4: Weatherproof, dust-tight › Quick-release wall mounting bracket included › Operating Temperature: -22°F to 122°F (-30°C to 50°C)
Dimensions	› Main enclosure: 12.8in × 9.7in × 3.8in (326mm × 247mm × 97mm)
Codes & Standards	› UL2594 compliant,UL2231 compliant, OCPP 1.6J, ISO15118, FCC Part 15 Class B, Energy Star
Safety	› ETL Listed
RFID	› Optional
4G module	› Optional
Warranty	› 2 years limited product warranty

Check Box Contents

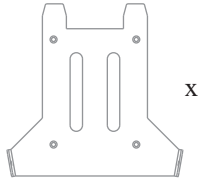
Your new EV Charger contains the following items. **If any of these items are missing or if you believe they've been damaged, call support immediately.**





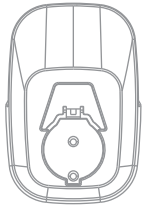
x 1

EV Charger installation and usage instruction



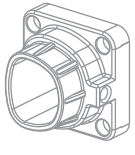
x 1

Mounting bracket



x 1

Gun cradle



x 1

Tesla Gun cradle（Optional）

x 6

Six drywallanchors

x 6

Six 7/32inch #12 Phillips screws

x 2

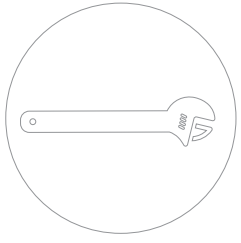
Two M4X8 hand-screws

x 2

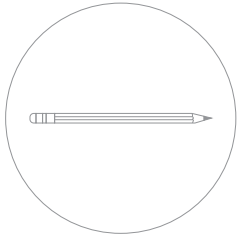
Internal hexagonal plum blossom screw（Optional）

Here are the tools you will need to install the EV Charger.

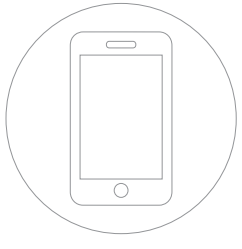
Phillips, flathead and torx screwdrivers



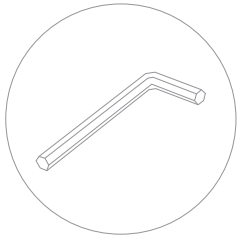
Adjustable Wrench



Pencil

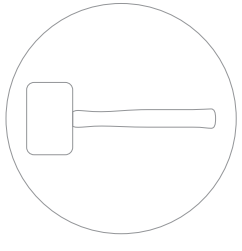


IOS or Android phone or tablet

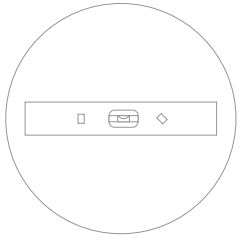


Allen Wrench

Drill with a 5/16" drill bit



Rubber Mallet



Bubble Level

Hardwired Installation See Step 8-1

- EV Charger can supply a maximum charging current and corresponding selection of air switches.
- Please refer to the table below.

CAUTION: To reduce the risk of fire, connect only to a circuit provided with 100 amperes maximum branch circuit over current protection in accordance with the National Electrical Code, ANSI/NFPA 70 and the Canadian Electrical Code, Part I, C22.1.
Thanks to reduce the risk of fire, connect only to a circuit provided with branch circuit over current protection in accordance with the CSA C22.1-15 Canadian Electrical.
Code, Part 1 (Canada) or NOM-001-SEDE Electrical installations (Utility) (Mexico) or ANSI NFPA 70 National Electrical Code (USA)

