NIO Power

NIO Power Home 3.0 User Manual

About This Manual

Product Specifications

All specifications and descriptions contained in this document are verified to be accurate at the time of your download. However, NIO reserves the right to make modifications at any time for continuous improvements.

Copyrights

Safety Information

Important Safety Instructions

This document contains important instructions and warnings that must be followed when installing and maintaining your Power Home 3.0.

This product shall only be installed, repaired or serviced by an authorised electrician. All applicable local, regional and national regulations for electrical installations must be respected.

Warnings

Warning: Please read the instructions carefully before using the product.

Warning: Minors are not allowed to operate this product.

Warning: During use, the Power Home 3.0 must be grounded via a permanent wiring system.

Warning: Do not install or use the Power Home 3.0 near flammable, explosive, harsh, or combustible materials, chemicals, or vapors.

Warning: Turn off input power at the circuit breaker before installing or cleaning the Power Home 3.0.

Warning: Use the Power Home 3.0 only within the specified operating parameters.

Warning: Never spray water or any other liquid directly at the wall-mounted control box. Never spray water onto the charging plug or submerge the charging plug in liquid. Put the charging plug in the plug holder to prevent unnecessary exposure to contamination or moisture.

Warning: Do not expose the Power Home 3.0 to excessive contact with water and never touch the Power Home 3.0 and cables with wet hands. This leads to the risk of electric shock, which can cause serious or fatal injuries. Do not aim a strong jet of water at or against the Power Home 3.0. Never operate the Power Home 3.0 with wet hands. Never immerse the charging plug in liquids.

Warning: Install the product out of reach of children and animals

Warning: Do not use the Power Home 3.0 if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.

Warning: Do not attempt to disassemble, repair, tamper with, or modify the Power Home 3.0. Contact NIO for any repairs or modifications.

Warning: Do not forcefully fold or apply pressure to any part of the Power Home 3.0 or damage it with sharp objects.

Warning: Do not insert foreign objects into any part of the Power Home 3.0.

Warning: Do not use private power generators as a power source for charging.

Warning: Do not operate at temperatures below -30℃ or above 50℃

Warning: Do not attempt to install Power Homer 3.0 alone. 2 persons are required to install this device.

Warning: An external type A residual current circuit breaker with a rated residual current of 30 mA AC must be installed to operate the Wallbox.

Notes

Note: Ensure that the charging cable of the Power Home 3.0 is properly positioned so it will not be stepped on, driven over, tripped over, or otherwise subject to damage or stress.

Note: Do not use cleaning solvents to clean any components of the Power Home 3.0. The exterior of the Power Home 3.0, the charging cable, and the connector end should be periodically wiped with a clean dry cloth to prevent accumulation of dirt and dust.

Note: Be careful not to damage the circuit boards or components during installation.

Specifications

Item	Parameters
Rated Input	400 V AC 32 A 50Hz
Rated Power	22 kW
Output Current	12-32 A
Rated Output	400 V AC 32 A 50 Hz
Operating Temperature	-30℃ to +50℃
Connector Cable Length	6 m
Operating Altitude	≤ 2000 m
Operating Humidity	5% to 95%, no condensation
Enclosure Rating	IP55
Protection Degree	CLASS I
Enclosure Materials	UL94-V0 Flame retardant plastic
Charger Dimensions	222 x 350 x 137 mm (W x H x D)
Net Weight	6.3 kg
Residual Current Monitoring	≥ 6 mA DC

Residual Current Device unit:

The wallbox requires an external type A residual current device (RCD) with a rated residual current of 30 mA for operation. Each charging station in the system must be connected to the public power grid via its own residual current device and circuit breaker. A DC RCM with 6 mA is already integrated into the charging station.

Before You Begin

To improve user experience and ensure operation safety, we recommend that an NIO-authorized installation service provider inspect the installation area and install the charger.

