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### **!** IMPORTANT

Before operating or maintaining this unit, please read this manual carefully, paying extra attention to the safety warnings and precautions.

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# 1 Using This Manual

This manual provides the installation and operation procedures of the MaxiCharger DC Wall Mount (hereinafter referred to as MaxiCharger). Read through this manual and become familiarized with the instructions of the MaxiCharger prior to installation to ensure a successful installation and operation process.

Some illustrations shown in this manual may contain modules and optional equipment that are not included in your system. Contact your sales representative for availability of other modules and optional tools or accessories.

The document is intended for these groups:

- Owner of the MaxiCharger (see [Owner Responsibilities](#))
- Installation engineer (see [Installation Engineer Qualifications](#))

## 1.1 Conventions

---

### 1.1.1 Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

### 1.1.2 Notes

- **NOTE:** provides helpful information such as additional explanations, tips, and comments.
- **IMPORTANT:** indicates a situation that, if not avoided, may result in damage to the test equipment or vehicle.
- **DANGER:** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or bystanders.
- **WARNING:** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
- **CAUTION:** indicates that disobeying the instruction can cause damage to the equipment or property.

### 1.1.3 Hyperlinks

Hyperlinks are available in electronic documents. Blue italic text indicates a selectable hyperlink and blue underlined text indicates a website link or an email address link.

# 2 Safety

## 2.1 Safety Warnings

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- Disconnect the power supply to the MaxiCharger during the entire installation procedure.
- The load capacity of the grid must meet the requirements of the MaxiCharger.
- Connect the MaxiCharger to a grounded, metal, permanent wiring system. Otherwise, use the equipment-grounding conductor with the circuit conductors and connect it to the equipment grounding terminal or lead on the product.
- Unqualified personnel must keep a safe distance during the entire installation procedure.
- The connections to the MaxiCharger must comply with all applicable local rules.
- Only use electrical wires of sufficient gauge and insulation to handle the rated current and voltage demand.
- Protect the wiring inside the MaxiCharger from damage and do not obstruct the wiring when you perform maintenance on the cabinet.
- Keep the cabinet away from all water source.
- Protect the MaxiCharger with safety devices and measures as specified by local rules.
- Wear proper personal protective equipment such as protective clothing, safety gloves, safety shoes, and safety glasses when necessary.

## 2.2 Owner Responsibilities

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The MaxiCharger owner runs the MaxiCharger for commercial or business purposes for itself or third-party usage. To protect the user, other employees, or third parties, the owner bears legal responsibility for the operation of the charger and has the following responsibilities:

- Identify any hazards (in terms of a risk assessment) resulting from the working conditions on the site.
- Know and implement all local rules.
- Install protective devices before operating the MaxiCharger.
- Make sure all protective devices are installed after installation or maintenance work.
- Prepare an emergency plan that instructs people what to do in case of an emergency.

- Make sure that all employees and third parties are qualified in accordance with the applicable local rules to perform their work.
- Make sure that there is sufficient space around the MaxiCharger to safely do maintenance and installation work.
- Identify a site operator who is responsible for the safe operation of the MaxiCharger and for the coordination of all work, if the owner does not do these tasks.
- Make sure that all qualified installation engineers obey local rules and installation instructions, and adhere to the specifications of the MaxiCharger.

## 2.3 Installation Engineer Qualifications

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The installation engineers must:

- Be qualified in accordance with all applicable local rules to do the work.
- Be completely familiar with the MaxiCharger and its safe installation.
- Obey all local rules and the instructions in the installation manual.

## 2.4 Usage Instructions

---



Do not use the MaxiCharger and immediately contact the manufacturer if any of the following situations occur:



- Damaged enclosure
- Damaged EV charging cable or connector
- Expose to lightning
- Expose to water
- Expose to nature disaster, fire or smoke

## 2.5 Symbols on the MaxiCharger

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*Table 2-1 Symbol Description*

Symbol	Risk Description
	General risk
	Hazardous voltage with risk of electrocution

Symbol	Risk Description
	Waste from electrical and electronic equipment
	Hot surface with risk of burn injuries

## 2.6 Disposal Instructions

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To avoid negative effect on the environment and human health due to potential hazardous substances, dispose of parts according to local laws and guidance. Proper disposal of this product will allow for the reuse the materials and protect the environment.

## 2.7 Cyber Security

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### NOTE

This section applies only to the Ethernet and Wi-Fi connections.

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The MaxiCharger can use a network interface for connection and information and data communication. The owner bears the responsibility of providing a secure connection between the MaxiCharger and the owner’s network or any other networks.

Appropriate measures shall be taken by the owner to shield the MaxiCharger, the network, the system, and the interface from any security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information. These measures may include firewalls, authentication methods, data encryption, anti-virus programs, etc.

Autel is not liable for damages and/or losses resulting from security breaches.



# 3 General Introduction

The Autel MaxiCharger is designed to charge an electric vehicle (hereinafter called EV). Our chargers provide you with safe, reliable, fast, and smart charging solutions.

The MaxiCharger is intended for the DC charging of EVs and is intended for both indoor and outdoor use in fleets, highway rest stops, commercial parking garages, and other locations.

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## DANGER

- If you use the MaxiCharger in any way other than described in its documentation, you can cause death, injury, and property damage.
- Use the MaxiCharger only as intended.

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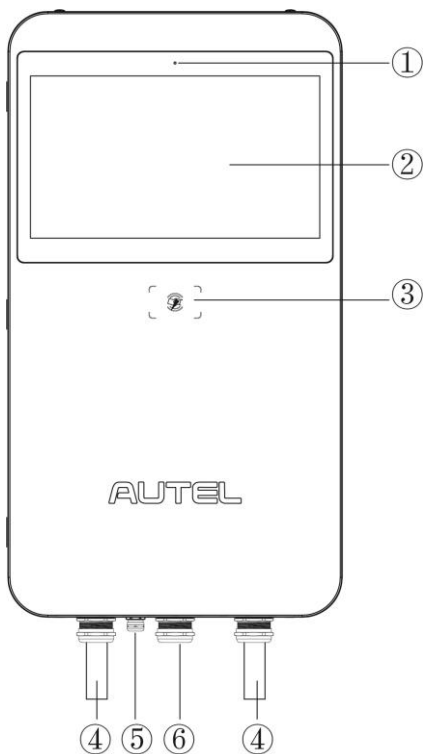
## NOTE

The images and illustrations depicted in this manual may differ slightly from the actual product.

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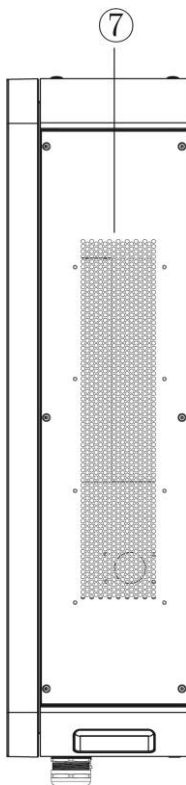
This manual will instruct you how to install and operate the MaxiCharger.

## 3.1 Product Overview

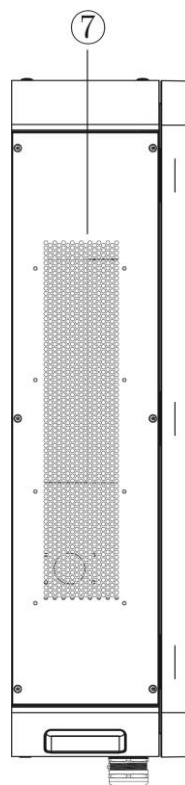


**Front View**

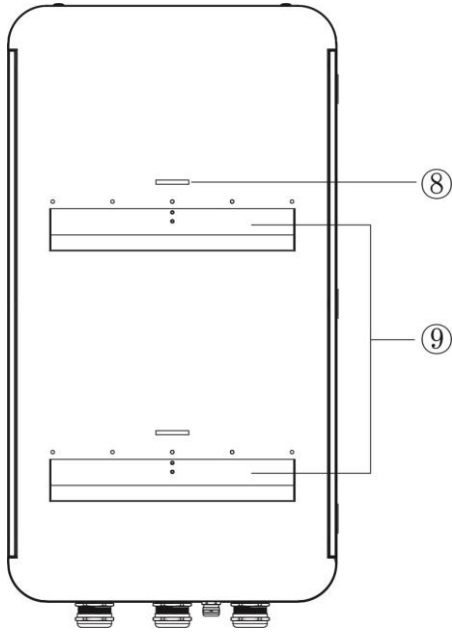
1. Light Sensor
2. Touchscreen
3. RFID Card Reader
4. EV Charging Cable
5. Ethernet Cable Port
6. AC Inlet Hole
7. Vent



