

# UERI Series



## Electric Vehicle Smart Charger User Manual

ATTENTION: Installers, please read this guide Thoroughly.



# TABLE OF CONTENTS

1. Important Safety Instructions ..... 1

2. Product Introduction and Data Sheet .....4

3. Verify Contents ..... 7

4. Gather Tools .....9

5. Wire the Circuit ..... 10

6. Plan The Mounting Location ..... 11

7. Mounting ..... 12

9. Configuring Your Device .....14

10. Operating Steps with Plug and Charge .....15

11. Operating Steps with RFID ..... 16

12. Light Codes .....18

13. Reset and Hard Reboot Button ..... 20

14. Warranty and Maintenance .....20

# 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 -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 PE L1 L2 L3 N 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.
- 



**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, 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
  - 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. 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.
- 



---

**CAUTION:**

- Ensure proper safety measures by using appropriate protection when connecting to the main power distribution cable.
  - Type B, C or D breaker with the rating current for table should be installed in the upstream AC distribution box.
-

### 1.3 Daily Maintenance



**WARNING:**

- If removing the face cover of the device is required, avoid touching the 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.

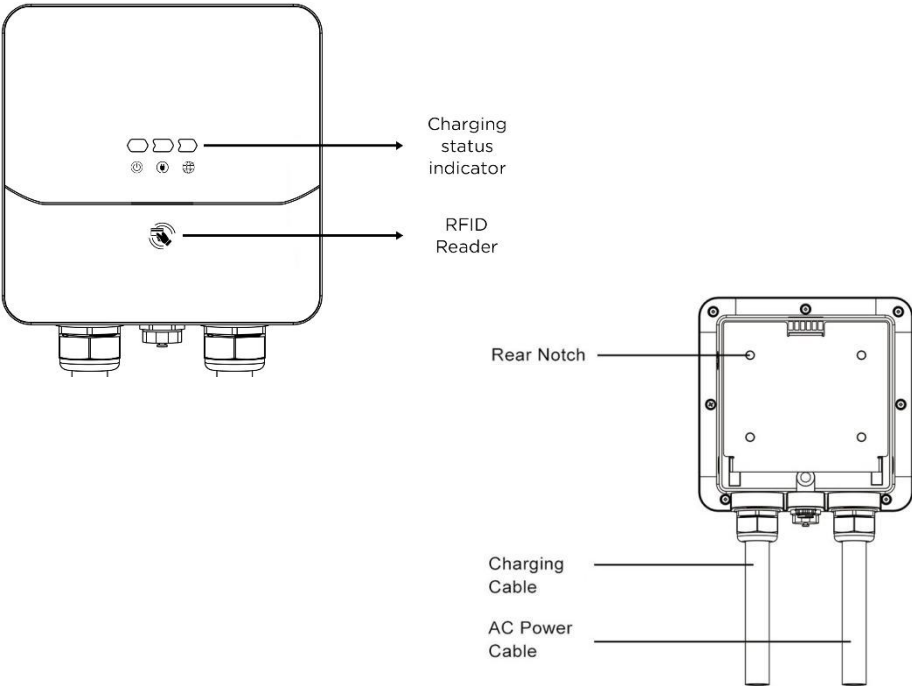
Circuit Breaker Options Table			
	Single Phase	Three Phase	
Output Amperage (A)	32A	16A	32A
Circuit Breaker Options (A)	40A	20A	40A