The installation of the charger involves electrical construction that must be performed in accordance with relevant specifications and standards. Please select a qualified installation partner to ensure the construction complies with the national and local standards (if any). Failure to follow the specifications during construction may lead to safety risks, including the major risks listed below:

1. Incorrect dimensioned wires may generate heat during the charging process and impair the insulation. In serious cases, this can lead to electric shock and fire hazards.

2. Improper wiring may shorten the lifespan of wires, damage the insulation, and even cause short circuits.

3. Incorrect switch selection may cause the switch to trip during the charging process. In some cases, the switch may not cut off the power supply promptly in the event of leakage, overload, overvoltage or undervoltage, compromising equipment and personal safety.

4. Incorrect power supply point may prevent the equipment from operating properly, result in overload, and even cause large-scale power outages and irreparable damage to the equipment.

Note that the above are just some of the potential safety risks that can result from non-compliant construction. Besides, you must obtain permission from the property management company, power supply department, and firefighting department before installing the charger. If you choose to install it by electrician not trained by NIO, you shall assume all risks and losses associated with such installation. In this case NIO is not liable for any of the consequences.

The NIO Power Home comes with features such as remote control and app management. If you choose to install the charger by electrician not trained by NIO, contact NIO after installation for remote configuration, activation, and linking. Otherwise, the product may not function properly.

Installation Planning

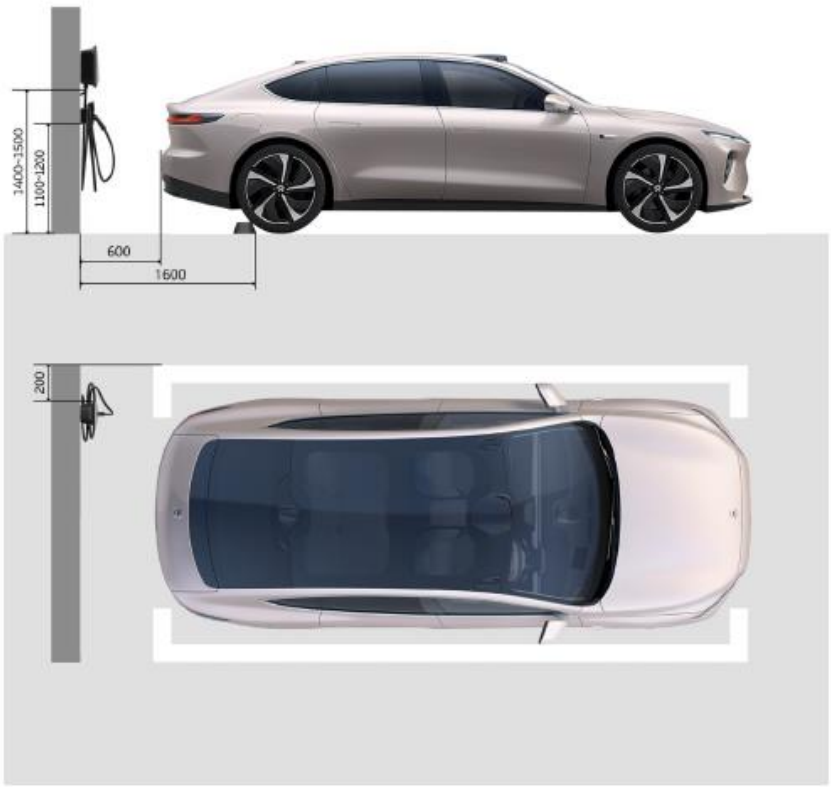
Installation Preparation

Wall-mounted Installation

We recommend installing the charger in a convenient location based on your parking habits so that the charging connector port and the reset button are easily accessible. It's best to install it on the same side as the vehicle's charging port.

For a wall-mounted installation at the rear of the parking space (as shown in the figure below), make sure the charger is located on the same side as the charging port. The center of the charger should be 0.2 m from the edge of the parking space, and the base should be 1.4-1.5 m from the ground. The center of the charging connector should be about 1.1-1.2 m from the ground and about 0.1 m from the edge of the parking space.