**Right View**

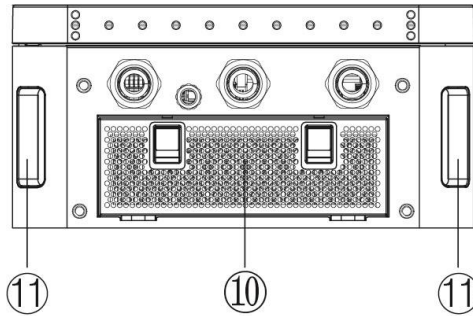


**Left View**



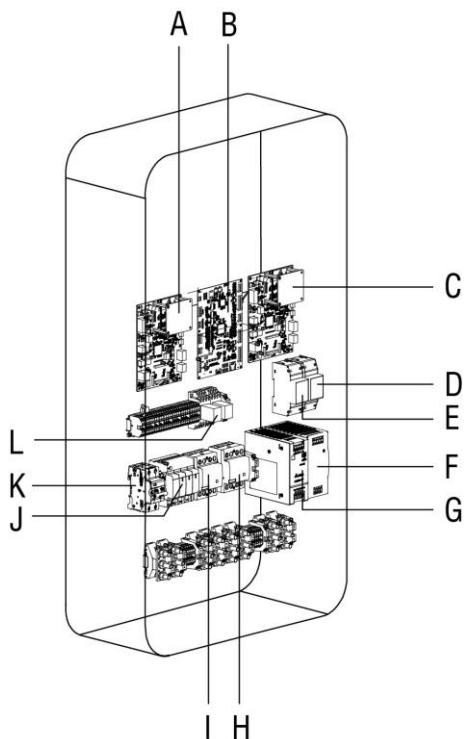
**Back View**

- 8. Slot
- 9. Groove



**Bottom View**

- 10. Bezel
- 11. Lifting Handle



<b>A</b>	Inertial Measurement Unit 1
<b>B</b>	Electronic Control Unit
<b>C</b>	Inertial Measurement Unit 2
<b>D</b>	Energy Meter (PJ1)
<b>E</b>	Energy Meter (PJ2)
<b>F</b>	48 V Auxiliary Power
<b>G</b>	24 V Auxiliary Power
<b>H</b>	AC Contactor (KM2)
<b>I</b>	AC Contactor (KM1)
<b>J</b>	Surge Protection Device
<b>K</b>	Fuse
<b>L</b>	Intermediate Relay

## 3.2 Specifications

Product Information	
<b>Power Rating</b>	40 kW, max. 47 kW
<b>Charging Type</b>	Fast power charging
<b>Max. Output Current for Outlet A/B</b>	<ul style="list-style-type: none"> <li>● CCS2 133 A</li> <li>● CHAdeMO :125 A</li> </ul>
<b>Outlet A+B</b>	<ul style="list-style-type: none"> <li>● CCS2 + CHAdeMO (charging for 2 EVs concurrently)</li> <li>● CCS2 + CCS2 (charging for 2 EVs concurrently)</li> <li>● CCS2</li> </ul>
<b>Rated/Max. Input AC Current</b>	87 A/96 A
<b>Input Voltage Range</b>	400 VAC+10%~-10% @50Hz
<b>Network Type</b>	<ul style="list-style-type: none"> <li>● TN-S</li> <li>● TN-C</li> <li>● TN-C-S</li> <li>● TT(Requires external RCD)</li> </ul>
<b>AC Input Connection</b>	3P+N + PE
<b>DC Output Voltage</b>	<ul style="list-style-type: none"> <li>● CCS2: 150 ~ 950 VDC</li> <li>● CHAdeMO: 150 ~ 500 VDC</li> </ul>
<b>Cable Length</b>	4 m/5 m
<b>Protection</b>	Overcurrent, overvoltage, under-voltage, ground fault, over-temperature, short-circuit, insulation monitor, surge protection

<b>Overvoltage Category</b>	AC side (Input) OVC: III
<b>Power Factor (&gt;50% load)</b>	$\geq 0.99$
<b>Total Harmonic Distortion (&gt;50% load)</b>	$\leq 5\%$
<b>Peak Efficiency</b>	$\geq 96\%$
<b>Standby Power</b>	40 W
<b>Cellular Communication</b>	GSM / 4G / LTE
<b>General Characteristics</b>	
<b>Enclosure Type</b>	Stainless steel 430
<b>Operating Altitude</b>	< 2000 m (2000 m ~ 3000 m with power de-rating)
<b>Operating Temperature Range</b>	-30 °C to + 55 °C (+45 °C to +55 °C with linear power de-rating)
<b>Storage Temperature Range</b>	-40 °C to +70 °C
<b>Mounting</b>	Free-standing cabinet
<b>User Interface</b>	
<b>Status Indication</b>	LED/APP
<b>User Interface</b>	<ul style="list-style-type: none"> <li>● Autel Charge APP</li> <li>● Autel Charge Cloud</li> </ul>
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>● Bluetooth</li> <li>● Wi-Fi</li> <li>● Ethernet</li> <li>● CAN</li> </ul>

	<ul style="list-style-type: none"> <li>● RS485</li> </ul>
<b>Communication Protocols</b>	<ul style="list-style-type: none"> <li>● OCPP 1.6 JSON</li> <li>● OCPP 2.0.1 (Optional)</li> </ul>
<b>User Authentication</b>	<ul style="list-style-type: none"> <li>● QR code</li> <li>● RFID</li> <li>● ISO 15118 Plug &amp; Charge</li> <li>● Credit card (optional)</li> </ul>
<b>Software Update</b>	
<b>Software Update</b>	OTA updates via web portal
<b>Certification and Standards</b>	
<b>Charging System</b>	<ul style="list-style-type: none"> <li>● IEC 61851-1</li> <li>● IEC 61851-23</li> <li>● IEC 61851-21-2</li> </ul>
<b>Communication to the EV</b>	<ul style="list-style-type: none"> <li>● ISO 15118 PnC</li> <li>● DIN 70121</li> <li>● CHAdeMO 1.2</li> </ul>
<b>EMC Compliance</b>	<p>CCS: 200 A  CCS boost: 300 A (peak 400 A)  CHAdeMO: 125 A/200 A</p>
<b>Certification</b>	<ul style="list-style-type: none"> <li>● CE</li> <li>● UKCA</li> <li>● TR25</li> </ul>
<b>Design Life</b>	10 year
<b>Warranty</b>	Base warranty 24 months after site acceptance test or 30 months after factory delivery. Warranty extensions available

## 3.3 Local Service Portal

The Local Service Portal provides information about the MaxiCharger, allows for the configuration of the key parameters during commissioning, and enables diagnostics on site. For detailed operation procedures, see [Local Service Portal Operations](#).

Parameter	Example (* indicates variables)
Charger ID	DG1120B1*****
OCPP IP	***** .***** .**
OCPP-URL address	*****
Port number	***
OCPP encryption method	***
Country code	UK
Network selection	auto/wifi/4g
Supplier	Autel
Control board SN	C06G120*****
MAC address	ba:9f:aa:8c:*.:**
Password	000000
Connection ID	0: Connectors 1 and 2 initialization
Charger configuration model	120:120kW
MGR IP	***** .***** .**
MGR URL	*****
MGR PORT	***
MGR SEC	https
MGR ENABLE	1: Enable



<b>Parameter</b>	<b>Example (* indicates variables)</b>
<b>http API address</b>	temporarily useless
<b>Running environment</b>	1: China /3: Europe /4: UK /5: USA
<b>Payment method</b>	1: QR code 2: NFC module 3: QR code and NFC module 4: Credit card 5: QR code and credit card 6: NFC module and credit card 7: All
<b>Http test switch</b>	1: Production environment
<b>Device Model</b>	Maxi CN DC*****
<b>Rated Power</b>	120kW
<b>Rated Voltage</b>	1000V
<b>Maximum current</b>	200A
<b>Set Current</b>	200A
<b>Max Power</b>	120kW

## 3.4 Cloud Service Portal

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Autel provides a set of cloud-based tools to commission, monitor, and troubleshoot the MaxiCharger. For more information, contact your Autel e-Mobility representative.

# 4 Preparation

## 4.1 Before You Begin

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- Read through this manual prior to installation to be familiarized with the installation steps.
- Ensure the appropriate wiring, circuit protection, and metering is in place at the installation site, according to the specifications, wiring diagrams, and grounding requirements.
- Ensure the MaxiCharger is connected to a grounded, metal, permanent wiring system. Otherwise, an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.
- Ensure the installation site has a load capacity sufficient to support the MaxiCharger.
- If you choose to use a cellular network to communicate with the MaxiCharger, the cellular coverage at the installation site should be consistently strong. Use a cellular signal detection device to ensure the signal is above -90 dBm. If the signal is below -90 dBm, install repeaters to boost the strength of the cellular signal. Repeaters are often required when installing the MaxiCharger in underground environments such as in an underground garage or enclosed parking space.
- There is enough space available around the installation site to use a forklift or other lifting equipment, to unpack, and to allow people to work freely.
- Ensure the charging connector of the MaxiCharger can sufficiently reach the vehicle's charging port with the chosen cable length. The standard charging cable length is 4 m, and a 5-meter cable is also available.

## 4.2 Location Requirements

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With a wall dock or a pedestal, the MaxiCharger will support two available mounting options:

- Mounting on a wall
- Mounting on a pedestal

The location requirements will differ between these two mounting options. Before mounting the MaxiCharger, choose a suitable mounting location that meet the following requirements:

**For mounting on a wall:**

- The mounting location must be capable of supporting the MaxiCharger. The maximum weight of a MaxiCharger is approximately 122 kg.
- The wall must be flat and plumb.
- Ensure the charging connector of the MaxiCharger can sufficiently reach the vehicle's charging port with the chosen cable length. The standard charging cable length is 4 m, and a 5-meter cable is also available.


