

UNRI Series



Electric Vehicle Smart Charger User Manual

ATTENTION: Installers, please read this guide Thoroughly.

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1. Important Safety Instructions

PLEASE KEEP THESE INSTRUCTIONS SAFE



WARNING: This Installation Guide contains important instructions for your Ulandpower Smart EV Charger. Remember to always follow simple precautions when using electronic products, including the following guidelines.



CAUTION: Strict compliance with the information provided in this manual does not exempt the user from their responsibility to comply with all relevant codes and safety standards. This Installation Guide outlines the typical installation and mounting scenarios. If any situation arises where it is not feasible to carry out an installation according to the procedures specified in this document, please consult with a licensed installer.

1.1 General Warnings & Cautions



WARNING: To avoid fire, property damage, injury or death, carefully read and follow the instructions during installation, operation and maintenance. Install and operate only as instructed in this Installation Guide.

DO NOT put fingers into the electric vehicle connector.

DO NOT use this product if the input 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 defect or damage.

DO NOT operate Ulandpower Smart EV Charger in temperatures outside its operating range of -22°F to 131°F (-30°C to 55°C).

DO NOT remove cover or attempt to open the enclosure in rain or other inclement weather - risk of electric shock.

DO NOT open the front cover of your charger while it is connected to the power supply.

DO NOT put heavy objects on the charger to avoid danger.



WARNING:

- If removing the face cover of the device is required, avoid touching the L1 IN, L2 IN, PE IN, L1 OUT, L2 OUT, PE OUT connectors, connection terminals, ribbon cable terminals linking the front cover to the main motherboard, or any other internal components if the device is still turned on - risk of electric shock.
- This Installation Guide contains important instructions for your Ulandpower Smart EV Charger. Remember to always follow simple precautions when using electronic products, including the following guidelines.
- This Installation Guide contains important instructions for your Ulandpower Smart EV Charger. Remember to always follow simple precautions when using electronic products, including the following guidelines.
- This device should be supervised when used around children.



WARNING:

- This device must be grounded. Failure to ground the charging station can lead to risk of electrocution or fire.
 - To avoid a risk of fire or electric shock, do not use this device with an extension cord.
 - It's recommended to install this device in a sufficiently ventilated area and preferably avoid installing it in areas with extreme direct sunlight.
 - In case of flooding, do not operate charger while it or your EV is submerged in water.
 - If charger was submerged in water due to flooding, make sure a qualified electrician inspect it before energizing or using it again.
 - The suitability of the use of flexible cord in accordance with CE code, part I, rule 4-012, is to be determined by the local inspection authority.
 - To reduce the risk of fire, connect only to a dedicated circuit provided with branch circuit overcurrent 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).
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CAUTION: Please use the charger properly. Do not hit or press hard on the enclosure. If the case is damaged, please contact a professional technician.

1.2 Installation Requirements



WARNING:

- For the installation of your Ulandpower Smart EV Charger (hardwired installation and/or NEMA 14-50 outlet installation), it is recommended to only engage licensed electrician with proper qualification and sufficient installation experience to ensure compliance with both national and local building and electrical codes and standards as well as all applicable safety standards, codes, ordinances and any local safety regulations. It's recommended to use a high quality circuit breaker and wiring (for hardwire installation) and/or NEMA 14-50 receptacle and wiring (plug-in installation).
 - Disconnect electrical power to install the charging station.
 - Be sure to preview this Installation Guide before installing the Charger.
 - Your charger must be grounded to ensure safety. Grounding provides a path of least resistance, reducing the risk of electric shock if the charger malfunctions. The plug-in version of the charger comes with a grounding conductor and plug, which must be connected to a properly installed and grounded NEMA 14-50 receptacle according to local codes. If you hardwire your charger, please consult a licensed electrician to ensure proper grounding. If your device signals a Ground Fault, consult a licensed electrician to ensure proper grounding. Improperly connecting the equipment-grounding conductor can cause the risk of electric shock. If you're unsure if the product is properly grounded, consult a qualified electrician or service technician. Do not modify the provided plug. If it doesn't fit the receptacle, have a qualified electrician install the appropriate NEMA 14-50.
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CAUTION:

- Ensure proper safety measures by using appropriate protection when connecting to the main power distribution cable.
 - Install type B, C, or D circuit breakers that meet the rated current requirements at the input terminal for effective protection.
 - The device shall be mounted at height between 3ft and 5ft from ground
-

1.3 Daily Maintenance



WARNING:

- If removing the face cover of the device is required, avoid touching the L1 IN, L2 IN, PE IN, L1 OUT, L2 OUT, PE OUT connectors, connection terminals, ribbon cable terminals linking the front cover to the main motherboard, or any other internal components if the device is still turned on - risk of electric shock.
 - This Installation Guide contains important instructions for your Ulandpower Smart EV Charger. Remember to always follow simple precautions when using electronic products, including the following guidelines.
 - This Installation Guide contains important instructions for your Ulandpower Smart EV Charger. Remember to always follow simple precautions when using electronic products, including the following guidelines.
 - This device should be supervised when used around children.
-



CAUTION:

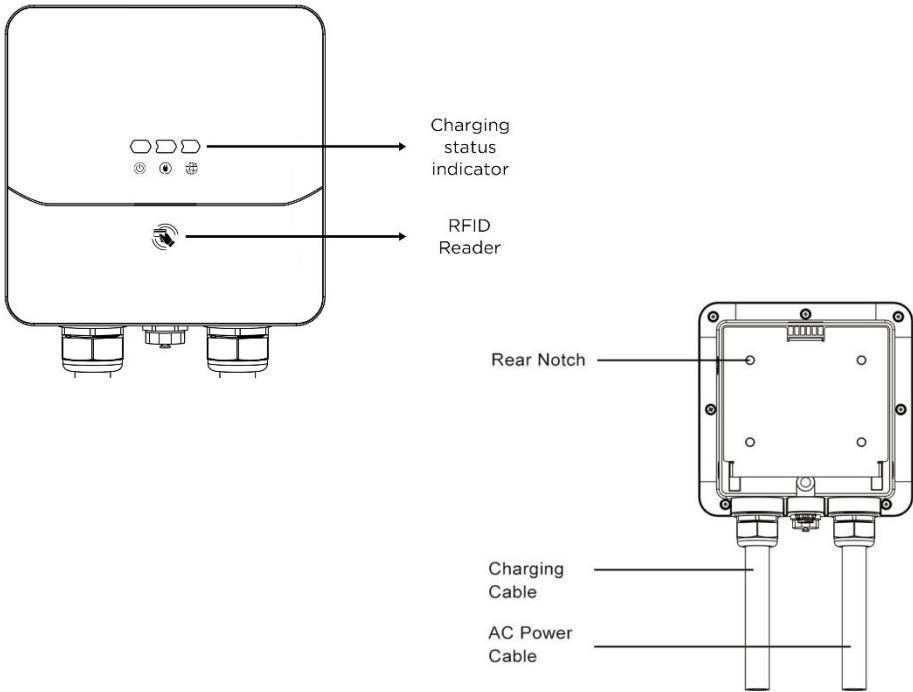
- Avoid moisture or water in the charger. If there is water or moisture ingress in the charger, it is necessary to immediately power off to avoid immediate danger, and notify the professional technician to carry out maintenance before next use.
 - Your charger contains no user-serviceable parts. Please do not attempt to service or repair any part of the device yourself. For any servicing needs, please contact customer service.
 - Please use the charger properly. Do not hit or press hard on the enclosure. If it is damaged, please contact a professional technician.
 - Take necessary precautions with electronic medical implants.
 - Ensure that the charging cable is positioned in the way where possibility of stepping on or tripping over it are excluded and a chance to cause damage is minimized. Please do not close a garage door on the charging cable or the connector.
 - Avoid placing the charger near hot objects and at high temperature locations and away from dangerous substances such as flammable gases and corrosive materials. Do not install Ulandpower Smart EV Charger near flammable, combustible or explosive materials.
 - Do not put heavy objects on the charger to avoid danger.
 - Before cleaning your charger, disconnect it from the power. Avoid using cleaning solvents; wipe it down with a clean, dry cloth to remove dust and dirt.
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2. Product Introduction and Data Sheet

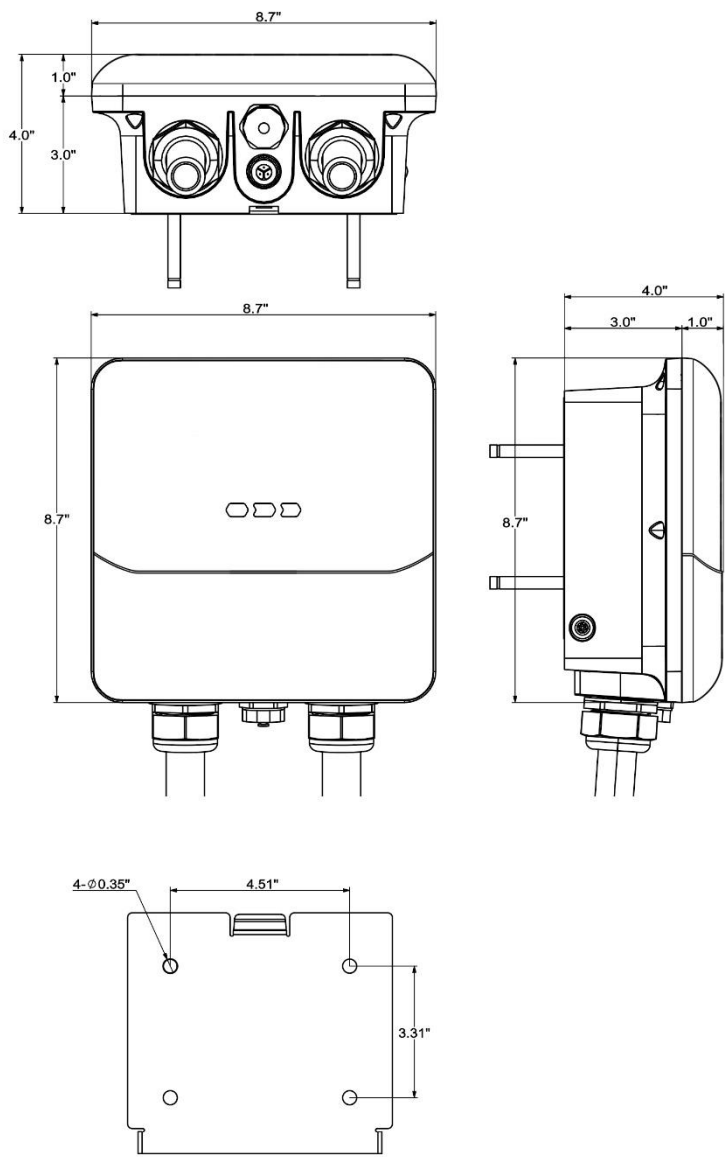


IMPORTANT: Make sure you understand how the device works and its basic interface. Ulandpower Smart EV Charger must be installed by a licensed electrician.