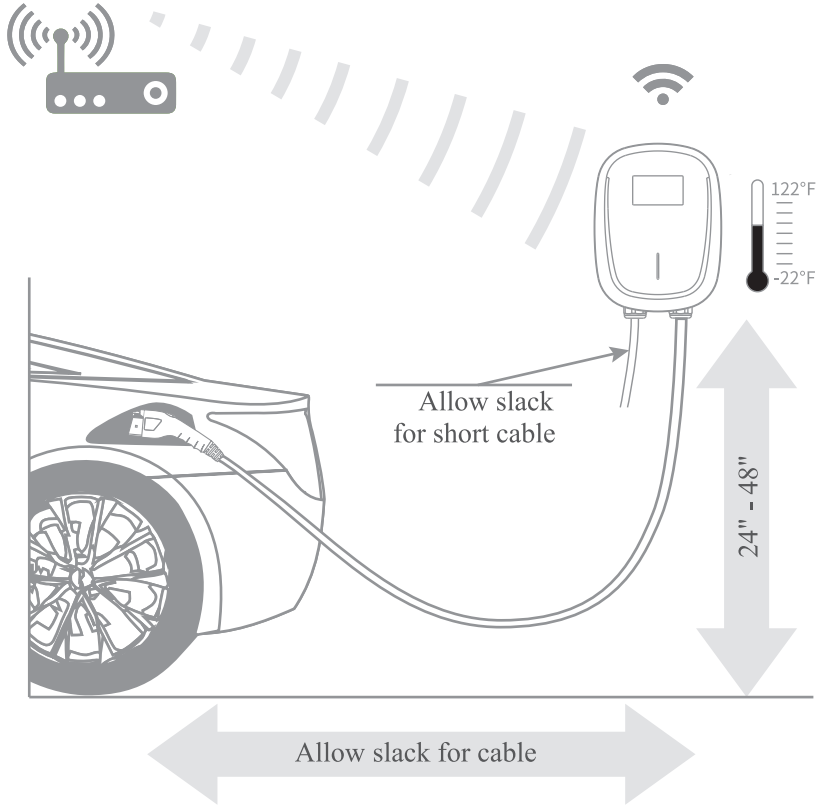
Dedicated Breaker	Charge Power @ 240V	
15A	2.9kW	12A
20A	3.8kW	16A
25A	4.8kW	20A
30A	5.8kW	24A
35A	6.7kW	28A
40A	7.7kW	32A
45A	8.6kW	36A
50A	9.6kW	40A
60A	11.5kW	48A
100A*	19.2kW	80A

*This 100A circuit breaker shall be capable of being locked in the open position. The provisions for locking shall remain in place with or without the lock installed.

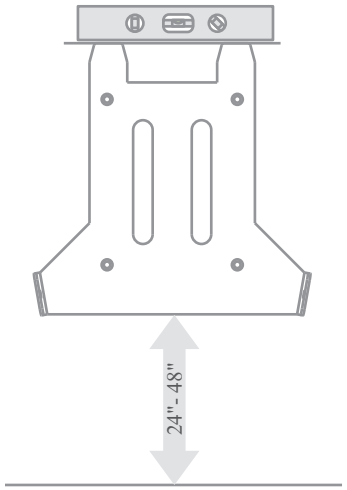
- EV Charger can supply a maximum charging current and corresponding selection of air switches. Please refer to the above table.

Step 2: Find a Place for the EV Charger

This device shall be mounted at a sufficient height from grade such that the height of the storage means for the coupling device is located between 24"(600 mm) and 48"(1.2 m) from grade; the distance from the vehicle allows slack for charging cable; temperatures are between -22°F to 122°F; the charger is within range of WIFI signal; and if plugged-in, the distance from the NEMA outlet allows slack for a short cable.

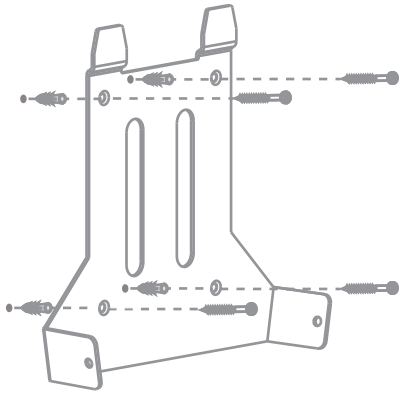


Step 3: Mark the Mounting Bracket Location



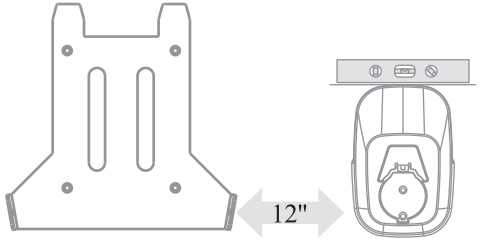
On the plasterboard / drywall where the charger will be installed, use a bubble level to **draw a horizontal line** where the top of the EV Charger will sit on the wall ensuring it is mounted at a sufficient height from grade such that the height of the storage means for the coupling device is located between 24"(600 mm) and 48" (1.2 m) from grade and allows slack for the NEMA cable if it will be plugged in. Then, align the top of the mounting bracket to the line and **mark the 4 mounting holes.**