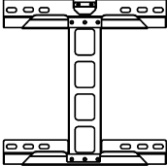

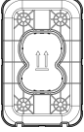


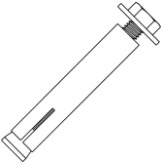

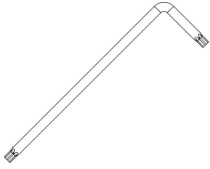
**For mounting on a pedestal:**

- To safely mount a MaxiCharger, the concrete must be at least 80 mm thick.
- The concrete surface must be perfectly flat and level.
- Ensure the charging connector of the MaxiCharger can sufficiently reach the vehicle's charging port with the chosen cable length. The standard charging cable length is 4 m, and a 5-meter cable is also available.





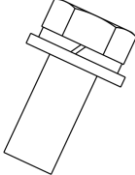
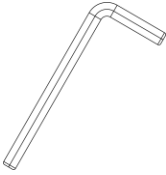
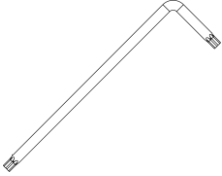
## 4.3 Packing List

Depending on your order, ensure the corresponding items can be found in the package:

**For Mounting on a Wall:**

<p><b>MaxiCharger</b></p>		<p><b>Wall Dock</b></p>	
<p><b>Holster Front Cover</b></p>		<p><b>Holster Rear Cover</b></p>	
<p><b>M12 Lifting Eye Bolt</b> 4 PCS</p>		<p><b>M12 x 80 Expansion Bolt</b> 4 PCS</p>	
<p><b>M6 x 60 Expansion Bolt</b> 8 PCS</p>		<p><b>Hex Key (6 mm)</b></p>	
<p><b>Torx Screwdriver (T25)</b></p>			

**For Mounting on a Pedestal:**

<p><b>MaxiCharger</b></p>		<p><b>Pedestal</b></p>	
<p><b>M12 Lifting Eye Bolt</b> 4 PCS</p>		<p><b>M12 x 80 Expansion Bolt</b> 4 PCS</p>	
<p><b>M12 x 30 Bolt</b> 2 PCS</p>		<p><b>Hex Key (6 mm)</b></p>	
<p><b>Torx Screwdriver (T25)</b></p>			

## 4.4 Installation Tools

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- Flathead screwdriver
- Hoisting equipment
- Spirit level
- Marker/Pencil
- Socket wrench (10 mm/19 mm)
- Drill (16 mm/10 mm)
- Cleaning tool
- Wire stripper
- Cable lug
- Voltage tester
- Digital multimeter

---

### NOTE

- The tools mentioned above are not provided. Be sure to have all the tools prepared prior to the installation.
  - This tool list does not necessarily include all the tools you may need.
-

# 5 Installation

## General Installation Procedures:

1. Unpack the shipping crate.
2. Move the MaxiCharger to the installation site.
3. Mount the MaxiCharger.
4. Complete the power supply wiring.

The installation work shall be carried out after a suitable location is chosen.

### CAUTION

- Cut off the power supply before opening the MaxiCharger.
- Do not touch the inside components of the MaxiCharger while it is powered on.
- Ensure no voltage is applied while checking the MaxiCharger.
- Operate the MaxiCharger only when its door is closed and locked.

## 5.1 Unpacking

---

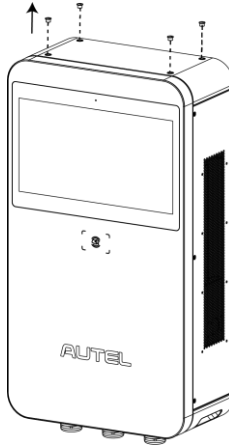
1. Remove the outside packing and interior using appropriate tools.
2. Inspect the MaxiCharger and the parts for installation for damage. If damage is evident or the parts are not consistent with the order, contact your local dealer.

## 5.2 Moving the MaxiCharger

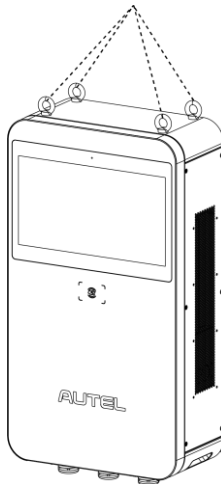
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It is recommended to move the MaxiCharger to the installation site using appropriate hoisting equipment (crane, straps, and so on).

1. Remove the packaging.
2. Remove the four screws on top of the charger using a flathead screwdriver.



3. Install and tighten the four M12 lifting eye bolts into the four holes.
4. Connect the cables of the hoisting equipment to the eye bolts' lifting loops.
5. Move the MaxiCharger to the installation site.





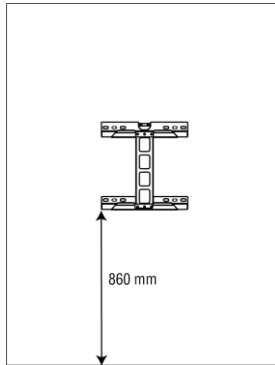
## 5.3 Mounting the MaxiCharger

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### 5.3.1 Mounting on a Wall

#### Step 1: Mounting the Charger

1. Place the wall dock against the wall, 860 mm above the ground and level it using a spirit level.



2. Mark the four holes on the wall and set the wall dock aside.

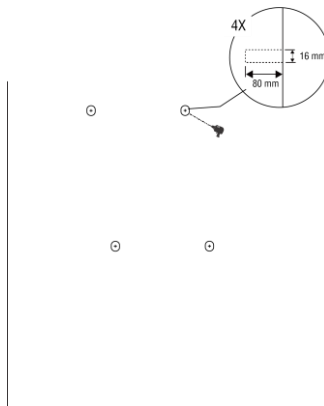
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#### NOTE

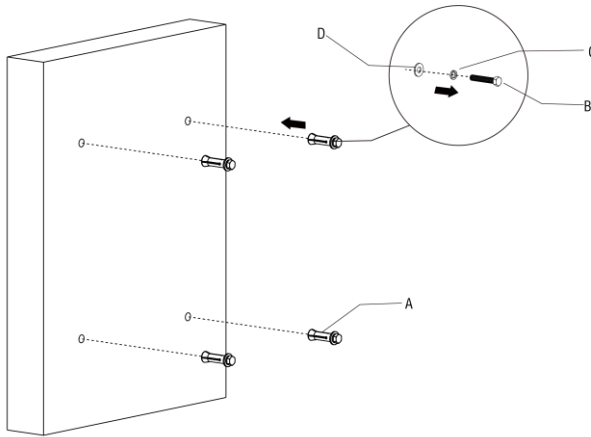
There are three types of mounting holes on the wall dock: the outer, the middle, and the inner. Choose the most appropriate type based on the wall width. For instance, a narrow wall can use the inner mounting holes.

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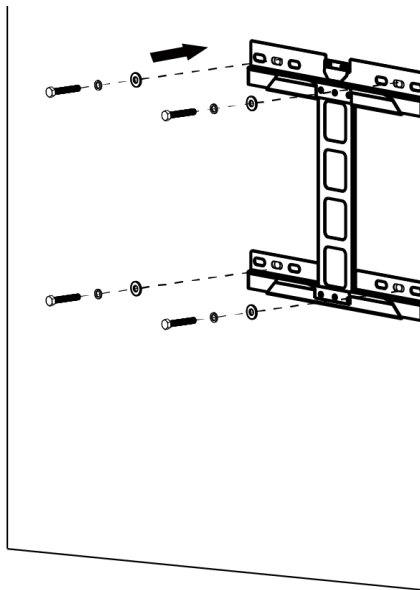
3. Drill the four holes at the marked location measuring 16 mm in diameter and 80 mm in depth.



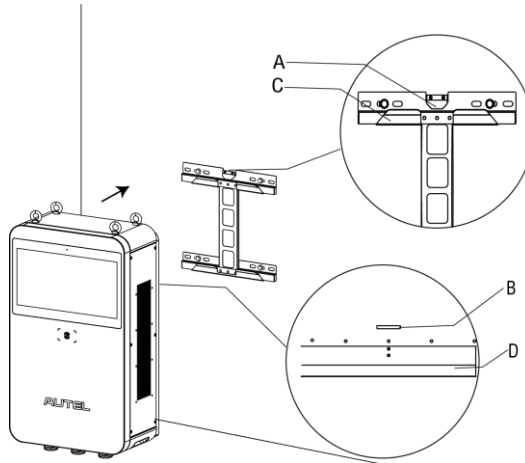
4. Tap the included four M12 x 80 expansion bolts into the drilled holes. Remove the threaded bolts (B), spring washers (C), and flat washers (D) when the expansion sleeves (A) are stuck. Set them aside.



5. Attach the wall dock to the mounting location.
6. Reinsert the flat washers, spring washers, and threaded bolts in order and tighten them using a 19 mm socket wrench to the torque 45 – 55 N·m to secure the wall dock.