2.1 Basic Interface



2.2 Basic Dimensions

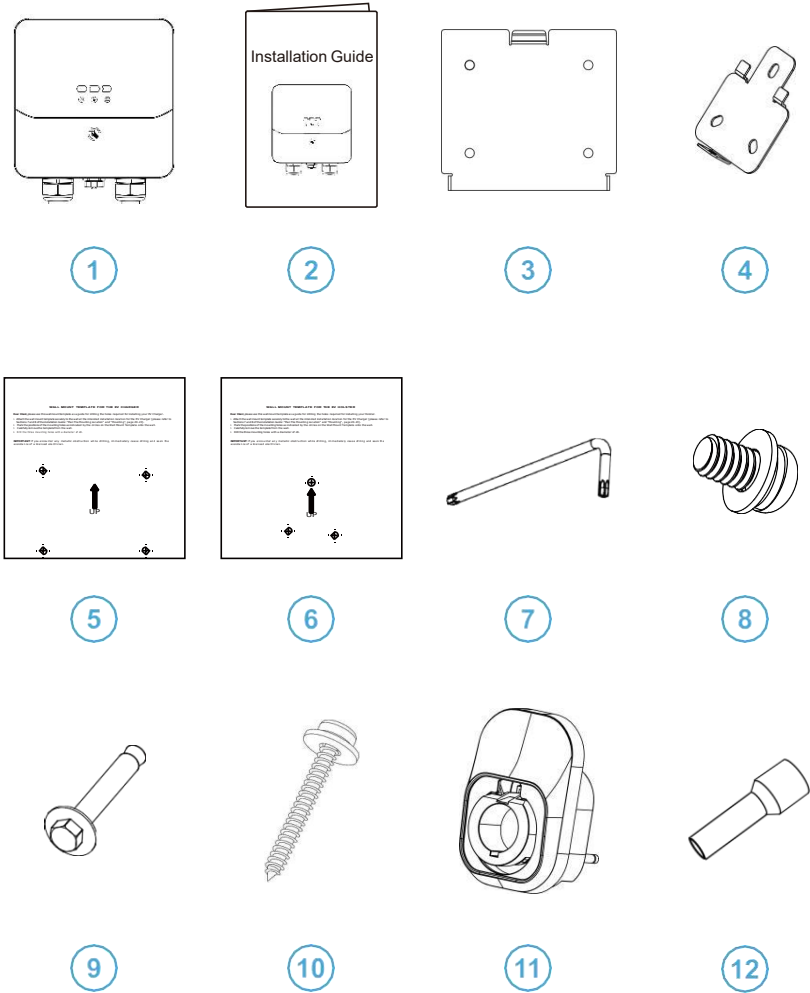


2.3 Specifications of Ulandpower Smart EV Charger

Model Number	UNR1
Rated Input Voltage	208-240 V AC
Rated Output Current	40A (plug-in max) / 48A (hardwire max)
Power Cable	37" input cable with NEMA 14-50 plug or 39" THWN-2 6 AWG (for L1 and L2) and 10 AWG (for PE) for hardwire model
AC Power Frequency	60 Hz
Input Protection	UVP, OVP, RCD (CCID20), SPD, Ground Fault Protection
Output Protection	OCP, OTP, Control Pilot Fault Protection, Relay-sticking protection
Output Interface	SAE J1772 AC Charging Connector or SAE J3400 AC Charging Connector (NACS)
Start Mode	Plug&Play/RFID/APP
Extend	CT-CLAMP
Storage Temperature	-40°F to 167°F (-40°C to 75°C)
Operation Temperature	-22°F to 131°F (-30°C to 55°C)
Relative Operation Humidity	Up to 95% non-condensing
Relative Storage Humidity	Up to 95% non-condensing
Network Connection	Wi-Fi Version / Bluetooth Version
Internet Function	10M / 100M Base-T
Wi-Fi Function	802.11 b/g/n
Cable Length	25ft Extra Long (+/- 3%)
Protection Level	NEMA 4, IP 66
Installation Type	Wall-Mounted
Altitude	≤ 6561ft
Status Indication	Red, Green, Blue LED

3. Verify Contents

Check the list to ensure you have this Installation Guide and all the parts listed below:



No.	Product Name	Quantity	Description
1	Ulandpower Smart EV Charger by Ulandpower	1	With attached input power cable (with NEMA 14-50 plug or 3-wire whip with a 3.2 ft conduit for hardwiring) and 25 ft output charging cable with J1772 connector
2	Installation Guide	1	Please read carefully before use
3	Wall-Mounted Bracket for Ulandpower Smart EV Charger	1	For mounting the Ulandpower Smart EV Charger to the wall. Comes already fixed to the charging unit.
4	Wall-Mounted Bracket for the Holster	1	For mounting the Holster to the wall. Comes already fixed to the Holster out of the box.
5	Mounting Template for the EV Charger	1	For easy drilling of 4 screw holes in masonry, brick or concrete walls for the Ulandpower Smart EV Charger wall-mounted bracket installation.
6	Mounting Template for the Holster	1	For easy drilling of 3 screw holes in masonry, brick or concrete walls for the Holster wall-mounted bracket installation.
7	Allen Wrench	1	For tightening Anti-Theft Button Head Screws on the sides of Ulandpower Smart EV Charger.
8	Anti-Theft Button Head Screws	4	To secure the EV Charger and Holster to their respective mounting brackets, 2 screws are pre-installed on the Charger's bracket by default, and 1 screw is pre-installed on the Holster. An additional screw is provided as a spare for your convenience.
9	Hexagonal Expansion Bolts	8	For installing the Mounting Bracket of the Ulandpower Smart EV Charger and the Mounting Bracket of the Holster to the masonry, concrete or brick walls. 1 piece is provided as a spare part for your convenience.
10	Phillips Pan Head Lag Screws with gaskets	8	For installing the EV Charger Mounting Bracket and the Holster Mounting Bracket onto wood studs or drywall, one spare piece is included for your convenience.
11	Holster	1	Safely store the J1772 connector and output cable when they are not in use using the provided Holster.
12	Pin Terminal Connectors - for 40A Plug-in only (in case you need to hardwire the 40A Plug-In version).	3	x2 pin connectors for L1/L2 IN, 8AWG (F $\pm$ 0.47", L $\pm$ 0.86", W $\pm$ 0.29", B $\pm$ 0.39", D $\pm$ 0.19", C $\pm$ 0.17"), x1 pin connector for PE IN, 10AWG (F $\pm$ 0.47", L $\pm$ 0.82", W $\pm$ 0.23", B $\pm$ 0.35", D $\pm$ 0.15", C $\pm$ 0.13").

4. Gather Tools

To ensure a smooth installation of the Ulandpower Smart EV Charger, depending on whether you are using a plug-in or hardwire installation, you may need the following items(Not included in the contents of the EV Charger):

1. NEMA 14-50P 240V outlet or electrical materials for hardwiring, based on your specific setup (consult with a licensed installer).
2. Wire stripper
3. Adjustable Wrench M6
4. Voltmeter or digital multi-meter (for measuring AC voltage at the installation site)
5. Level
6. Pencil or marker
7. Drill

Note: The above tools are important, ensure to have them all for proper installation.



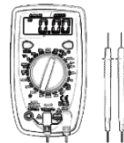
1



2



3



4



5



6



7

5. Plan the Installation Type Based on Your Version



ATTENTION: Before installing your charger, ensure you obtain all necessary permits and/or approvals according to applicable electrical codes, regulations and ordinances.

There are 2 versions of Ulandpower Smart EV Chargers:

- 1) 40A (Max) plug-in version 2) 48A (Max) hardwire version.

Note: 40A plug-in version is capable of harwiring, custom whip is required.

Plug-in version is 40A max output. Hardwire version is 48A max output.

In both versions, the amperage can be reduced to either 16A or 32A using the hardware Amperage Dip Switch, with details on its location and operation provided on page 10. Additionally, the xx app includes an amperage adjuster in 1A increments, enabling precise adjustment within the Dip Switch's set range. When determining your preferred amperage, keep in mind factors such as the capacity of your electrical panel, your desired charging speed, available outlet options, and whether you opt for a hardwired or plug-in setup.



ATTENTION: Ulandpower Smart EV Charger plug-in version is pre-set for the default 40 Amps max output which is the maximum amperage allowed by the regulations for NEMA 14-50 plug-in EV chargers. To get 40 Amps out of a NEMA 14-50 outlet, a 50 Amp* dedicated circuit is required.

Ulandpower Smart EV Charger hardwire version is pre-set for the default 48 Amps max output and requires a 60 Amps* dedicated circuit.

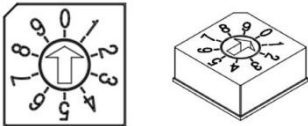
CAUTION: The National Electrical Code “80% rule” stipulates that electrical circuits should not be continuously loaded (three hours or more) to more than 80% of their maximum rated capacity.

The Ulandpower Smart EV Charger 40A plug-in version comes with a NEMA 14-50 input power plug and is configured for a maximum output of 40 Amps by default (set to number “2” on the Amperage Dip Switch inside the device). If necessary, the unit can also be hardwired (custom whip required—please consult a licensed electrician if you have any questions). It is important to note that, even with a hardwired installation, the maximum output will remain at 40A for the 40A plug-in version. Changing the Amperage Dip Switch to a setting higher than “2” will not increase the output beyond 40A.

The Ulandpower Smart EV Charger 48A hardwire version includes a 3-wire whip, liquid-tight connector, and a 3.2ft nonmetallic liquid-tight flexible electrical conduit (3.1ft for hardwiring). By default, the Amperage Dip Switch is set to 48 Amps (set to number “3” inside the device). Even if the Amperage Dip Switch is adjusted to a higher setting than “3,” the maximum output will remain 48A.