## 2. Product Introduction and Data Sheet

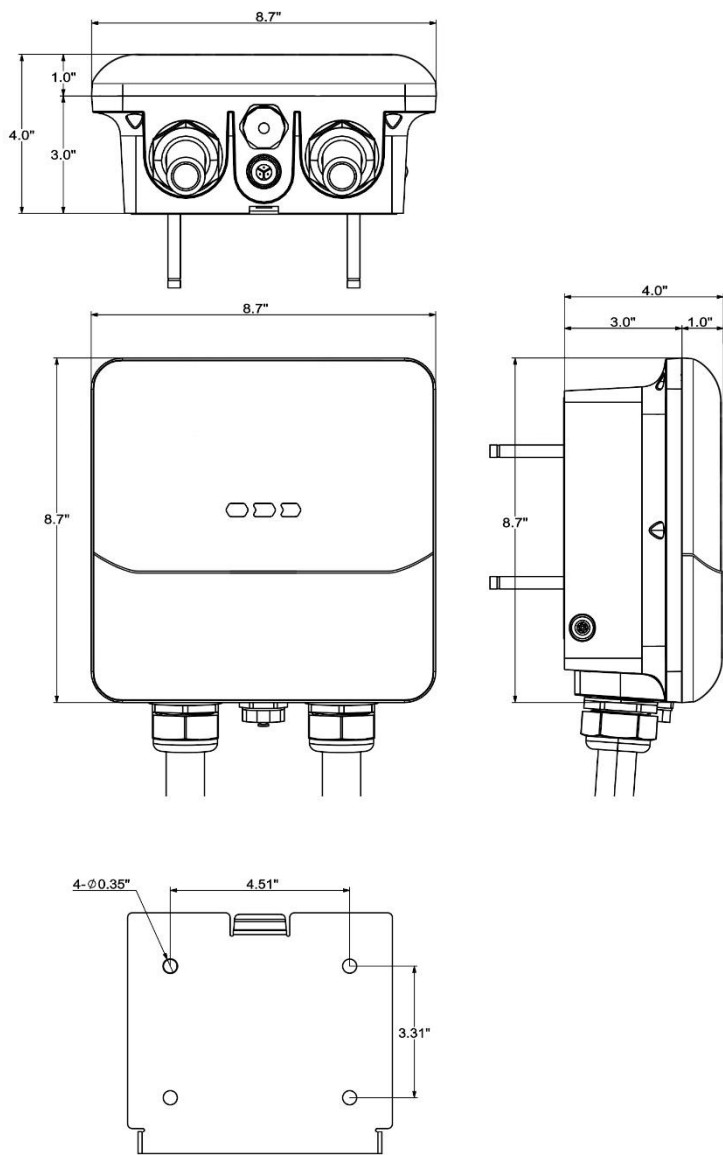


**IMPORTANT:** Make sure you understand how the device works and its basic interface. Ulandpower Smart EV Charger must be installed by a licensed electrician.