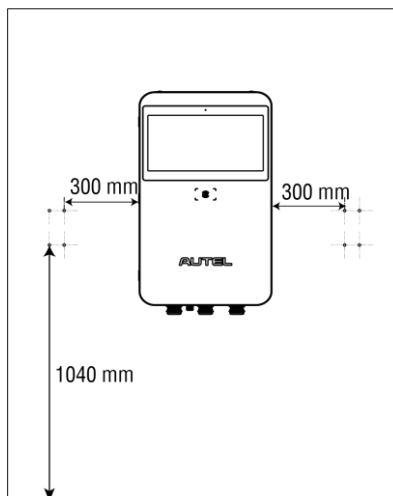
- Lift the charger onto the wall dock by the hoisting equipment. Position the slot (B) on the back of the charger to fit the metal plate (A) of the wall dock as shown below. Meanwhile, the protrusion (C) on the wall dock and the groove (D) on the back of the charger will be fitted as well. Ensure the charger is securely attached.



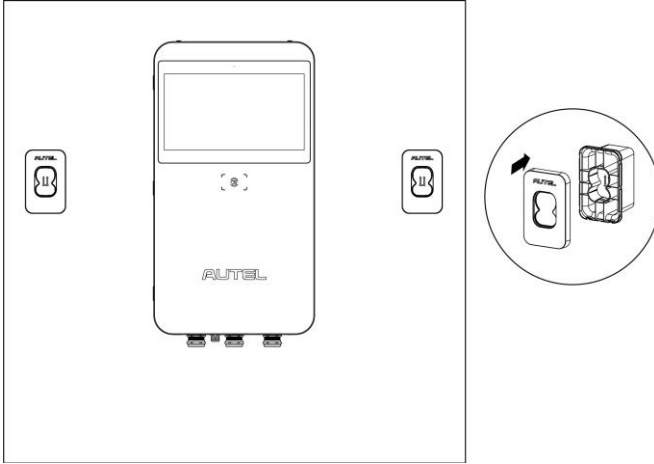
- Remove the four lifting eyebolts and reinstall the top screws.

### **Step 2: Mounting the Holsters**

- Place the holster rear covers against the wall, 1040 mm above the ground and 300 mm from the MaxiCharger.
- Mark the eight mounting holes on the wall. Remove the holster rear covers temporarily.



3. Drill the eight holes at the marked positions measuring 10 mm in diameter and 60 mm in depth.
4. Attach the holster rear covers to the drilled location by screwing the eight M6 x 60 expansion bolts into the holes. Tighten the screws to 3 N•m using a 10 mm socket wrench.
5. Position the holster front covers and press forcefully down to be secured.



## 5.3.2 Mounting on a Pedestal

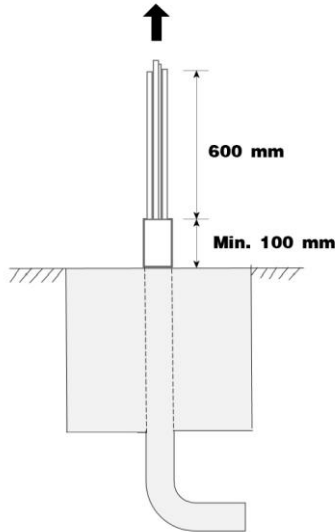
The pedestal can be mounted to an existing surface.

### ⚠ IMPORTANT

Always check local codes to ensure compliance. The guidelines described here are the minimum requirements. Ensure that the installation complied with all applicable codes.

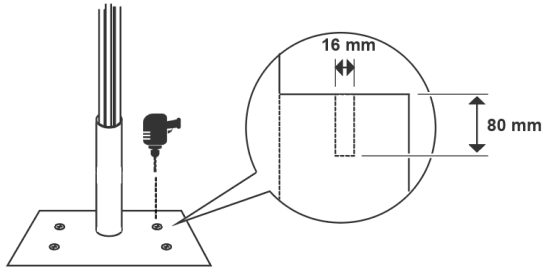
#### **Step 1: Preparing a conduit**

1. Trench and excavate a cable tunnel to accommodate the conduit.
2. The conduit stub-up should be minimum 100 mm.
3. Pull the conduit and wire up through the exit opening, leaving 600 mm flexible length for installation activities.



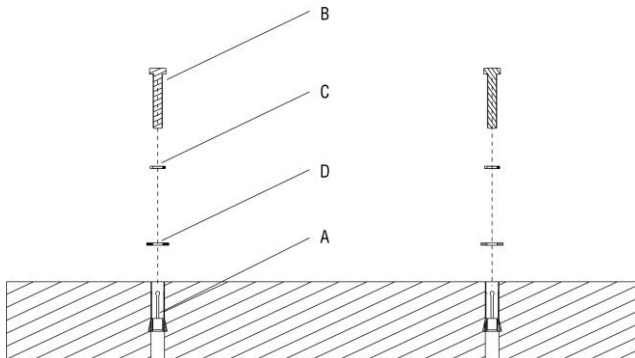
### **Step 2: Drilling holes**

1. Place the drilling template on the concrete surface, aligning its central hole with the exit opening.
2. Mark the four holes on the concrete surface using a marker. Remove the drilling template.
3. Drill the four holes at the marked positions measuring 16 mm in diameter and 80 mm in depth.
4. Clean the dust ashes.

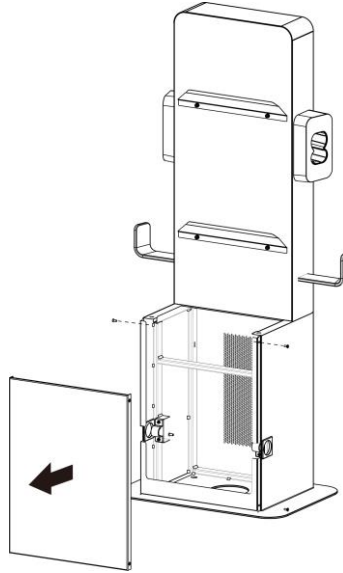


### **Step 3: Mounting a pedestal**

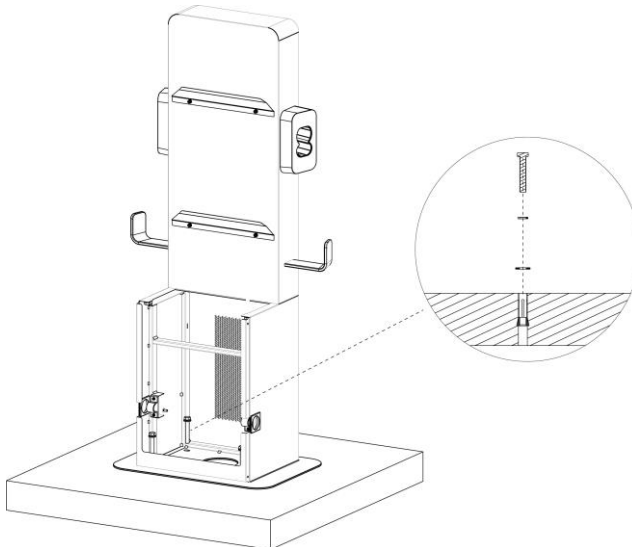
1. Tap the four M12 x 80 expansion bolts into the four drilled holes. Remove the threaded bolts (B), spring washers (C), and flat washers (D) when the expansion sleeves (A) are stuck. Set them aside.



2. Loosen the four M5 security screws at the edge of the pedestal using a T25 Torx screwdriver to remove the front cover from the pedestal. Set them aside.

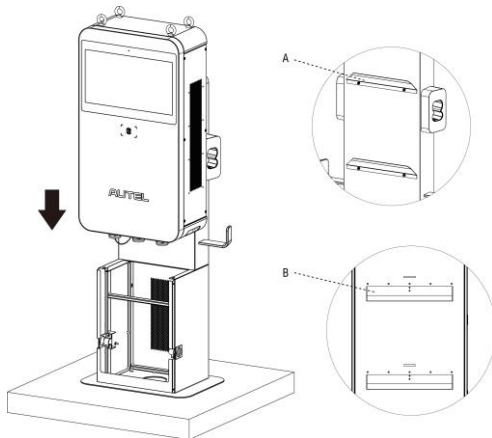


3. Place the pedestal onto the mounting location.
4. Reinsert the flat washers, spring washers, and threaded bolts in order and tighten them using a 19 mm socket wrench to 45 – 55 N·m.

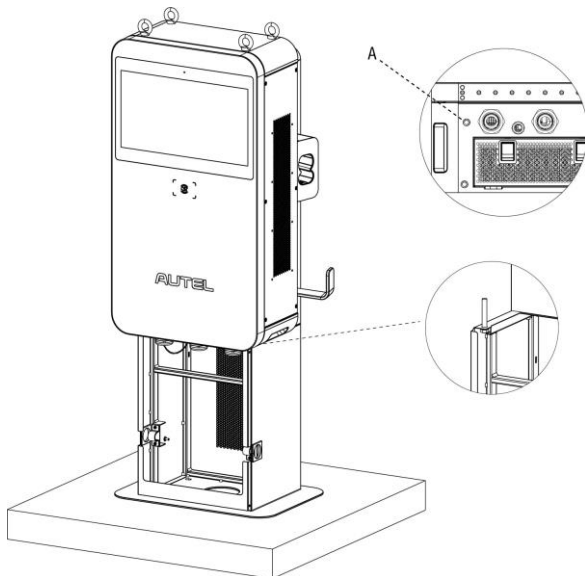


#### Step 4: Mounting a charger

1. Lift the charger onto the pedestal by the hoisting equipment. Position the groove (B) on the back of the charger to fit the protrusion (A) of the pedestal as shown below. Ensure the charger is securely attached.



