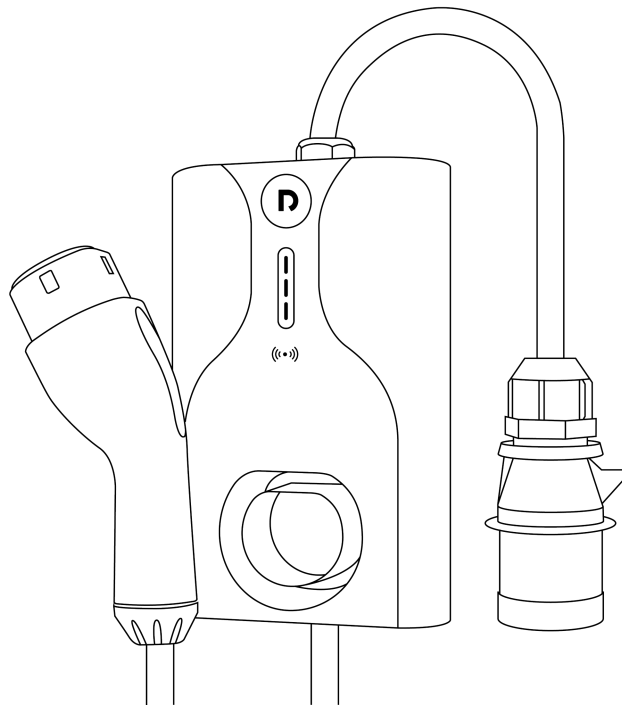


ENERGIZE THE FUTURE OF EMOBILITY

RAEDIAN



INSTALLATION MANUAL

NORA

CABLE VARIANT



Safety Notice

It's crucial to familiarize with this manual and abide by all safety precautions outlined, including those indicated by safety markings on the equipment.

General safety first While this manual provides helpful guidance, it's not exhaustive. Always prioritize general safety requirements, design, production, and established safety standards when operating the charger.

Local regulations matter Follow the specific regulations and guidelines related to EV charging installation and usage in your region along with the instructions in this manual.

Check before you install Never install or use a charger that appears defective, cracked, damaged, or malfunctioning. It's better to be safe than sorry.

Power down before install Switch off the power before installation. Before you touch the charger for any reason, turn off the upstream residual current operated circuit-breakers with integral over current protection (RCBO).

Ensure proper installation Only install the charger in environments specifically mentioned in this manual. Think of it like building a house on the right foundation to avoid future problems.

Keep water way Direct water exposure can damage the charger. Opt for a sheltered location for optimal performance and longevity.

Avoid hazardous locations Never install the charger near or in areas with flammable materials like gasoline, explosives, chemicals, or steam. Treat it like keeping lighters away from fireworks for safety!

Avoid electromagnetic interference Strong magnetic fields and wireless transmitters can disrupt the charging process. Choose a location free from such interference.

Seek shade Direct sunlight can impact the charger's performance. Opt for a shaded area for efficient charging.

Extreme weather warning Extreme weather conditions, like heavy rain, snow, or scorching heat, can compromise the charger's functionality. Avoid using it in such circumstances.

EV manual matters Before charging your specific electric vehicle with this product, always consult its manual for any additional safety instructions or compatibility detail.

Protecting the Product

- Keeping safety marks, warning signs, nameplates, and cabling marks intact ensures you have readily available safety information.
- Never insert fingers or sharp objects into any product component. Curiosity can lead to injury.
- Don't submerge the charging connector in water.
- Resist the urge to disassemble, repair, or modify the product yourself.
- Avoid dropping, squeezing, or piercing the product.
- Don't fold, crush, or damage any component with sharp objects.

Stick to your vehicle Only connect the charger to a vehicle, not other devices. Mixing and matching can lead to trouble or damages.