### 2.1 Basic Interface



## 2.2 Basic Dimensions



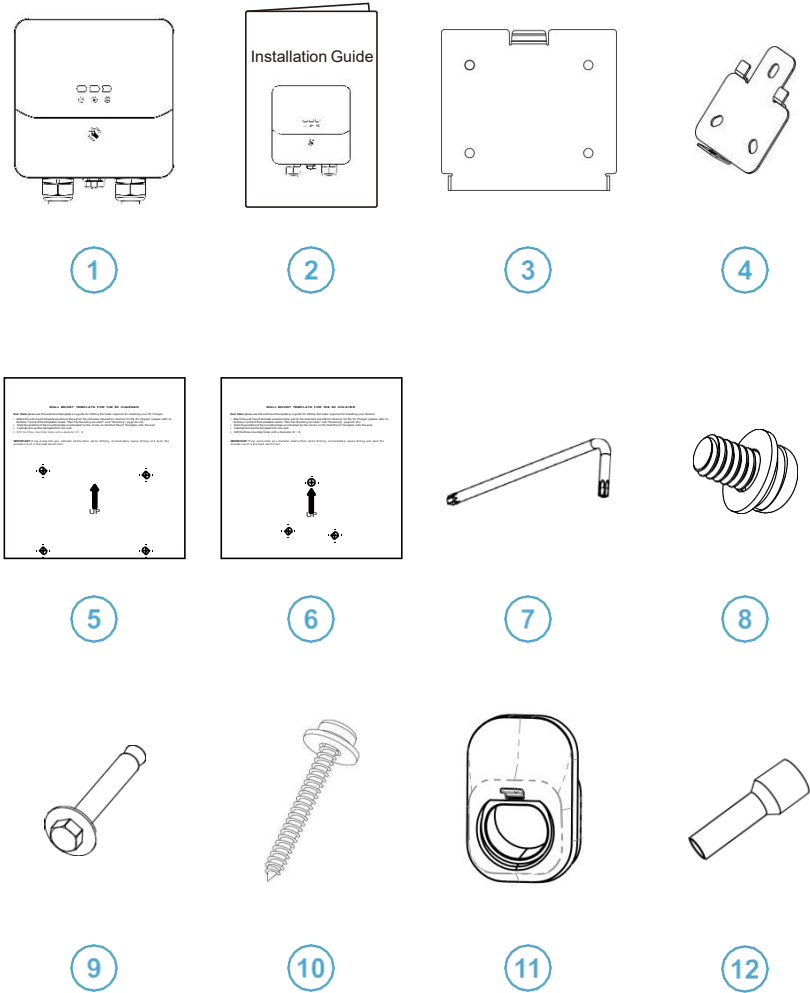


## 2.3 Specifications of Ulandpower Smart EV Charger

Model Number	UER1		
Rated Input Voltage	230Vac±10%/ Single Phase	400Vac±10%/ Three Phase	
Amperage/Power Output	32A/7KW	16A/11KW	32A/22KW
AC Power Frequency	60 Hz		
Safety Protection	Ground Fault Detection:A+DC6,Ground Monitor: BS-7671, O-PEN:BS-7671, Surge Protection:4kV @2,000A		
Protection	UVP, OVP, OCP, OTP, Control Pilot Fault Protection, Relay-sticking protection, Ground Fault Protection,O-PEN Protection		
Output Interface	IEC 62196-2 Compliant, Type 2		
Start Mode	Plug&Play/RFID/APP		
Storage Temperature	-40°C to 75°C		
Operation Temperature	-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	5m Standard, 7m Optional		
Protection Level	IP66/IK10		
Installation Type	Wall-Mounted		
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 and 5m output charging cable with type2 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 Type 2 connector and output cable when they are not in use using the provided Holster.
12	Pin Terminal Connectors (in case you need to change a new wire)	3	For protecting cable when connecting input cable

## 4. Gather Tools

To ensure a smooth installation of the Ulandpower Smart EV Charger, you may need the following items(Not included in the contents of the EV Charger):

1. Wire stripper
2. Adjustable Wrench M6
3. Voltmeter or digital multi-meter (for measuring AC voltage at the installation site)
4. Level
5. Pencil or marker
6. Drill

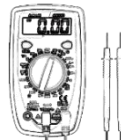
**Note:** The above tools are important, ensure to have them all for proper installation.



1



2



3



4



5



6

## 5. Wire the Circuit



**ELECTRIC SHOCK HAZARD:** 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.

**For safe use of electricity,** please set up a circuit breaker protection in the input part of EV Charger.

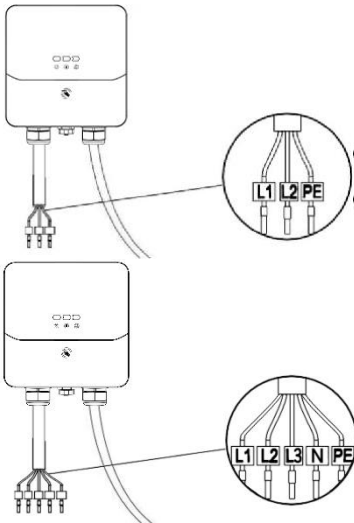
The wiring is not complicated, just need to follow the instructions below:

### For Single Phase

Connect the L1 lead to the grid L1, connect the N lead to the grid N, connect the PE lead to the grid PE.

### For Three Phase

Connect the L1 lead to the grid L1, connect the L2 lead to the grid L2, connect the L3 to the grid L3, connect the N lead to the grid N, connect the PE lead to the grid PE.