2. Insert and fasten the included two M12 x 30 screws to the bottom holes (A) of the charger using a 19 mm socket wrench to secure the charger.



3. Remove the four lifting eyebolts and reinstall the top screws.



## 5.4 Power Supply Wiring

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### WARNING

#### Risk of Electric Shock

- Only a qualified electrician is allowed to determine the electrical requirements and connect wires.
- Ensure the power is off before connecting the wires.

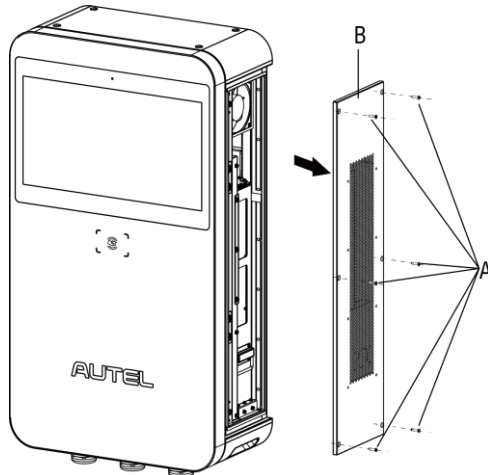
### IMPORTANT

Before connecting wires, ensure the following requirements are met:

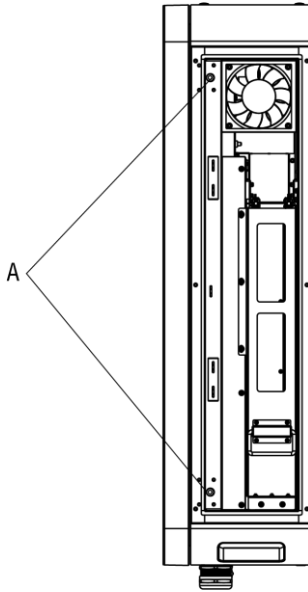
- Use 90 °C copper wire only.
- The circuit breaker at the panel must be off.
- The MaxiCharger must be grounded to true earth.
- An insulated grounding conductor must be installed as part of the branch circuit that supplies the MaxiCharger.
- The grounding conductor should be grounded to earth at the service equipment or, when supplied by a separately derived system, at the supply transformer.
- All connections must comply with all local codes and ordinances.
- Use 25 mm<sup>2</sup> wires.

### 5.4.1 Connecting to the PE Wire

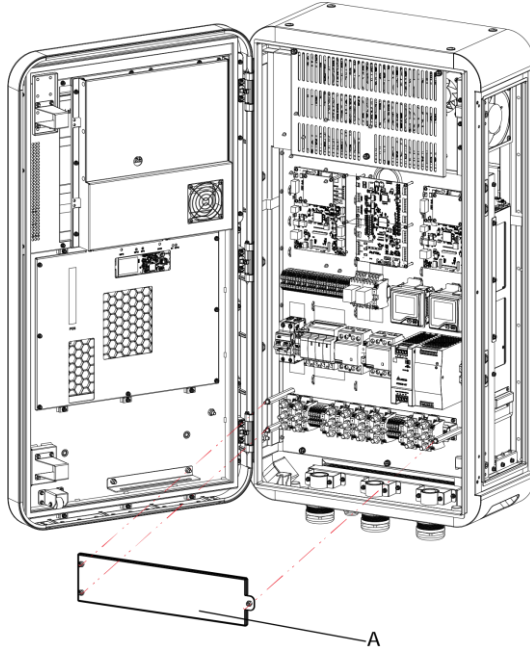
1. Remove the six M5 security screws (A) on the right side of the MaxiCharger using a T25 Torx screwdriver to remove the side cover (B). Set them aside.



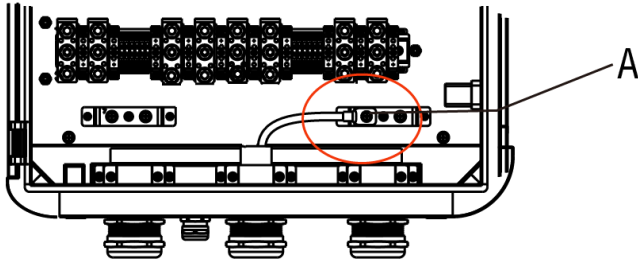
2. Loosen the two M8 hex screws (A) using the hex key and open the front door.



3. Loosen the three M6 nuts to remove the insulating barrier (A) and set them aside.

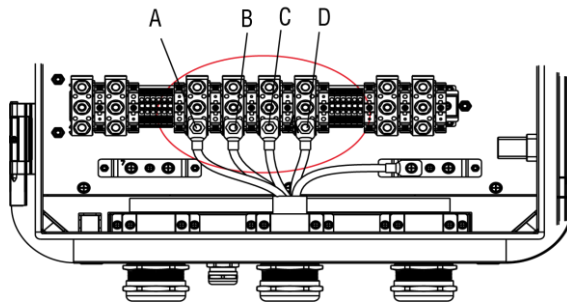


4. Pull the wires and guide them through the bottom AC inlet hole.
5. Use a wire stripper to remove 20 mm of the insulation from the end of the PE wire.
6. Use the crimping tool to attach the cable lug to the end of the wire.
7. Loosen the M6 fastener using a 10 mm socket wrench.
8. Connect the PE wire to the PE busbar and reinsert the fastener. Tighten it to  $20.5 \pm 2.5 \text{ N}\cdot\text{m}$ .



### 5.4.2 Connecting to AC Input Wire

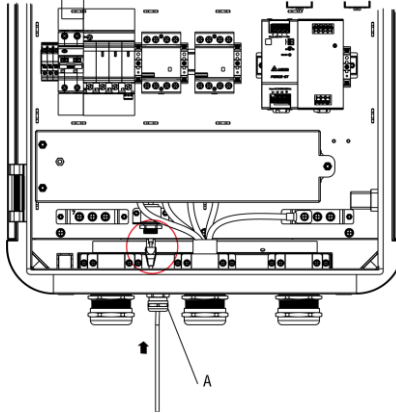
1. Use a wire stripper to remove 20 mm of the insulation from the end of the wires. Ensure the stripped length is compatible with cable lugs.
2. Use the crimping tool to attach the cable lugs to the end of the wires.
3. Loosen the four M8 fasteners to attach the wires to the connectors:
  - L1 wire to the connector A
  - L2 wire to the connector B
  - L3 wire to the connector C
  - N wire to the connector D



4. Reinsert the fasteners and tighten them to the torque  $20.5 \pm 2.5 \text{ Nm}$ .
5. Reinstall the insulating barrier.

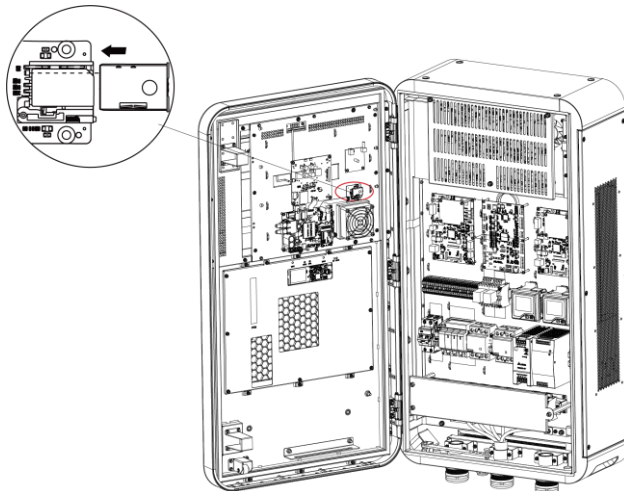
### 5.4.3 Connecting to the Ethernet Cable

1. Loosen the cable gland (A).
2. Put the Ethernet cable through the Ethernet cable port at the bottom of the MaxiCharger.
3. Plug the Ethernet cable into the RJ45 port.
4. Tighten the cable gland (A).