The Amperage Dip Switch is a hardware amperage output limiter. It's located inside the device. To access it:

- 1) **Remove EV Charger from the Wall Bracket:** Utilize the included allen wrench to unscrew the anti-theft screws positioned on both sides of the device.
- 2) **Power off the device.**
- 3) **Unscrew the face part:** Once the anti-theft screws are loosened, proceed to unscrew the seven screws located on the back of the device.
- 4) **Turn off the power supply.** Do not open the front cover of your charger while it is connected to the power supply.
- 5) **Detach the faceplate of the EV Charger.**
- 6) **The Amperage Dip Switch is located on the internal side of the faceplate, positioned on the motherboard in the top left. It is small and gray in color.**



Amperage Dip Switch

To decrease the default Max Output Load of Ulandpower Smart EV Charger to 32 Amps - choose "1" on the Amperage Dip Switch. For 16 Amps - choose "0", respectively.

Dedicated Circuit Rating	60 A	50 A	40 A	30 A	20 A
Max Output Load for Ulandpower	48 A	40 A	32 A	24 A	16 A
Corresponding Value of the Amperage Dip Switch	3	2	1	set for "1" (32A) and decrease to 24A in the U-Charge app	0
Plug-In	No	Yes	Yes	No	No
Hardwire	Yes	Yes	Yes	Yes	Yes



ATTENTION: In Canada, a plug-in installation is permitted exclusively with a 50 Amps dedicated circuit, according to the regulatory requirements.

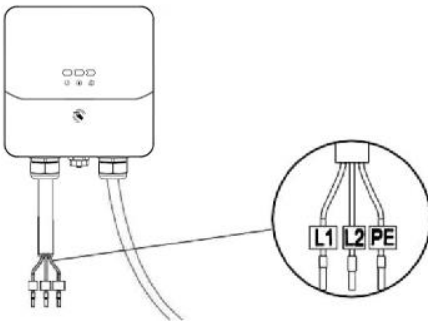
6. Wire the Circuit



ELECTRIC SHOCK HAZARD: Before beginning the installation, ensure that the circuit breaker supplying power to the circuit is turned off at the panel. Do not restore power until the installation is fully completed. Ignoring this important safety precaution could lead to the risk of electric shock or electrocution.

Once a plug-in or hardwired installation has been chosen:

- 1) For 40A plug-in installation, wire the circuit (40A or 50A) with appropriate 14-50 outlet. Install the outlet with the ground prong facing up. Plug in the Charger.
- 2) For a hardwired installation of the 40A plug-in version of Ulandpower Smart EV Charger, remove the original input power cable with NEMA 14-50 plug first. To remove the faceplate — unscrew the 7 screws on the back side. Then, you will need THWN-2 copper wires with the following gauge sizes: L1/L2 8AWG and GND (PE) 10AWG. The pin terminal connectors for L1, L2 and PE are added to the 40A plug-in version installation set (specs on page 15). Please use UL certified components only. Connect the L1 lead to the grid L1, the L2 to L2, and PE lead to the grid PE ground bar. Torque for L1/L2 IN: 17.7 in·lbs (2.0 N·m). Conduit of 1" and liquid tight connector will be required. Return the original input power cable to the box. Attach the label indicating the rating to the circuit panel.
- 3) For hardwired installation of the hardwire version of Ulandpower Smart EV Charger, use the original 3-wire whip of 3.2ft with nonmetallic liquid tight flexible electrical conduit provided to hardwire the device following the connection instructions in point 2 above.



The Ulandpower Smart EV Charger has the GFCI protection included.

If you need access to the Amperage Dip Switch and had to detach the faceplate:

Please note the screws are located on the back side so you have to close the device and tighten the 7 screws on the back side before mounting the device onto the wall and fixing the conduit.



WARNING: This device must be grounded. Disconnect electrical power before installing the charging station.



WARNING: Improper connection of the equipment-grounding conductor would result in a risk of electric shock. Check with a qualified electrician if you aren't sure if the product is properly grounded. Don't modify the plug provided with the product – if it doesn't fit the outlet, have a proper outlet installed by an electrician.

7. Plan The Mounting Location



WARNING: In areas with frequent thunderstorms, it is highly recommended to install surge protection at the service panel for all circuits. Additionally, ensure that all power and grounding connections, particularly at the breaker and bus bar, are clean and properly tightened.



CAUTION: For optimal performance, install the device close to the WiFi router to ensure a strong signal and stable internet connection. When planning the device's location, avoid placing it on surfaces that may interfere with the WiFi signal.

Select the appropriate mounting location with electrical capacity sufficient for the Ulandpower Smart EV Charger operation:

- A. Ensure that the chosen mounting location allows the charging cable to comfortably reach the vehicle's charging port while maintaining enough slack. The cable length is 25 ft (7.62 m).
- B. For plug-in installations: Before mounting the device bracket or holster bracket, verify the position of the NEMA 14-50 outlet and the preferred location for the Ulandpower Smart EV Charger. Ensure the input power cable with a NEMA 14-50 plug can reach the outlet without being overstretched, allowing for a slight curve. When installing with NEMA cable, account for the 37" (95 cm) cable length to ensure adequate flexibility in positioning the charger.
- C. For hardwired installations: Choose a mounting location that facilitates the hardwiring of the EV Charger, considering the distance to the breaker panel or junction box. The hardwired version of the Ulandpower Smart EV Charger includes a 39" (1 m) 3-wire whip with a liquid-tight connector and conduit. If using a 40A plug-in version for hardwiring, position the charger based on your custom wiring. Note that the unit does not have a rear access port; the bottom access port should be used.



