## **AutoBot**



48A EV Charger

# **User Manual**

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## **Important Safety Instructions**

#### **Overall Warnings & Cautions**



**WARNING:** To avoid fire, injury or death, carefully read and follow the instructions during installation, operation and maintenance.

**DO NOT** put fingers into the electric vehicle connector.

DO NOT use this product if the flexible power cord or EV cable is frayed, insulation-broken, 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 remove cover or attempt to open the enclosure because of risk of electric shock.

**DO NOT** leave metals such as bolts, gaskets inside the device.

- **WARNING:** This device should be supervised when used around children.
- **WARNING:** This device must be grounded.



**WARNING:** Switch off the circuit breaker of the electrical outlet before installing this device.

#### Installation Requirements



**WARNING:** Disconnect electrical power prior to installing the charger.

**WARNING:** Be sure to preview the User Manual and ensure local building and electrical codes are reviewed before installing the charger.



**WARNING:** The charger should be installed by a qualified technician according to the User Manual and local safety regulations.



(I) CAUTION: Use appropriate protection when connecting to the main power distribution cable.

- **CAUTION:** Type A, B, C or D breaker with the rating current for table should be installed in the upstream AC distribution box.
- (P) CAUTION: The device shall be mounted at height between 600 mm and 1500 mm from ground.
- ( CAUTION: Install this device on a surface that can support its weight. Failure to do so can result in death, personal injury, or property damage.
- (! CAUTION: Please keep the charger in a clean area with low humidity. Not recommended to be installed in coastal environments with high humidity or high dust.

#### **Daily Maintenance**

- (! 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 professionals to carry out maintenance before next use.
- (Please use the charger properly. Do not hit or press hard on the enclosure. If it is damaged, please contact a professional technician.
- (! CAUTION: Avoid placing the charger near hot objects and at high temperature locations and away from dangerous substances such as flammable gases and corrosive materials.
- **CAUTION:** Do not put heavy objects on the charger to avoid danger.

## **Product Introduction**

**CAUTION:** Avoid placing the charger near hot objects and at high temperature locations and away from dangerous substances such as flammable gases and corrosive materials.

#### **Basic Interface**



### Dimensions







## **Specifications**

TECHNICAL					
Model Number	A08-US48A, A08-US40A				
Rated Voltage	208-240V				
Rated Current	11.5kW/48A, 9.6kW/40A				
Standard Compliance	SAE J1772				
Charging Connector	25 Feet Tethered SAE J1772				
Charging Mode	Mode 3				
Electrical Protection	UVP, OVP, RCD, SPD, Ground Fault Protection OCP, OTP, Control Pilot Fault Protection				
Energy Meter	On-board Device +/- 1% Accuracy				
FEATURES					
User Interface	Digital Screen				
Multi Cable Entry	Bottom Side				
	NETWORK				
Connectivity	2.4G Wi-Fi, Bluetooth				
	ENVIRONMENT				
Operating Temperature	-22°F - 122°F (-30°C - 50°C)				
Operating Humidity	Up to RH 95%, non-condensing				
Impact/ Ingress Protection Rating	Type 3R				
PHYSICAL					
Housing Material	PC with Anti-UV Treatment				
Dimensions (mm)	87*190*330 (D*W*H)				
Net Weight	c. 4.8kg				

## Unpacking

#### Components

Make sure that all parts are delivered. Check the packaging for the following parts:







AutoBot charger

User Manual

Screws (Ф5 x 40 mm)







Wall anchors

0 1 0

Installation template

Screw plug

**RFID** cards

#### **Required Tools**

Tools required before installing the charger, gather the following tools:





Adjustable wrench



Voltmeter or digital multi-meter



Wire stripper



Pencil



Electric drill



Level





Phillips head screwdriver

## **Plan The Location**



**WARNING:** In areas with frequent thunderstorms, add surge protection at the service panel for all circuits. Ensure all power and ground connections, especially those at the breaker and bus bar, are clean and tight.



**CAUTION:** Not recommended to be installed in coastal environments with high humidity or high dust.

Before installation, check the site for appropriate mounting location and electrical capacity.

 Choose a mounting location that allows the charging cable to reach the car's charging port while still providing slack.



- 2. The device must be anchored into mounting such as 80mm x 130mm stud or a solid wall.
- 3. The device shall be mounted at height between 600 mm and 1500 mm from ground.
- **4.** Ensure there is Wi-Fi signal available if you want to use the app.
- **5.** Determine the desired charging amperage and whether the desired circuit rating requires a hardwired circuit. Choose based on the electrical capacity in the panel, the desired speed of charging, and whether the user prefers a hardwired or plug-in installation.

Circuit Rating	Max Load	Estimated Range Per Hour (based on 16kW/100 km)	Plug-in	Hardwire
60 A	48 A	Up to 45 miles/72 km	No	Yes
50 A	40 A	Up to 38 miles/61 km	Yes	Yes
40 A	32 A	Up to 30 miles/48 km	Yes	Yes

- **6.** Ensure the electrical panel supports a 240V dedicated circuit with a new, dedicated, and non-GFCI two-pole circuit breaker, in accordance with local codes and ordinances.
- 7. The recommended installation height is between 51 and 59 inches (130 150 cm). Note that the minimum installation height must be at least 19 inches (50 cm), measured from the bottom of your charger.

For plug-in installations, the NEMA outlet should be located 43 and 51 inches (110 - 130 cm) from the ground adjacent to the stud where the charging station will be mounted.