### 5.4.4 Installing the SIM Card

1. Locate the SIM card tray (above the fan).
2. Slide the SIM card in from the right.

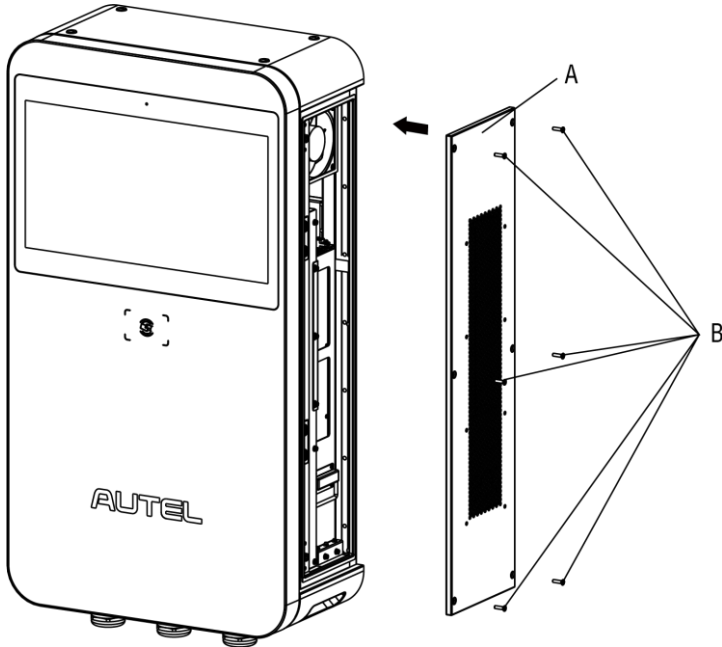


## 5.5 Completing Installation

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### For Mounting on a Wall:

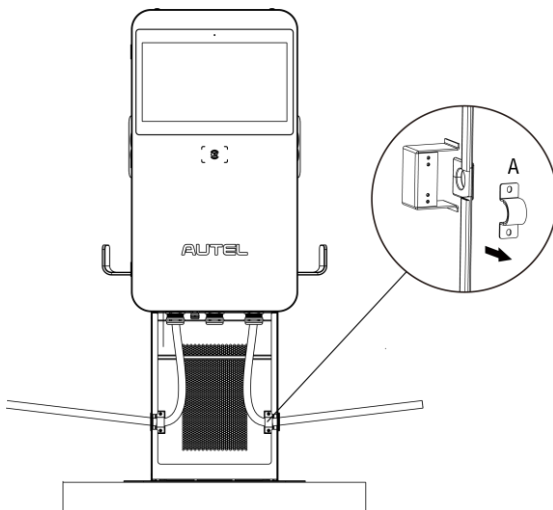
1. Close the front door by reinstalling the two M8 hex screws using the hex key and tightening the screws to 2 N•m.
2. Reinstall the side cover (A) by inserting and tightening the six M5 security screws (B) to 2 N•m using the T25 Torx screwdriver.



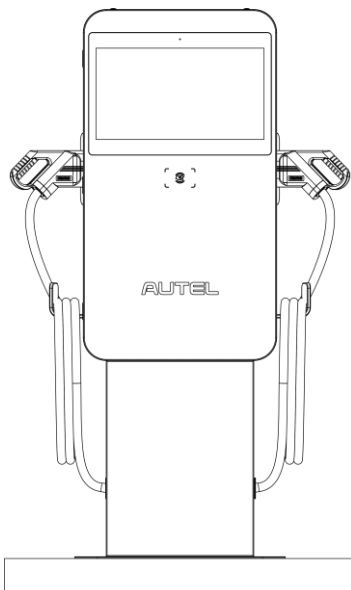
### For Mounting on a Pedestal:

1. Close the front door by reinstalling the two M8 hex screws using the hex key and tightening the screws to 2 N•m.
2. Reinstall the side cover by inserting and tightening the six M5 security screws to 2 N•m using the T25 Torx screwdriver.
3. Organize the charging cables as described below:
  - a) Remove the two brackets (A) by unscrewing the four M4 screws on both sides of the pedestal using the Phillips screwdriver.
  - b) Put the cables into the rubber rings via the opening.

- c) Reinstall the brackets by screwing the four M4 screws and tightening them to 1.2 N•m. Ensure the charging cables are allowed to remain its bending tolerance.



- d) Drape the cables over the cable holders on both sides of the pedestal and plug the connectors into the holsters.
4. Reinstall the pedestal's front cover by screwing the four M5 security screws and tighten them to 2 N•m.



# 6 Operation

## 6.1 Before Use

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- Install the MaxiCharger according to the instructions in this manual.
- Prepare an emergency plan that instructs people what to do in case of an emergency.
- Provide instructions for charging procedure to all end users.
- Only the manufacturer or a qualified technician authorized by the manufacturer can commission the MaxiCharger. Contact the manufacturer when the MaxiCharger is ready for commissioning.
- Regularly maintain the MaxiCharger by referring to [Routine Maintenance](#).
- If the MaxiCharger is de-energized for more than four hours, activate the internal heater to remove condensation from the MaxiCharger.

### ➤ To power on the MaxiCharger

1. Make sure that the upstream breaker stays in the **OFF** position and locked during the procedure.
2. Tighten the screws and bolts of key parts and make sure the cabinet is clean inside. Prevent the electronic components from being damaged by dust or particles.
3. Use the multimeter to check the circuit connections among L1, L2, L3, N, and PE. If short circuit occurs, contact Autel technical support; otherwise, reinstall the insulating barrier.
4. Make sure that the RCCB and MCCB stay in the **OFF** position.
5. Contact Customer Technical Support to turn on the upstream breaker, then measure the voltage of AC power input by following [Measuring the AC Voltage](#). Make sure that all the measured voltages are in accordance with the input voltage range 400 VAC +10% ~ -10% @ 50Hz.
6. Set the main breaker to the **ON** position.
7. Set the RCCB to the **ON** position and check the indicators on CCU, ECU and TCU and the screen display.
  - If any indicator of CCU, ECU, or TCU is off or the screen display is abnormal, please contact Autel technical support;
  - If all indicators and the screen display normal, go to next step.
8. Set the MCCB to the **ON** position and connect to the main circuit. Close the doors of the MaxiCharger. The MaxiCharger is ready for use.

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**⚠ CAUTION**

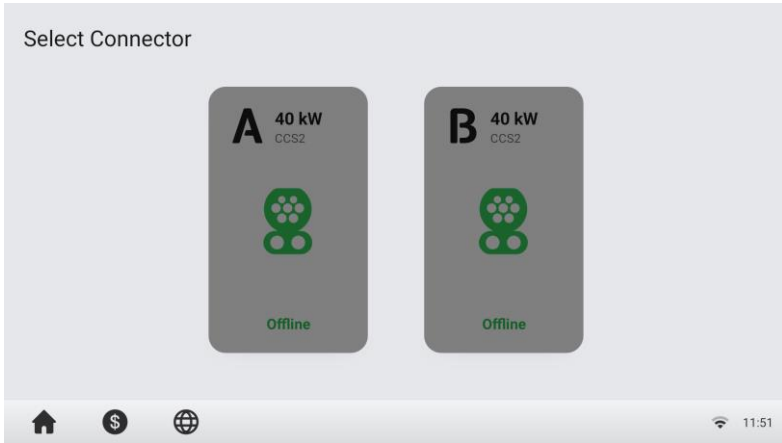
To prevent damage to the MaxiCharger, remove condensation before use.

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## 6.2 Charging Procedure

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### 6.2.1 Standby Mode



After a connector is successfully connected to your EV, the MaxiCharger can automatically recognize the connector, then the corresponding connector's Authorization Screen will appear.

If no operation is performed for a long time on the Authorization Screen, the Standby Screen will appear. Manually select the appropriate connector on the touchscreen.

### 6.2.2 Authorization

---

**ⓘ IMPORTANT**

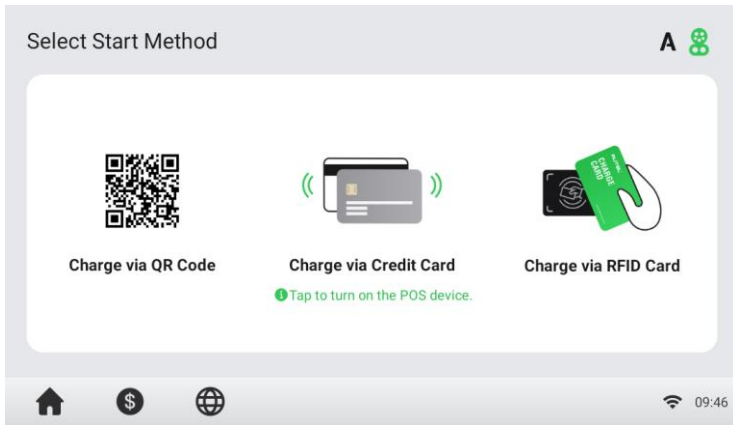
- Observe the screen for any abnormalities, such as an error messages, before starting a charge session. Check the surroundings and the MaxiCharger for any abnormalities or damage as well.
  - If the screen displays an error message, DO NOT use the MaxiCharger. Contact Autel Technical Support.
- 

When the Authorization Screen appears, you can use any of the following methods to start a charge session.

- Scan the QR code on the screen (by the Autel Charge app)
- RFID card
- Plug & charge (supports the ISO 15118 PnC function)

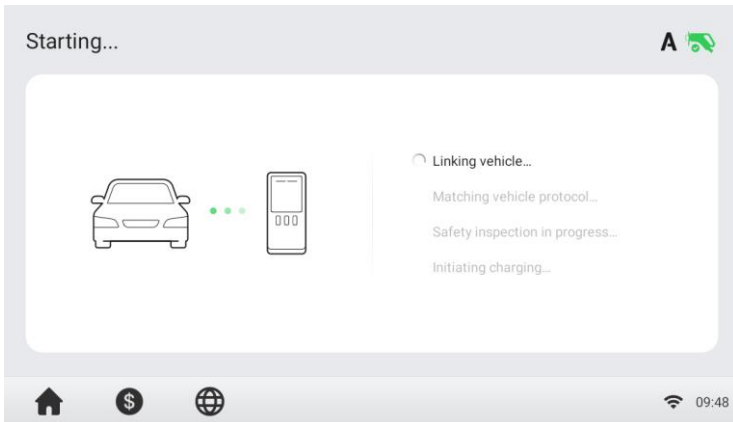


- Credit card (optional)



## 6.2.3 Start Charging

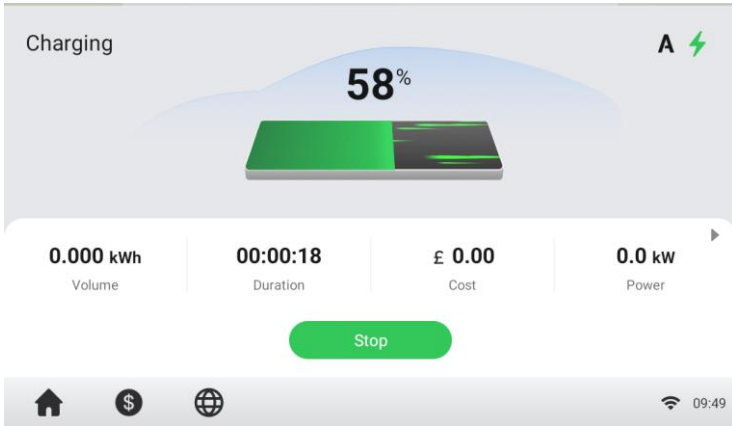
After authorization, the MaxiCharger will set up communication with your EV and necessary safety tests will be performed. Following the safety tests, the charge session will start automatically.