Step 4: Install the Mounting Bracket



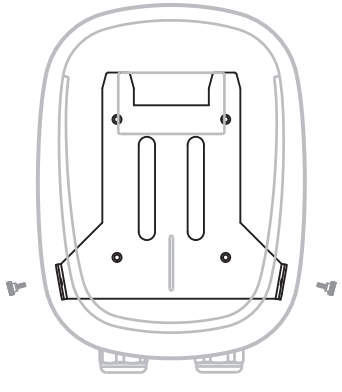
For each mark, drill a 5/16" hole in the wall. Use a Rubber Mallet to tap in the 4 drywall anchors. Install the bracket with 4 Phillips screws into the anchors.

Step 5: Install the Gun Cradle Beside the Charger



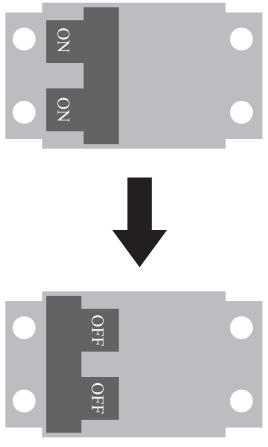
Use a bubble level to **draw a horizontal line** at least 12"away from the mounting bracket at the height you'd like the cradle beside your EV Charger. Holding the gun cradle up to your line, mark the top two and bottom mounting holes of the gun cradle.
If install the gun cradle on the wall or on the power distribution cabinet or board. drill a 5/16" hole in the wall for each mark. Use a Rubber Mallet to tap in 2 drywall anchors (4 dry wall anchors ifNACS Tesla Gun cradle). Install the gun cradle with 2 Phillips screws (4 Phillips screws if NACS Tesla Gun cradle) into the anchors.

Step 6: Mount the EV Charger



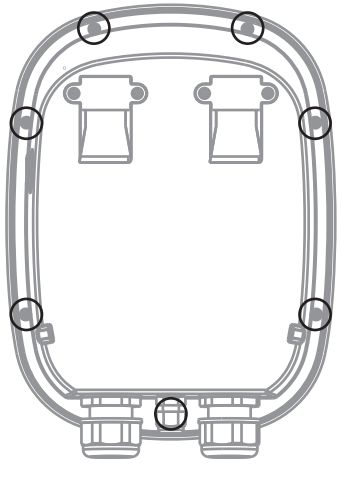
Use the 2 M4X8 hand-screws (Or Internal hexagonal plum blossom screw)to install the EV Charger on the mounting bracket.

Step 7-1: Hardwired Instructions for Electricians



A licensed electrician or other qualified professional can follow these **instructions to hardwire the EV Charger to a breaker.** First, turn off the dedicated dual-pole breaker that will power the EV Charger.

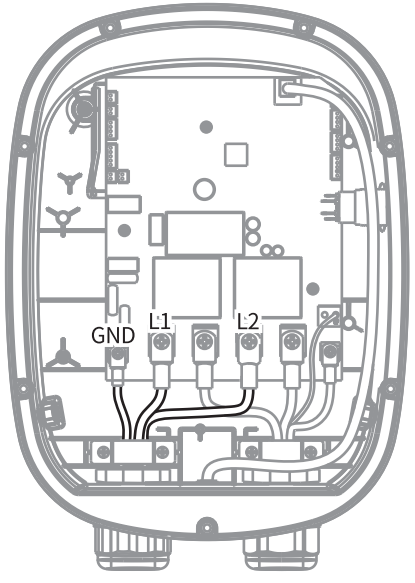
Step 7-2: Hardwired Instructions for Electricians



From the back of the EV Charger, use the Allen wrench to remove the 7 screws to detach the front cover. Use Adjustable wrench to remove waterproof joint.
CAUTION: there's a cable connecting the cover to the circuit board in the Charger. To remove the cable, gently grab the cable bundle and pull it away from the circuit board.