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.

## 6. 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:

**Select** the appropriate mounting location with electrical capacity:

- I. Ensure the owner has chosen a mounting location that allows the charging cable to reach the car's charging port while still providing slack.
- II. The device must be anchored into mounting such as a 50.8mm x 101.6mm pedestal or a solid wall.
- III. The device shall be mounted at height between 600 mm and 1200 mm from ground.

**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.

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.**

The maximum output current can be adjusted by dial switch  
 0:16A  
 1:32A



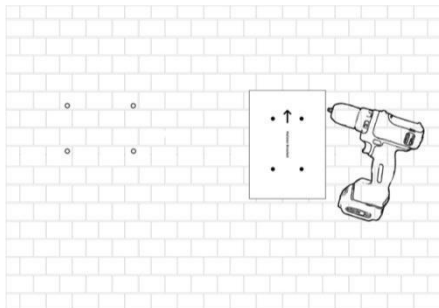
## 7. Mounting

**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 8mm (0.31" or 5/16") with a depth of 5.2cm (2.05"). When drilling, ensure proper alignment by noting that both templates have arrows indicating the top side.

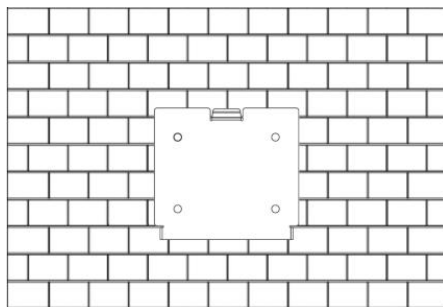
For wood studs: Proceed to STEP 2 and use the provided Phillips Pan Head Screws. If installing on drywall, ensure the drywall is thick enough to securely support the EV Charger. Id it.



### 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.

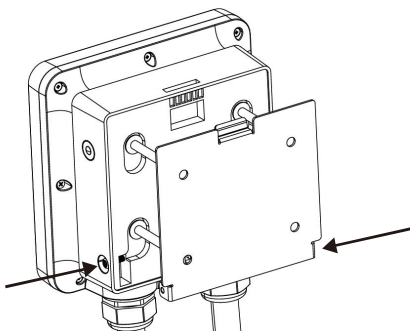
For concrete and brick walls: after the holes have been drilled (see step 1), use the set of 4 Hexagonal Expansion Screws provided in the box, along with the adjustable ratchet wrench, to securely fasten the wall-mounted bracket for the Ulandpower Smart EV Charger onto the wall.



**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.



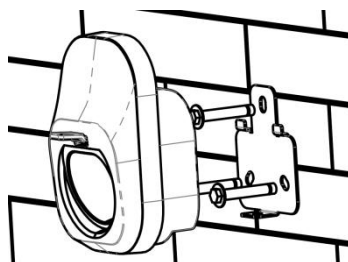
### STEP 4

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. After powering up, it will get flashing blue, indicating it has entered into a 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 port.



### 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:

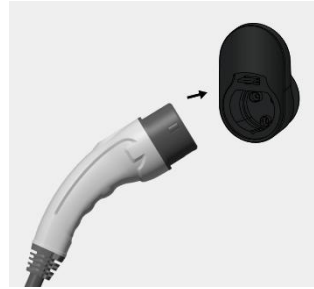
When the charging is finished, the green light (CHARGE) is constantly on, please press the button on connector and pull out the charging connector.



## 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

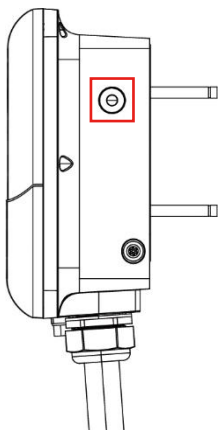
Connect to the cloud platform	Configuration mode	Connect to the network	No connection
 	 	 	 
Solid Blue	Fast Flashing Blue	Flow Flashing Green	Solid Red

## 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

## 14. 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.

## Notes

[illegible]