## 6.2.4 Charging

You will be informed of the progress during charging. Information about the charging duration, volume, cost, and power will appear on the Charging Screen. Tap the right arrow button on the right to view more information about the charging status, including SoC (State of Charge), current, and voltage.

Wait until your EV is fully charged or terminate the charge session by tapping the **Stop** button on screen.



## 6.2.5 Stop Charging

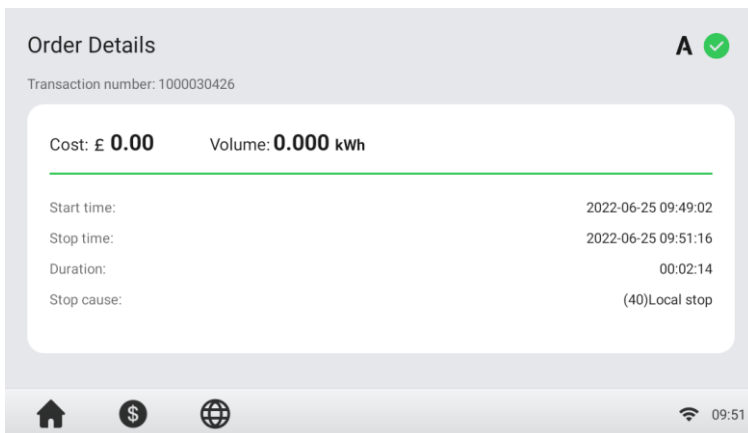
### ➤ To stop charging

1. Tap the **Stop** button on the screen.

#### 🔗 NOTE

When the battery is full, the charge session stops automatically.

2. Normally, you have to authorize again to finish charging, using the same authentication method as was used to start:
  - QR code: Scan the QR code by the Autel Charge app and tap the **Stop** button on the Charging Screen of the Autel Charge app.
  - RFID card: Put the RFID card on the card reader again to finish charging.
  - Credit card: Finish charging directly.
3. When charging is finished, your order details will appear.



4. Disconnect the EV charging cable from the EV.

### **WARNING**

Hazardous voltage. Do not unplug the connector suddenly during charging. This may cause severe damage to the MaxiCharger and/or severe personal injury or death.

## 6.2.6 Finish Charging

Return the connector to the holster on the MaxiCharger.

## 6.3 Charging Errors

This section depicts several common problems that may arise during your charging session, along with possible causes/solutions to help you resolve those problems. If the problem persists, contact your local dealer or Autel Technical Support.

### 6.3.1 Connector Connection Error

If the connector is not properly connected to your EV, then the Connector Not Connected screen will appear. Insert the connector into your EV's charge port and check the connection.

### 6.3.2 Authorization Failure

If an error occurs when you start the authorization process but without starting charging, the Authorization Failure screen will appear. The cause and possible solution(s) will display on the screen. Follow the on-screen instructions to resolve the problem, or contact your local dealer or Autel technical support.

### 6.3.3 Charging Start Failure

If an error occurs when you start charging, the Charge Start Failure screen will appear. The cause and possible solution(s) will display on the screen. Follow the on-screen instructions to resolve the problem.

### 6.3.4 Charging Failure

If an error occurs during charging, the Charging Failure screen will appear. The cause and possible solution(s) will display on the screen. Follow the on-screen instructions to resolve the problem, or contact your local dealer or Autel Technical Support.

## 6.4 Energizing the MaxiCharger

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➤ **To energize the MaxiCharger**

1. Set the upstream breaker that provides power to the MaxiCharger to **ON**.
2. The MaxiCharger will start and be ready for operation.

## 6.5 De-energizing the MaxiCharger

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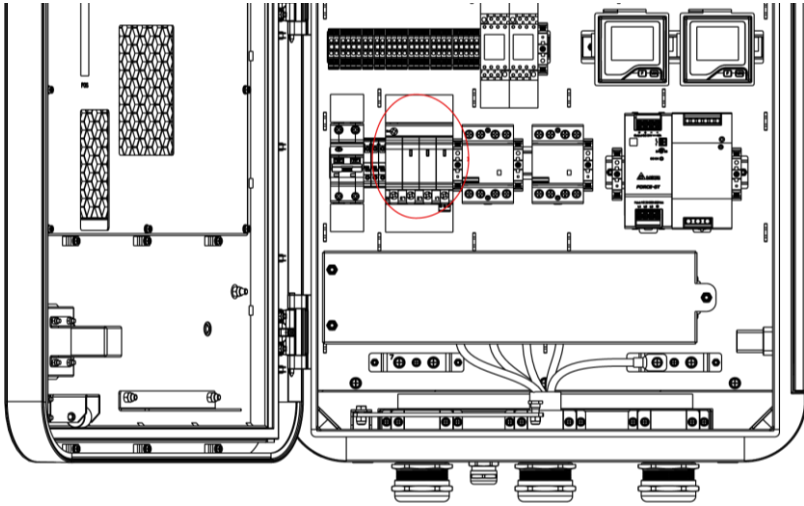
➤ **To de-energize the MaxiCharger**

1. Set the upstream breaker which provides the power to the MaxiCharger to **OFF** and lock it. Make sure that this breaker stays in the OFF position during the procedure.
2. Open the front door.
3. Measure the AC voltage by referring to [Measuring the AC Voltage](#). Make sure that all the measured voltages are 0 volts.
4. Measure the DC voltage by referring to [Measuring the DC Voltage](#). Make sure that all the measured voltages are 0 volts.
5. Close the front door.

### 6.5.1 Measuring the AC Voltage

Use a voltage tester to measure the AC voltage between the terminals on the surge protection device switch:

- L1 to L2
- L1 to L3
- L2 to L3
- N to L1/L2/L3



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**NOTE**

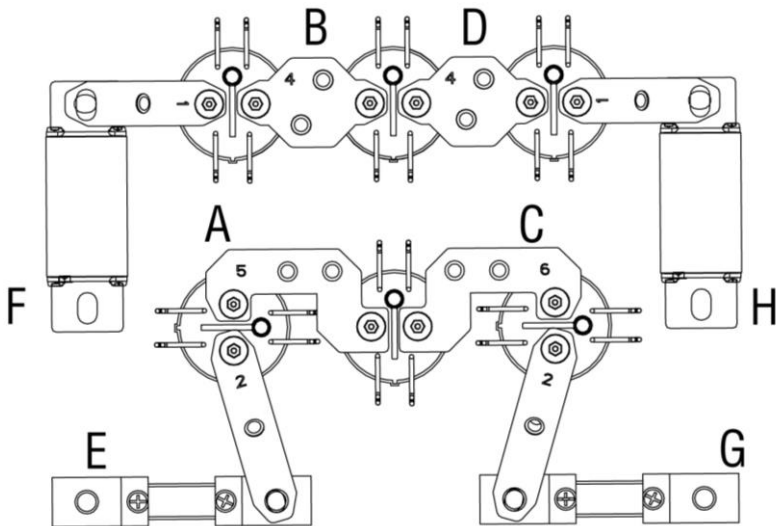
The surge protection device switch shows the indications N, L1, L2, and L3.

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## 6.5.2 Measuring the DC Voltage

Use a voltage tester to measure the DC voltage between the output terminals, make sure that all the measured voltages are 0 volts.

- Power module group output 1 — (A) to power module group output 1+ (B)
- Power module group output 2 — (C) to power module group output 2+ (D)
- EV charging cable 1 output — (E) to EV charging cable 1 output + (F)
- EV charging cable 2 output — (G) to EV charging cable 2 output + (H)



## 6.6 Removing Condensation

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### NOTE

If the MaxiCharger is off for more than two hours, condensation can occur.

---

#### ➤ To remove condensation from the MaxiCharger

1. Open the front door.
2. Set the main breaker from the **ON** to the **OFF** position.
3. Energize the MaxiCharger.
4. Close the front door. Wait 2 hours. The internal heater of the MaxiCharger will heat inside and the condensation will evaporate.
5. Open the front door.
6. Set the main breakers from the **OFF** position to the **ON** position.
7. Close the front door.