ELECTRIC SHOCK HAZARD: If the status light indicators turn on when the EV charger is plugged in during the installation, the circuit is not off. **STOP IMMEDIATELY.** Unplug EV charger and switch off the power to the outlet at the circuit breaker until the installation is complete.

- D. Ground connection for plug-in installation: make sure the ground in your NEMA 14-50 outlet is placed on the top to match with the plug of the input power cable which has the ground prong facing up.
- E. Ground connection for hardwire installation: follow the National Electrical Code and all local applicable codes. In case of Ground Fault - please consult a licensed electrician.
- F. If you decide to install the Ulandpower Smart EV Charger outdoors, this requires using an outdoor-rated, weather-resistant NEMA 14-50 outlet / hardwired installation.
- G. Please ensure the holster bracket is mounted at approximately the same level as the EV Charger bracket. It is recommended to keep a comfortable distance between the Ulandpower Smart EV Charger and the holster which would allow to properly store the loops of the 25ft charging cable.
- H. Both the device and holster must be securely anchored to a mounting surface, such as a stud of sufficient size or a solid wall, to ensure proper installation of the EV charger.
- I. It is recommended to mount the device at a height between 3 feet (91.5 cm) and 5.5 feet (167 cm) from the ground. The minimum installation height must be at least 18 inches (46 cm).

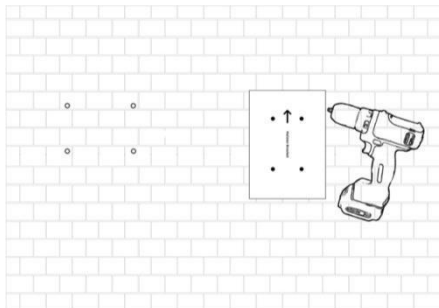
8. Mounting

For hardwire installation (if you had to detach the faceplate to get access to the internal components): Please note that the screws are located on the back side so you have to attach the faceplate of the Ulandpower Smart EV Charger, close the device and tighten the 7 screws on the back side before mounting the device onto the wall and fixing the conduit.

STEP 1

For concrete and brick walls: Choose the desired mounting location for the EV Charger and the Holster. Use the provided Wall Mount Templates (one for the EV Charger and one for the Holster) to mark the drilling points. Use an $\phi 8$ drill (8mm / 5/16" diameter) to create 4 holes for the Ulandpower Smart EV Charger and 4 holes for the Holster. The hole diameter should be approximately 5/16" (0.31" or 8mm) with a depth of 2.05" (5.2cm). When drilling, ensure proper alignment by noting that both templates have arrows indicating the top side.

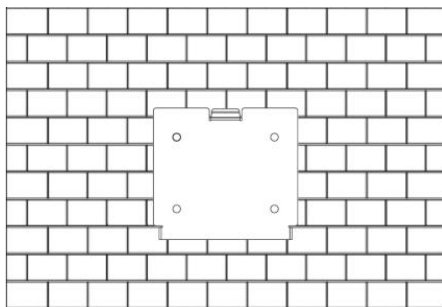
For wood studs: Proceed to STEP 2 and use the provided Phillips Pan Head Screws. If installing on drywall, ensure the drywall is thick enough to securely support the EV Charger. Id it.



STEP 2

Detach the wall mounting bracket from the EV charger using the Allen Wrench provided in the box. Don't lose it, you'll need it in the future.

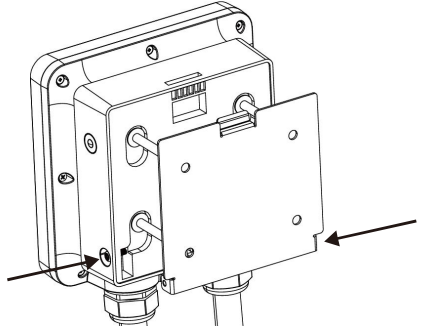
For concrete and brick walls: after the holes have been drilled (see step 1), use the set of 4 Hexagonal Expansion Screws provided in the box, along with the adjustable ratchet wrench, to securely fasten the wall-mounted bracket for the Ulandpower Smart EV Charger onto the wall.



For wood studs and drywalls: use the Phillips Pan Head Screws provided to fix the wall-mounted bracket for the Ulandpower Smart EV Charger onto the wall. Make sure the surface is sufficiently thick to hold the EV Charger.

STEP 3

Align the rear notches of the Ulandpower Smart EV Charger with the wall-mounted bracket. Insert the Anti-Theft Countersunk Head Screws through the screw holes on the right and left sides of the bracket. Then, use the Allen Wrench provided in the box to securely fasten the Ulandpower Smart EV Charger to the wall-mounted bracket.



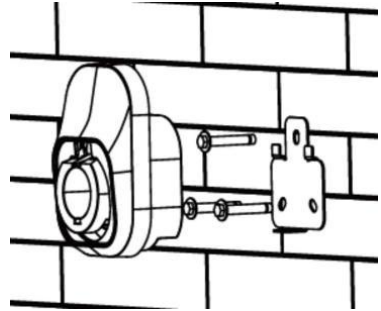
STEP 4

Detach the mounting bracket from the Holster using the Allen Wrench provided in the box.

Don't lose it, you'll need it in the future.