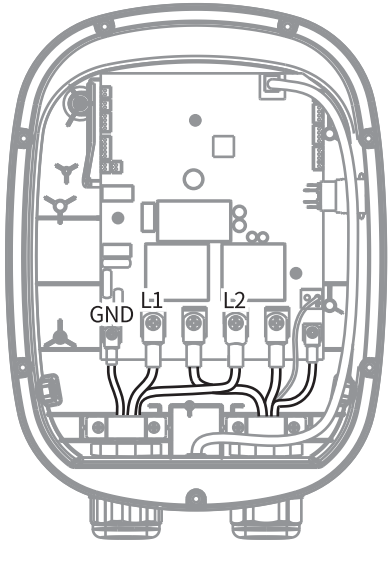
Step 7-3:
Hardwired Instructions for Electricians

Unscrew the screws for terminals L1, L2, and GND, to remove the NEMA cable wires.



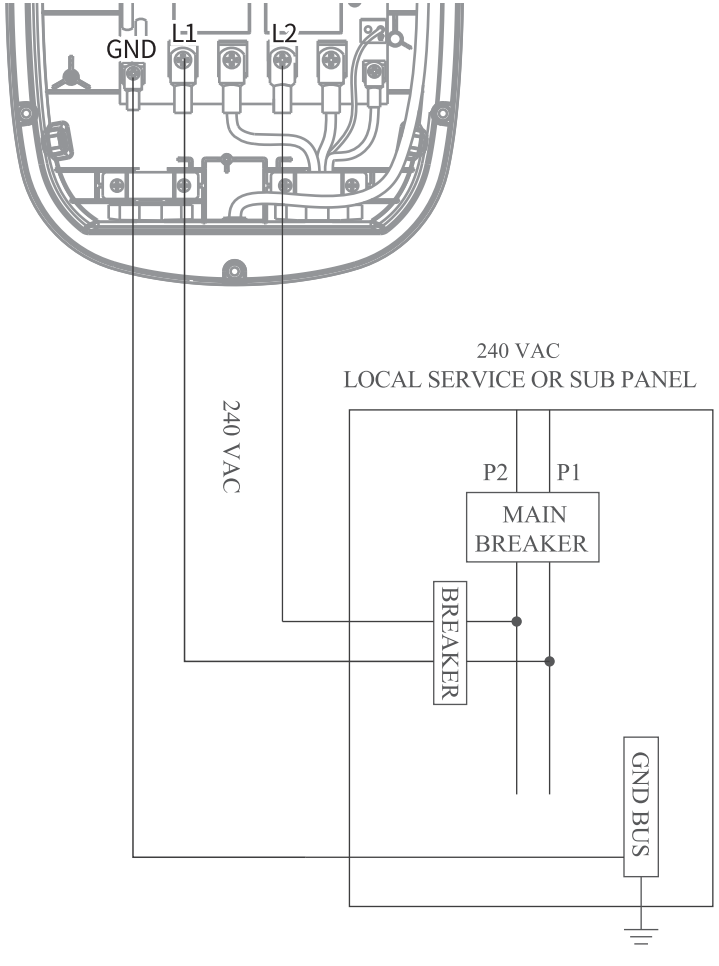
Step 7-4:
Hardwired Instructions for Electricians

Unscrew the screws to remove the clamp securing NEMA cable. Then, remove the NEMA cable from the assembly. Finally, unscrew the nut holding the cable gland in place and remove it from the assembly.

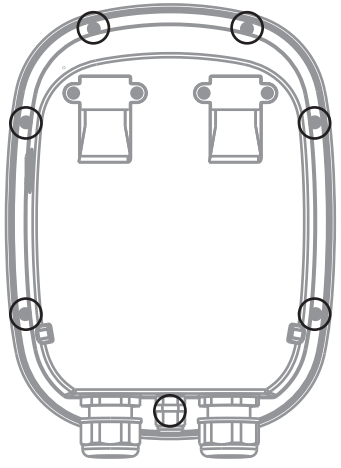


Step 7-5:
Hardwired Instructions for Electricians

Using 1-1/4" conduit and proper fittings for the connections, use copper conductor only, 105 °C,6 AWG for setting 32A/40A/48A/80A rating from both phases of the breaker along with a ground/earth lead into the EV Charger assembly. Put the phase 1 lead into terminal L1, the phase 2 lead into terminal L2, and the ground into terminal GND and secure them with the screws, applying a tightening torque of 1.2 Nm.