## 6.7 Local Service Portal Operations

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### 6.7.1 Setting the OCPP Parameters

#### NOTE

The OCPP parameter setting should be performed by an installation engineer.

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➤ **To set the OCPP parameters**

1. Tap the upper-left corner of the screen.
2. Tap **Device Maintenance**. Enter the default password (contact Autel customer service to obtain the password).
3. Tap **Set Parameters**. Wait for the system to load the data. This can take a few seconds.
4. Set the following parameters:
  - **Running environment**: current running environment
  - **OCPP IP**: IP address of the OCPP
  - **OCPP URL**: URL of the OCPP
  - **OCPP PORT**: port number of the OCPP
  - **MGR IP**: IP address of the management platform
  - **MGR URL**: URL of the management platform
  - **MGR PORT**: port number of the operational management platform



**NOTE**

Make sure that you type the URL or ID correctly and without spaces.

5. Tap **Save** to save your changes.

# 7 Maintenance

## 7.1 Routine Maintenance

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Routine maintenance can keep the MaxiCharger in safe and stable state.

- Clean the MaxiCharger every quarter: tighten the screws and bolts of key parts, and check whether the wire connection of the MaxiCharger's connector is burned out. If any abnormality is found, replace the parts promptly.
- Clean the filter at least twice a year.
- Test the residual current device once a year.

---

### WARNING

- Disconnect the power supply to the MaxiCharger during the entire maintenance procedure.
  - Make sure that unauthorized personnel are kept at a safe distance during maintenance.
  - Wear proper personal protective equipment, such as protective clothing, safety gloves, safety shoes, and safety glasses.
  - If you remove the safety devices for maintenance, reinstall them after completing the work.
- 

### 7.1.1 Cleaning the MaxiCharger

The MaxiCharger is powder-coated. The coating must be kept in good condition. When the MaxiCharger is in a corrosion sensitive environment, superficial rust may appear on welding points. Visible rust has no risk to the integrity of the MaxiCharger.

#### ➤ To remove rust

1. Stop any charging processes and power off the MaxiCharger.
2. Remove rough dirt by spraying with low-pressure tap water.
3. Apply a neutral or weak alkaline cleaning solution and let it soak.
4. Remove dirt by hand with a damp and non-woven nylon cleaning pad.
5. Rinse thoroughly with tap water.
6. Apply wax or a rust-preventive primer for extra protection if needed.

---

### WARNING

- Before cleaning, stop any charging processes and do not connect the power to the MaxiCharger. Failure to do so may cause damage and/or personal injury or death.
-



- 
- Do not apply high-pressure water jets and avoid water leaking into the MaxiCharger. Make sure that the inside of the MaxiCharger is dry during cleaning.
  - Do not use caustic solvents, sprays, solvents or abrasives. Use cleaning agents with a pH between 6 and 8 for strong stains only.
- 

## 7.1.2 Cleaning and Replacing the Filter

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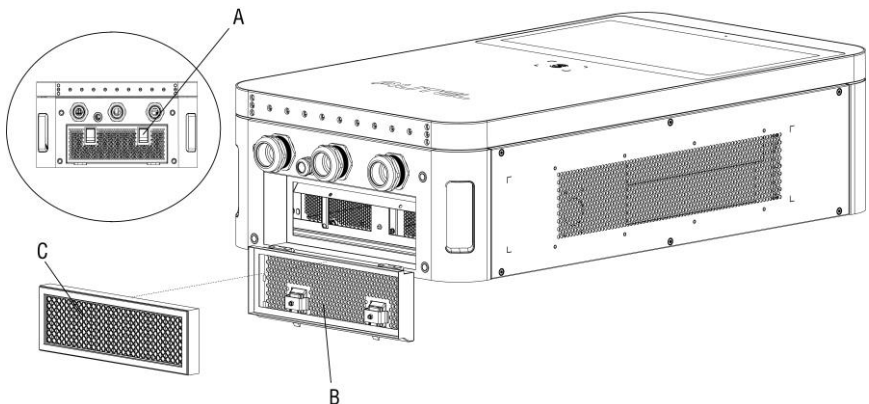
### WARNING

- Before cleaning, stop any charging processes and do not connect the power to the MaxiCharger. Failure to do so may cause damage and/or personal injury or death.
  - Do not apply high-pressure water jets and avoid water leaking into the MaxiCharger. Make sure that the inside of the MaxiCharger is dry during cleaning.
  - Do not use caustic solvents, sprays, solvents or abrasives.
- 

The MaxiCharger is equipped with a filter with a large mesh area to prevent the electronic components from being damaged by dust. Clean the filter every 3 months (not to exceed 6 months). Replace the filter annually.

#### ➤ To clean or replace the filter

1. Before cleaning and replacing, be sure to stop all charging processes, disconnect the external power supply, and perform the power-off protection.
2. Open the two toggle latches (A) at the bottom of the MaxiCharger to flip the bezel (B) downward.
3. Remove the filter (C).
4. Clean debris or dust of the filter and reinstall a cleaned filter. Alternatively install a new air filter.
5. Flip the bezel (B) upwards and close the two toggle latches (A).



## 7.2 Inspection and Maintenance

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When the MaxiCharger operates normally, only routine maintenance is needed.

When the MaxiCharger operates abnormally, refer to Troubleshooting to resolve the problem or contact your local dealer or Autel Technical Support promptly.

When parts need to be replaced, completely cut off the power supply upstream and inside the equipment before operating.

Regularly conduct a visual inspection of the following points:

- Cable and connector: Check for cracks or ruptures on the connector or cable.
- Display: Check for damage and cracks. Check whether the touchscreen works.
- MaxiCharger coating: Check for damage, cracks or ruptures.
- MaxiCharger: Check for rust or damage.

The following special inspections are needed for safe use:

- Check if the MaxiCharger was struck by lightning.
- Check if the MaxiCharger was damaged due to an accident or fire.
- Check the MaxiCharger installation site has been flooded.



### **WARNING**

Stop any charging processes and do not connect the power to the MaxiCharger until all the inspections are complete.

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## 7.3 Remote Maintenance

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The MaxiCharger has the function of connecting to cloud platform to monitor parameters in real time. This provides remote upgrades, remote diagnosis, and remote service functions, and can timely identify and locate problems in the operation process.

- System self-check for abnormality daily.
- If any operation abnormality is found, contact your local dealer or Autel technical support promptly.
- Autel service engineers can check logs, update configurations and programs, and provide remote maintenance services, such as remote management, diagnosis, configuration, and upgrades.

## 7.4 Maintenance Schedule

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<b>Item</b>	<b>Frequency</b>	<b>Actions</b>
<b>Connector</b>	Every 3 months	Check for cracks or ruptures on the connector.
<b>Input Cable</b>	Every 3 months	Check for cracks or ruptures on the cable.
<b>Filter</b>	Annually	Replace the filter.
<b>MaxiCharger</b>	Every 6 months	Clean and check for damage.

# 8 Troubleshooting and Service

## 8.1 Troubleshooting

1. Try to find a solution for the problem with the aid of the information in this document.
2. If you cannot find a solution for the problem, contact your local Autel representative or Autel Technical Support.

Issue	Possible Cause	Solution	Handler
<b>Screen Not Displaying</b>	No power supply to the MaxiCharger.	Check the power supply to the upstream distribution box. Open the front door and check the RCD breaker of auxiliary branch. Use the multimeter to test the power input.	Customer Technical Support/ Autel Technical Support
<b>The touchscreen displays a message: Unable to lock the connector.</b>	The connector is not connected correctly to the EV.	Plug the connector into the EV charging port correctly and retry. Try another MaxiCharger to charge the EV.	Customer Technical Support/ Autel Technical Support
<b>The touchscreen displays a message: Insulation error detected.</b>	There is an insulation problem on the EV or the MaxiCharger.	Try another MaxiCharger to charge the EV. Contact Autel technical support.	Customer Technical Support/ Autel Technical Support
<b>QR Code Scanning Failure</b>	Cellular network failure	Ensure that the network SIM card is properly installed.	Customer Technical Support/ Autel Technical Support

<b>Issue</b>	<b>Possible Cause</b>	<b>Solution</b>	<b>Handler</b>
	Local network failure	Check local network connection.	Customer Technical Support/ Autel Technical Support
<b>RFID Card Reading Failure</b>	The RFID card is not recognized.	The RFID card broken. No RFID card data on the cloud. Use a new RFID card.	Customer Technical Support
	Insufficient balance	Contact the operator for top-up.	Customer Technical Support
	Internet failure	See "QR Code Scanning Failure" solutions above.	Customer Technical Support/ Autel Technical Support
<b>Charging Failure</b>	The connector is not properly connected.	Check the connector connection and reconnect it. Try another MaxiCharger to charge the EV.	Customer Technical Support/ Autel Technical Support
	EV error	Try another MaxiCharger to charge the EV. Contact your EV manufacturer for support.	EV dealer/ EV manufacturer
	Charger error	Try another MaxiCharger to charge the EV. Contact Autel technical support.	Customer Technical Support/ Autel Technical Support

Issue	Possible Cause	Solution	Handler
Others	Other issues	Contact Autel technical support.	Autel Technical Support

## 8.2 Service

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If you cannot find solutions to your problems with the aid from the table above, please contact Autel Technical Support.

### AUTEL Europe

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