The wall on which the charging device is installed should be more than 1.5 m from the parking space limiter, with a clearance distance of at least 0.6m from the rear of the vehicle. In the case of limited installation space, maintain a safety distance as far as possible.



Component List

Component number	Describtion	Quantity
1	AC Charger with 6m Type 2 Connector	1
2	Connector Holder	1
3	Expansion Bolt	4
4	Packing List & Delivery Inspection Report	1
5	Spare screws with gaskets	11
6	User Manual	1

Product Schematic

Notes:

The reset button should only be used in emergencies.

Pressing this button stops the charging and the indicator light turns constant red. After pulling out the charging connector, the charger will return to its normal standby mode if no fault is detected.

If the indicator light remains constant red, please contact +00 8000 999 66 99

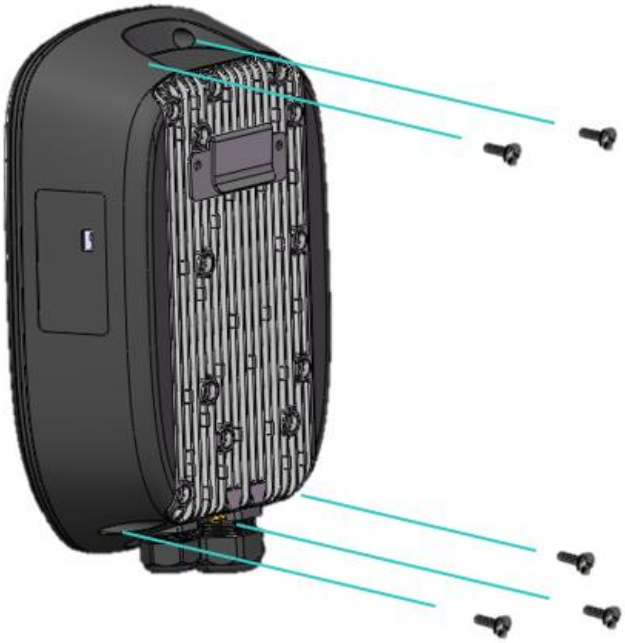
Indicator Light Display

Indicator Light Status	Charger Status
Constant blue	Idle
Pulsating blue	Charging
Constant amber	Waiting for scheduled charge
Constant green	Charging completed
Constant red	Cannot be used due to fault or warning

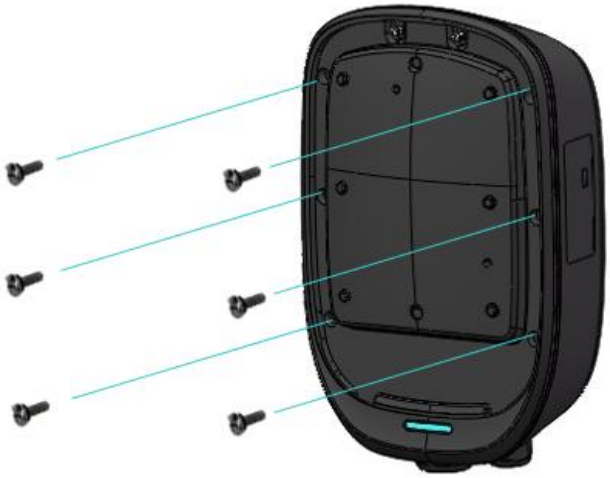
Installation Instructions

Detach Front Cover Instructions

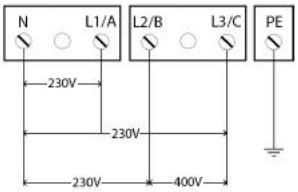
Unscrew the 5 points from the backside to open the front silver cover.