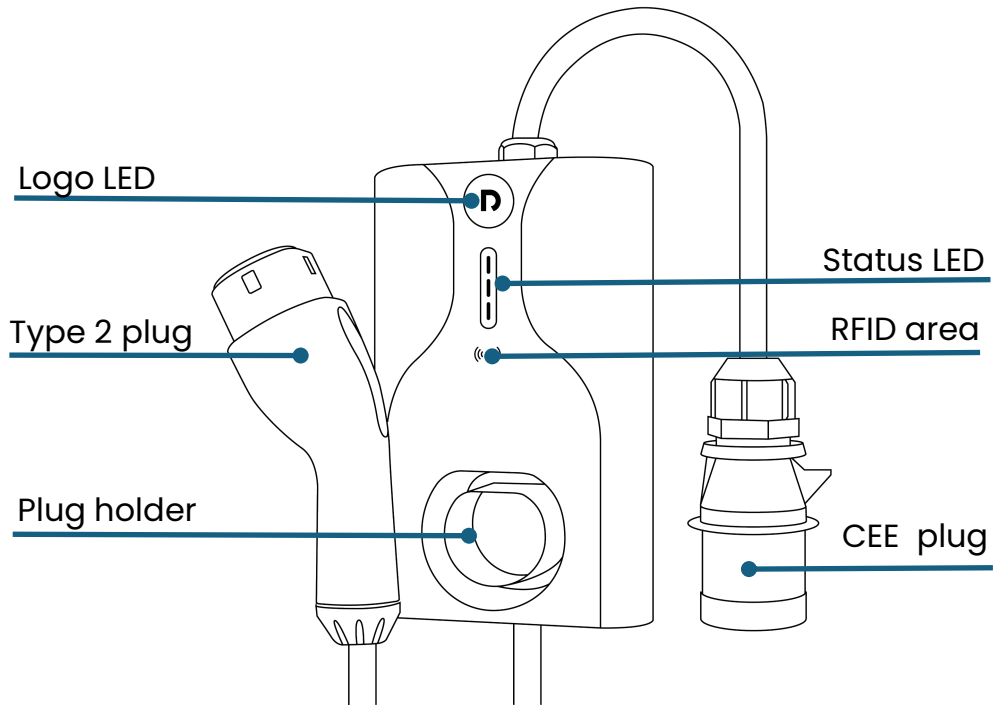
WARNING

This product shall only be installed, repaired or serviced by certified electricians. All applicable local, regional and national regulations for electrical installations must be followed strictly.


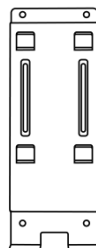




Notice of PIN Code

The PIN code is required for the charger register in the APP and located on the front of the quick guide, and on the back of the charger. Once the charger is registered in the APP, please reset a PIN Code.

1. Product overview



2. Accessories

			
Travelling bag		Wall bracket X1	
			
Wall mounting screw X4	Plastic anchor X4	Security screw X2	RFID card X2

3. Specification

Feature and Function	Cable
Charging mode	AC Mode 3
Charging connector	Type 2 with cable
AC power output	7/11/22KW
Mounting options	Wall mounted or pedestal
HMI	Logo LED, Status LED
Load management	Via APP
Communication	
Interface	Wi-Fi, BLE,4G(optional)
User authentication	RFID, APP, Plug and Charge
Backend protocol	OCPP 1.6 JSON
Software upgrade	OTA via APP, OCPP
Electrical Design	
Power supply	Single phase: 230VAC \pm 20%, 50/60Hz Three phase: 230/400VAC \pm 20%, 50/60Hz
Earthing system	TN/TT/IT
Protection	UVP, OVP, OCP, Relay Stuck, Over Temperature
RCD	Type A + 6mA d.c. per IEC 62955
Energy metering	\pm 2% Accuracy
General Design	
Operating temperature	-30 to 55°C with derating mechanism
Operating altitude	2500m
Environmental rating	Indoor and outdoor, IP65, IK10
Enclosure dimension	260x168x86 (mm)
Net weight	4.1kg

4. Installation planning

4.1 Household grid system evaluation

The installer needs to evaluate the available electrical capacity at the installation site to ensure that it can handle the installation of an EV charger. Protection limit is based on max. 80% of the fuse rating, which can be set in the RAEDIAN APP.