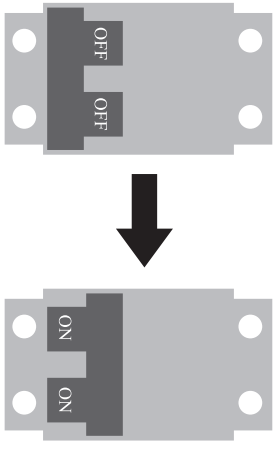


Step 7-6: Hardwired Instructions for Electricians

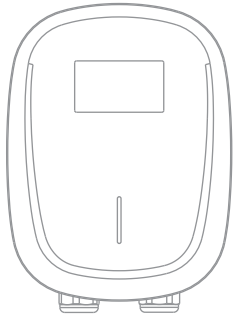


Gently reattach the cable to the cover and the circuit board. Then, from the back of the EV Charger, use the Allen wrench to replace the 7 screws to reattach the front cover.

Step 7-7: Hardwired Instructions for Electricians



Turn on the breaker and ensure that the power light on the front of the EV Charger is illuminated.

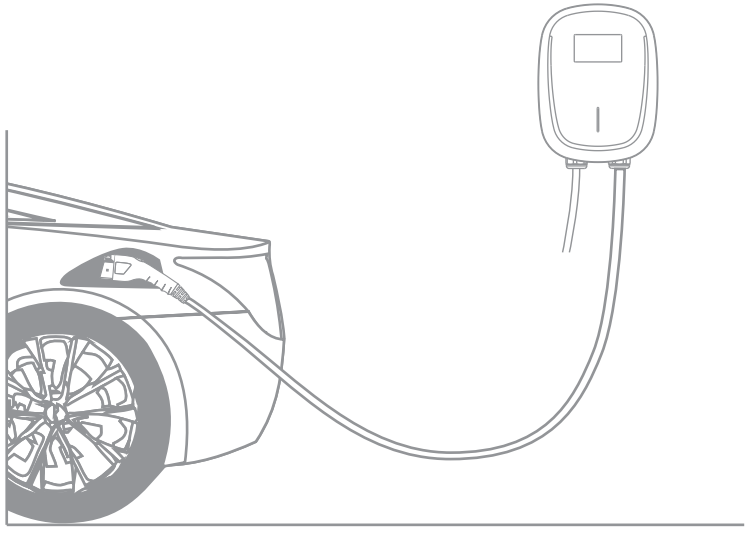


Step 8: Complete Setup

- Your EV Charger is now ready to charge your vehicle.
- Factory setting: Base on the maximum EV charger capacity that the car system will accept.
- Default factory setting of charging mode is Plug and Play.
- To raise or lower the charge rate to match your breaker size and to take advantage of the numerous other features through APP or OCPP Configuration Tool, follow the corresponding steps in User Instruction Manual to make changes.

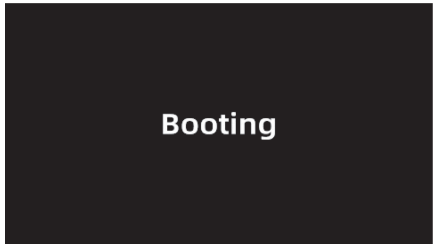
Charging your Vehicle

Factory setting: Base on the maximum EV charger capacity that the car system will accept. You can raise or lower this rate through the APP or OCPP Configuration Tool.
Default factory setting of charging mode is Plug and Play. If it is smart home charger, to switch to APP mode, please. refer to APP instruction. If it is commercial charger (OCPP version), switch the mode through the OCPP Configuration Tool in the phone or tablet.
To start charge the vehicle, open the port door and plug the EV Charger gun into the port. You will see the charge light on the EV Charger switch to solid green when it is connected to the vehicle. It will begin flash green, as the vehicle charges. Additionally, most EVs have indicator lights on the dashboard to let you know that you are charging. Do not attempt to drive your vehicle while the charge cable is connected to your vehicle.



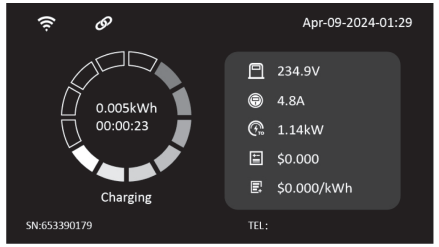
Boot Screen

-The screen display interface when thecharger is powered on.