## **Mount The Charger**



**WARNING:** This device must be grounded. Disconnect electrical power prior to installing the charger.



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



**CAUTION:** Use appropriate protection when connecting to the main power distribution cable.

#### **NEMA Plug-in Installation**

If you already have a NEMA outlet, ensure that:

- It complies with local electrical codes.
- It has a designated circuit breaker and electrical wiring that are dimensioned appropriately.

When installing a NEMA outlet, be sure the ground pin is facing up as shown in the diagram.

#### Important Recommendations

- Ensure you have the correct permits for this electrical installation.
- Keep in mind that the power supply cable length is about 19 inches (50 cm).
- Ensure the electrical panel supports a 240V dedicated circuit with a new, dedicated two pole



**NEMA 14-50R** 

- 1. Remove the faceplate and the wire cover from the
- Hold the included installation template to the wall. Mark the location of the holes. Ensure that the placement of the NEMA outlet and your charger will allow for an adequate connection of the 19" (50 cm) NEMA cable.
- **3.** Drill 2 holes with a diameter of 12 mm and a depth of 57 mm.
- Insert 2 wall anchors into the mounting holes.
  Then drill one screw into the top-most mounting hole, leaving a 5 mm gap to hang the charger on.
- **5.** Position the charger to align with the holes and hang it on the protruding screw using the notch on the back of the charger.

 Drive the remaining screw into the mounting hole to secure the charger. Do not over-tighten the screw.







7. Attach the screw plug to cover the bottom screw.

**8.** Place the wire cover over the exposed wiring.

- **9.** Insert the four corner screws to secure your charger cover.
- **10.** Snap the faceplate onto the charger.







#### **Hardwired Installation**

- **1.** Remove the faceplate and the wire cover from the
- Hold the included installation template to the wall. Mark the location of the holes. Ensure that the placement of the NEMA outlet and your charger will allow for an adequate connection of the 19" (50 cm) NEMA cable.
- **3.** Drill 2 holes with a diameter of 12 mm and a depth of 57 mm.
- Insert 2 wall anchors into the mounting holes. Then drill one screw into the top-most mounting hole, leaving a 5 mm gap to hang the charger on.
- Position the charger to align with the holes and hang it on the protruding screw using the notch on the back of the charger.

 Drive the remaining screw into the mounting hole to secure the charger. Do not over-tighten the screw.







7. Attach the screw plug to cover the bottom screw.

**8.** Feed the power supply wires through the bottom port with enough length to easily connect the wires to the terminals.

- **9.** Use copper conductors with the maximum wire size of 6 AWG (16 mm<sup>2</sup>).
- **10.** Strip the wires to 1/2" (12 mm), insert the wires per the diagram and tighten each connector screw to 2.4 N.m. using a torque screwdriver.
- **11.** Place the wire cover over the exposed wiring.

- **12.** Insert the four corner screws to secure your charger cover.
- **13.** Snap the faceplate onto the charger.



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## **Operate Your Charger**



WARNING: This device should be supervised when used around children.

**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.



**CAUTION:** Do not put heavy objects on the charger to avoid danger.

With your charger powered and connected to your EV, you can charge your EV with the provided RFID cards. If you want to fully access your charger functions and control your charger remotely, however, you will need to download the AutoBot EV app.

#### Power On

Once all electrical connections have been safely made, switch on the power to the circuit from the circuit breaker. If you have installed a NEMA plug-in model, insert the NEMA plug in the receptacle.



The charger LED screen should light up.

#### **Register and Connect Your Charger**

**1.** Download the AutoBot EV app to your mobile device from the Google Play or Apple App Store.



- Open the app, sign in or create an account with your email. You will need to verify your account with a valid email address.
- **3.** At the top right corner of the home screen, tap +.
- **4.** Choose the serial number (SN) for your charger. This information can be found on the side of the charger.



#### **Start Charging**



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

- **1.** Plug the connector into your EV charging port.
- 2. If you are using the app, tap "Start Charging" on the app or swipe the RFID card on the RFID reader.

If you've selected the Plug & Charge Mode, charging starts automatically.



#### **Stop Charging**

- 1. If you are using the app, tap Pause Charging on the app or swipe the RFID card on the RFID reader once more.
- **2.** Carefully remove the connector from EV.

## **The Digital Screen**



Display	Status	Description
	Available	* Plug & Charge mode * Not connected to EV
Please Plug in C C C C C C C C C C C C C C C C C C C		* App mode or RFID Card mode * Not connected to EV
Charging Message Charging V	Charging	* Charging in progress * Display voltage, current, and charging energy (kWh) in turn
Kwh	Charging ended	* Charging ended * Display charging energy (kWh)

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## Error and Warning Messages

Error Code	Status	Description
0001	Off Ground	Auto Recover
0002	RCD Abnormal	Auto Recover
0004	Over Current Protection	Auto Recover
0008	Over Voltage Protection	Auto Recover
0016	Under Voltage Protection	Auto Recover
0032	Energy Meter Fault	Contact Customer Service
0128	Control Pilot Fault	Auto Recover
0256	Over Temperature Protection	Auto Recover
0512	Ground Fault	Auto Recover
1024	Ground Self-Test	Auto Recover

## Warranty And Maintenance

• The warranty period for this charger is one year.

• 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.

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.

## Support

Need technical support? Contact AutoBot customer service:

Email: support@autobotlife.com Website: https://autobotlife.com

## **FCC Information**

FC

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 easonable protection againstharmful interference in a residential installation. This equipment generates, uses and can radiateradio 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 inaparticular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off andon, theuser 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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

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

This equipment complies with FCC radiation exposure limits set forth for anuncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.