Rated Power	Earthing System	Voltage	Max. charging current
7KW	TT, TN, IT	230VAC ±20%, 50/60Hz	32 Amp
11KW	TT, TN, IT	230/400VAC ±20%, 50/60Hz	16 Amp
22KW	TT, TN, IT	230/400VAC ±20%, 50/60Hz	32 Amp

4.2 RCD requirement

- A Residual current monitor device is integrated inside the charger, the charger will stop charging in case residual current exceeding 6mA d.c. is detected, according to IEC 62955.
- The RCD is automatically tested between each charging session.
- The integrated RCD has no influence on the function of external protective devices.

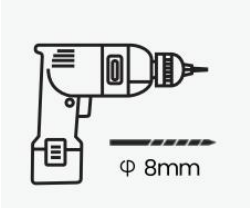



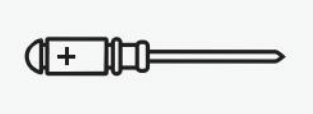
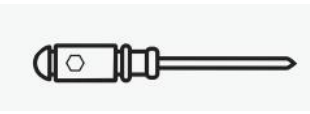
An external RCBO is required shown as below.

Input	Specification	Remark
Single phase	2P, 40A RCBO, at least Type A, Characteristic B/C	50 Amp is recommended if the ambient temperature is higher than 40°C
Three phase	4P, 40A RCBO, at least Type A, Characteristic B/C	

4.3 Recommend cable size

Rated Power	Max. charging current	Cross sectional area
7KW	32A	6mm ² to 10mm ²
11KW	16A	2.5mm ² to 10mm ²
22KW	32A	6mm ² to 10mm ²

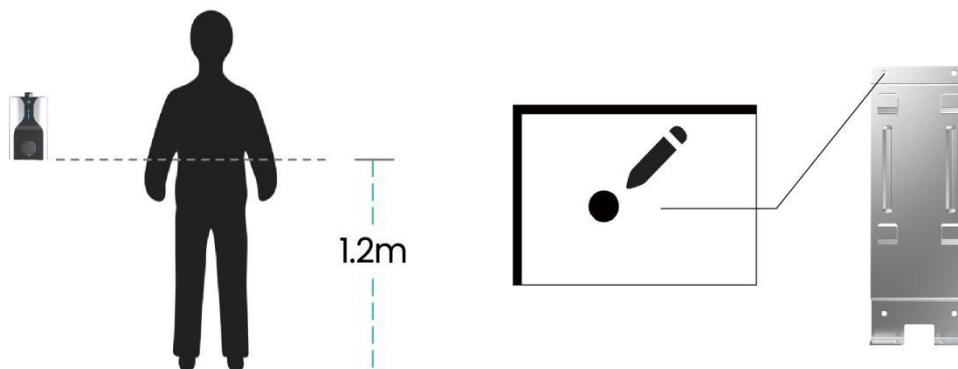
4.4 Suggested Installation Tools

<p>Power drill</p> 	<p>Multimeter</p> 	<p>Tape measure</p> 
<p>Marker</p> 	<p>Phillips screwdriver</p> 	<p>Hex wrench M4 (3/32)</p> 