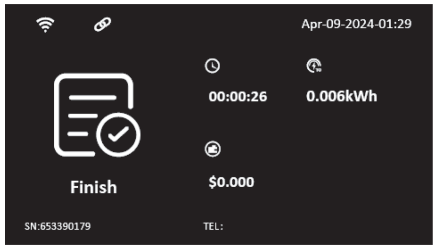
Charging Screen

-Real-time charging status;
-Voltage;
-Power;
-Charging duration;
-Real-time cost.



Transaction Information Screen

-When the charging finish, the screen will will show you the transaction details.



Error Screen

-Contact us if you see an error.

Power	
Off	Charger does not have power
Flowing Blue	Charger has power
Charge	
Off	Idle Mode
Flowing Green	Charging Mode
Solid Green	Pre-Charge Mode
Wi-Fi	
Off	Not connected to WIFI network
Soft white	Connected to the WIFI network

CAUTION: Do not touch and use this product when in case of failure. It is required to disconnect the power supply or have it handled by professionals.

Fault	
Red light always on	Reset switch failure.
Red light flashing every 3 seconds (once)	Input voltage is too high If plugged in, check that the NEMA14-50P or NEMA6-50P is plugged in securely. Check the supply breaker in your breaker panel for damage and replace if necessary. If issue persists, contact Support.
Red light flashing every 3 seconds (twice)	In put voltage is too low If plugged in, check that the NEMA14-50P or NEMA6-50P is plugged in securely. Check the supply breaker in your breaker panel for damage and replace if necessary. If issue persists, contact Support.
Red light flashing every 3 seconds (three times)	Output over current Unplug from car. Disconnect charger from power. Confirm there is no visible damage or foreign material in the EV gun. Return power to charger. If issue persists, contact Support.
Red light flashing every 3 seconds (four times)	Charger has exceeded nominal temperature. Ensure the charger is installed where ambient temperatures will not exceed 122°F (50°C). If issue persists, contact Support.
Red light flashing every 3 seconds (five times)	Current leakage. Unplug from car. Disconnect charger from power. Confirm there is no visible damage or foreign material in the EV gun. Return power to charger. If issue persists, contact Support.
Red light flashing every 3 seconds (six times)	Charger is not grounded Ensure that the EV Charger is properly wired and grounded. Check the line and neutral connections, as they may be reversed in the adapter or outlet. Unplug and reboot EV charger. If issue persists, contact Support.
Red light flashing every 3 seconds (seven times)	CP line not properly connected.
Red light flashing every 3 seconds (eight times)	Relay fused in position Disconnect from power immediately. Contact Support.

My vehicle is not responding or charging.

- Ensure that the latch on the EV charging cable handle is locked into place. If the handle is not latched securely, the vehicle will not charge. If the latch is pressed down during charging, charging automatically stops.
- Ensure that the vehicle is not set up to begin charging at a specific time of day.

FCC

Our EV Charger contains

This device complies with Part 15 of the FCC Rules / Industry Canada license-exempt RSS standard (s). 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.

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.

This equitment complies with CAN ICES-003(BNMB-003(B).

To satisfy FCC / IC RF exposure requirements, a separation distance of 20cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :

1. L’appareil ne doit pas produire de brouillage;
2. L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est

susceptible d’en compromettre le fonctionnement.

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

Always ensure that after charging, the charging cable is wrapped around the Wall Connector.

Regularly inspect the Wall Connector and charging cable for signs of damage. lf damage is found, contact service.

The Wall Connector contains no user-serviceable components. If the unit is not operating correctly, contact service.

Wipe the outside of the wall Connector, the charging cable, and the connector end of the charging cable with a clean dry cloth to remove any accumulation of dust and dirt.

WARNING: Turn off input power at the circuit breaker before cleaning the Wall Connector.

WARNING: Do not use cleaning solvents, scouring, powder, or any type of abrasive pad to clean the wall connector, its charging cable, or the vehicle's charging port.

CAUTION: To reduce the risk of electrical shock or equipment damage, do not allow liquid to enter the wall Connector while cleaning it.

Address: 2750 Garfield Ave. Commerce CA 90040
Contact Number: (424) 244- 3724
www.EVianCharge.com