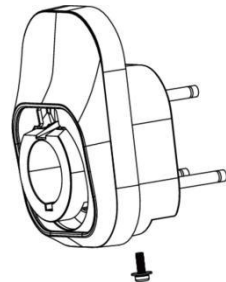
For concrete and brick walls: after the holes have been drilled (see step 1), use the set of 3 Hexagonal Expansion Screws provided in the box, along with the adjustable ratchet wrench, to securely fasten the wall-mounted bracket for the Holster onto the wall.

For wood studs and drywalls: use the Phillips Screws provided to fix wall-mounted bracket for the Holster onto the wall.



STEP 3

Align the rear notches of the Holster with the wall-mounted bracket. Insert the Anti-Theft Countersunk Head Screw through the screw hole on the bottom side of the bracket. Then, use the Allen Wrench provided in the box to securely fasten the Holster to the wall-mounted bracket.



Final Preparation

Important notes before Ulandpower Smart EV Charger is ready to go:

1. To ensure proper cable management, extend the cable to its full length, allowing any kinks or tension to be released. Afterwards, securely store the cable using the holster for neat and organized storage. You can also store the cable on the Ulandpower Smart EV Charger as the faceplate has a special lip to hold the cable loops.
2. Restore power to the circuit at the electrical breaker panel by switching on the corresponding breaker.
3. After powering up the Ulandpower Smart EV Charger following the installation, the charging status indicator will get solid green, indicating it is ready to charge. By default the Ulandpower Smart EV Charger is set for Plug & Charge mode – just plug in the connector to your car and the charging session will start automatically.
4. The Network Status Indicator will flash blue after powering up, indicating that it has entered configuration mode. Please note the configuration window is 15 minutes. Once expired, restart the device. In this status the device is prepared for configuration and pairing with the smartphone through the mobile app.



ATTENTION: Once the Ulandpower Smart EV Charger gets powered up for the first time, it may go into the firmware update. This happens OTA (over-the-air), usually in the afternoon. Once updated, the charger will reboot itself to save the changes and briefly go offline. After rebooting, it will power back on and get back online. In case of rebooting, the charging session will be interrupted.

9. Configuring Your Device

1. **Open the U-Charge APP.**
2. **Ensure Bluetooth is enabled on your phone. Tap the button in the top-right corner or at the bottom of the screen to add a device, and wait for the app to search for available devices.**
3. **Select the device you wish to connect to, then choose [Connect & Configure WiFi settings].**
4. **Enter the WiFi name and password for the charging station.**
5. **Configuration complete.**
6. **Connection successful. You can now start using the device.**

10. Operating Steps with Plug and Charge

STEP 1

Standby Mode:

After the product enters the standby mode, the "Power" indicator and the "Charge" indicator will be green and stay on.



STEP 2

Plug the Charging Connector:

Please plug the charging connector into the vehicle charging inlet.



STEP 3

Charging:

The charging state indicator is blue and stays on, and charging is in progress.

- If the red light (FAULT) is on, plug the vehicle connector again.
- If red light is still on, please refer to "Error and Warning Messages".



STEP 4**Charging finished:**

When the charging is finished, the green light (CHARGE) is constantly on, please press the button on connector and pull out the charging connector.

**STEP 5****Re-plug the charging connector:**

when you finish the charging process, please re-plug the charging connector back to the holster, you will hear a "click" sound.



11. Operating Steps with RFID



CAUTION: Please keep your RFID card properly to avoid unnecessary loss.

STEP 1**Standby Mode:**

After the product enters the standby mode, the "Power" indicator and the "Charge" indicator will be green and stay on.



STEP 2**Swipe the RFID Card:**

Insert the EV charger into the vehicle charging port. Next, swipe the RFID card.

**STEP 3****Charging:**

The charging state indicator is blue and stays on, and charging is in progress.

- If the red light (FAULT) is on, plug the vehicle connector again.
- If red light is still on, please refer to "Error and Warning Messages".

**STEP 4****Charging finished:**

When the charging is finished, the green light (CHARGE) is constantly on, please press the button on connector and pull out the charging connector.



STEP 5

Re-plug the charging connector:
when you finish the charging process, please re-plug the charging connector back to the holster, you will hear a “click” sound.



12. Light Codes

12.1 Power Status Indicator

Normal operation	No Power	Fault
 	 	 
Solid Green	No lighting	Flow Flashing Red

12.2 Charging Status Indicator

AVAILABLE	PREPARE	CHARGING	SUSPEND	FINISH
 	 	 	 	 
Solid Green	Fast Flashing Green	Solid Blue	Fast Flashing Blue	Solid Green

12.3 Network Status Indicator

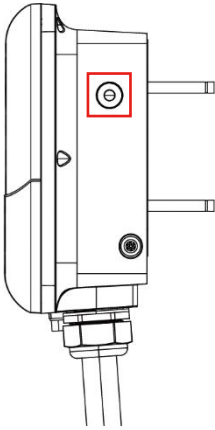
Connect to the cloud platform	Configuration mode	Connect to the network	No connection
 	 	 	 