5. Installation instructions

5.1 Positioning

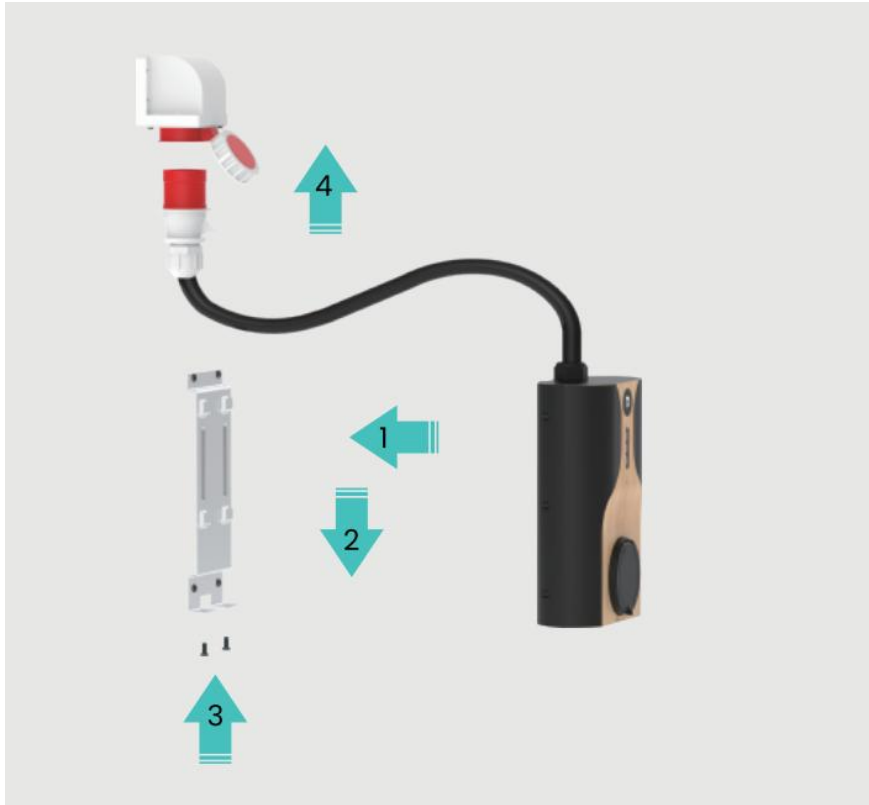
- Ensure that the installation surface is solid enough to hold the charger. It is recommended that the wall have a bearing capacity of at least 100 kg.
- Place the backplate on the wall, keep it horizontal, and use a marker/pencil to mark the hole drilling positions on the wall.



5.2 Mounting

- Use an electric drill to open four holes in the wall at the marked positions, the recommended depth and diameter, Insertion depth: 50 mm; φ 8mm.

- Insert four plastic anchors into four openings.
- Use four wall-mounting screws to fasten the wall bracket.
- Hang the charger on the wall bracket.
- Use two security screws to tighten the device.
- Plug into CEE socket.

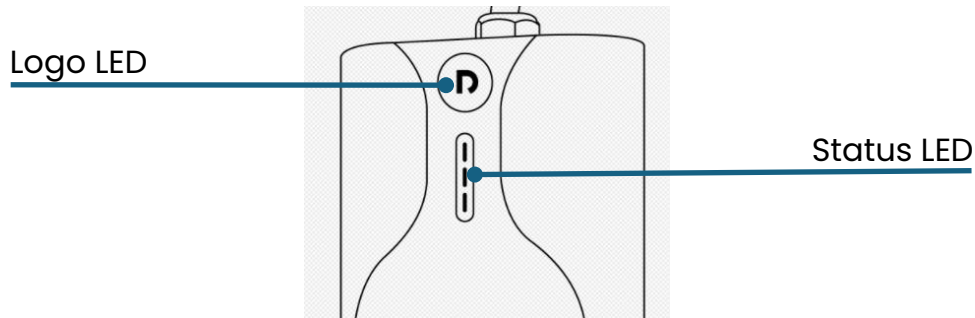


6. Installation Acceptance Inspection

6.1 Power On

Power on the charger. The logo LED will be steady on after booting.

6.2 LED indicators



Status	Logo LED Description	Status LED Description
Standby, available for charging	White, steady	Off
Cable plugged in, waiting for authorization or waiting for EV	Blue, steady	Blue,running
Charging in progress	Cyan, breathing	Cyan, breathing
Charging Complete	Cyan, steady	Cyan, steady
Error	White, steady	Red, steady

6.3 EV Charging test

- Plug in the charging cable into your EV socket inlet
- Charging session will start immediately with safe start current of 10 Amp.
- Change the access and the charging current of the charger, please follow the next step to connect with your phone.

6.4 Connect with your phone

Scan the following QR code and download RAEDIAN APP. Open the Bluetooth of your mobile phone and get close to the charger and get connected.



Scan the QR code
Find out more about NORA's App

RAEDIAN

Zhejiang Raedian New Energy Technology Co., Ltd
No.3, Shuangbai Road, Yuanhua Town, Haining City, 314416
Zhejiang
China