Solid Blue	Fast Flashing Blue	Flow Flashing Green	Solid Red

12.3 Errors and Warning Messages

Fault Priority	Fault Type	Power Light Status	Charge Light Status	Recovery Method
1	Ground Fault	1hz frequency red light flashes 4 times, on for 5S	1hz frequency, red flashes continuously	Draw the gun to recover
2	Leakage fault	1hz frequency red light flashes 9 times, on for 5S	Solid red	Draw the gun to recover
3	Relay failure	1hz frequency red light flashes 8 times, on for 5S	Solid red	Draw the gun to recover
4	Leakage self-test	1hz frequency red light flashes 10 times, and stays on for 5S	Solid red	Restart recovery
5	Metering failure	1hz frequency red light flashes 7 times, on for 5S	Solid red	Automatic recovery
6	CP Failure	1hz frequency red light flashes 5 times, on for 5S	1hz frequency, red flashes continuously	Draw the gun to recover
7	Overcurrent fault	1hz frequency red light flashes 3 times, on for 5S	1hz frequency, red flashes continuously	Draw the gun to recover
8	Overvoltage fault	1hz frequency red light flashes 2 times, on for 5S	1hz frequency, red flashes continuously	Automatic recovery
9	Undervoltage fault	1hz frequency red light flashes once, stays on for 5s	1hz frequency, red flashes continuously	Automatic recovery
10	Over temperature fault	1hz frequency red light flashes 6 times, on for 5S	1hz frequency, red flashes continuously	Automatic recovery

13. Reset and Hard Reboot Button

On the right side of the device, there's a reset and hard reboot button.

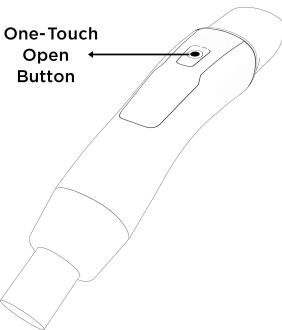


- 1) **To reset the charger:** press and hold the button for 5 seconds, then release to reset the device. During the restart process, both indicators located on the faceplate will cycle through three colors: red, green, and blue. You will also hear a beep sound.
- 2) **To reset to factory settings (hard reboot):** press and hold the button for at least 15 seconds. The light indicators will turn solid red for 3 seconds before the device shuts down, restarts, and restores to factory settings. You will hear a beep sound. Please wait 1-2 minutes for the unit to reset to factory settings. You will need to reconfigure the device and pair it again with the U-Charge app.



ATTENTION: To prevent accidental resets that could disrupt charging, accidental clicking on the reset button of less than 1 second does nothing.

14. One-Touch Open Button (NACS)



If you choose the NACS connector, you will be able to use the One-Touch open function. The One-Touch Open Button is located just above the surface of the NACS connector handle, designed to provide a seamless charging experience for users. This feature operates at a frequency of 315MHz and is compatible with vehicles which have NACS port and support one-click open function.

To open the charge port:

1. Ensure the vehicle is either unlocked or detects the owner's smartphone nearby.
2. Press the One-Touch Open Button on the NACS connector.
3. Upon receiving the 315MHz signal, the vehicle will automatically pop open the charge port cover, providing easy access for charging.



ATTENTION: The One-Touch Open Button will only respond when the vehicle is unlocked or detects the owner's smartphone nearby to avoid accidental openings. Ensure that the vehicle and smartphone are within operational range for smooth functionality.

15. Warranty and Maintenance

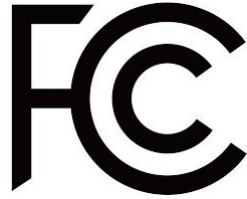
- The warranty period for this charger is three years.
- During the warranty period for any malfunction under normal use according to the User Manual and Service Instructions (to be determined by certified maintenance technicians of sellers), the product shall be repaired free of charge. Except for the following situations, the charger shall be subject to the above warranty terms:
 1. The warranty certificate cannot be provided or the contents of the warranty certificate are modified or inconsistent with the label indication of the repaired product.
 2. Those who are unable to provide valid proof of purchase.
 3. Those who exceed the manufacturer's specified warranty period.
 4. Those who damage the product due to not following the product service instruction for use, maintenance and storage.
 5. Damage or malfunction caused by external object entering.
 6. Unauthorized repair, disassembly or modification.
 7. Damage caused by force majeure (such as lightning, excessive voltage, earthquake, fire, flood, etc.).
 8. Malfunction and damage caused by other unavoidable external factors. Malfunction and damage caused by improper use of equipment, such as water or other solutions entering into the equipment.
 9. Malfunction and damage caused by the grid power supply and voltage which is not specified for use with the charger equipment.

The above guarantees shall be made solely, and no other express or implied warranties shall be made (including the implied warranties of merchant ability, particular and applicable reason- ableness and adaptability, etc.) whether in the contract, civil negligence, or other aspects, the Company shall not be responsible for any special, incidental or consequential damages.

15. Compliance

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.
2. This device must accept any interference received, including interference that may cause undesired operation.



NOTE: 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.

FCC ID:2BG8P-UNR148T for J1772 connector model (both 40A and 48A);
WiFI module: Containing FCC ID:2AC7Z-ESPWROOM32UE;

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.

NOTE: The manufacturer bears no responsibility for any radio or TV interference caused by unauthorized modifications to this equipment. It is important to note that such modifications have the potential to invalidate the user's authority to operate the equipment.

This equipment is designed to comply with the FCC's radiation exposure limits for uncontrolled environments. For safe operation, it should be installed and used with a minimum distance of 20 cm between the radiator and your body. To ensure proper functioning, it is important to avoid placing this transmitter in proximity to any other antenna or transmitte.

Notes

[illegible]