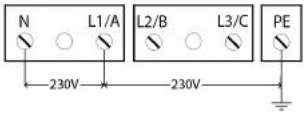
After detaching front silver cover, unscrew the 6 points to open the front black cover.



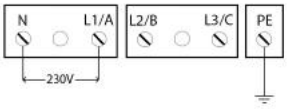
Wiring



TN system option 1: 400V 3-phase with neutral , all three phases(L1, L2 and L3) and neutral must be connected.



TN system option 2: 230V 1-phase with neutral, one of L1, L2 or L3 and neutral on the grid must be connected to the L1/A and N on the terminal block.



IT/TT system option 3: 230V 1-phase without neutral. Connect any two of L1, L2 or L3) to L1/A and N on the terminal block.

Warning: Before leading the wire to the terminal block, make sure the screw is loosen to ensure wiring has full contact with the terminal.

Restore Front Cover

Attach the front cover by screwing the above 11 points and tighten the black plastic gland cover for incoming power.

Wall-mounted Installation Instructions

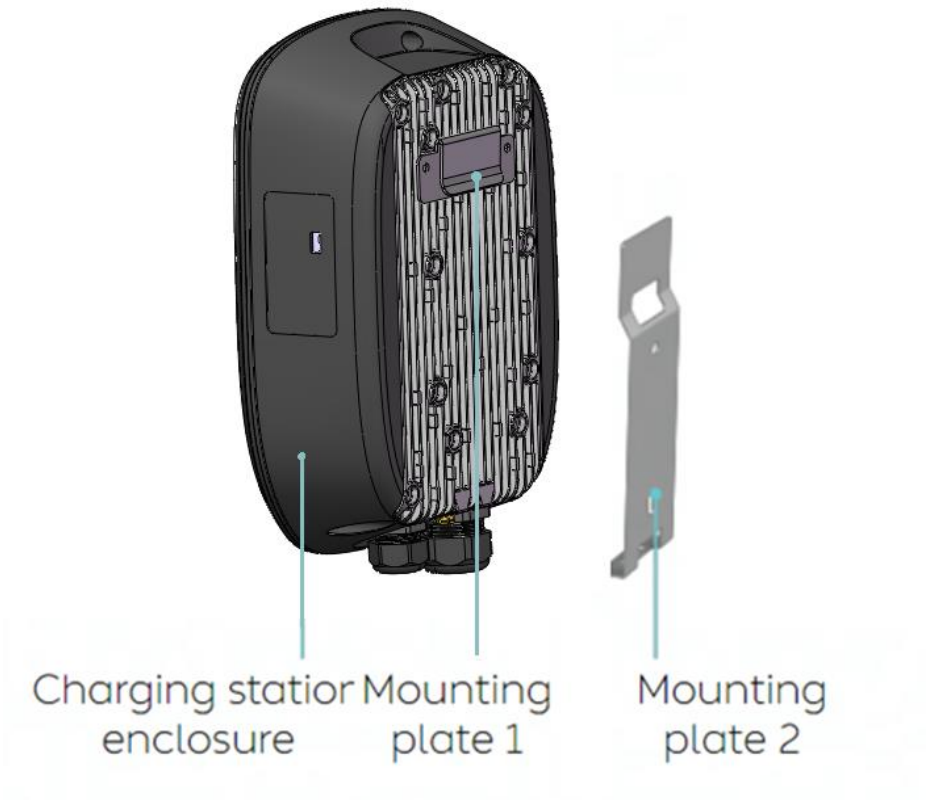
Charger Installation

Step 1: Install the M10 expansion screws on the wall at the distances marked in the figure (distance between holes: 103mm) and fix mounting plate 2 to the wall. The mounting plate should be level with a tolerance of 2mm.

Step 2: Insert mounting plate 1 on the back of the charger into mounting plate 2 and tighten the 2 screws at the bottom so that the charger is firmly held in place.

Step 3: Depending on the electrical installation environment, choose the correct circuit breaker with Type A RCD function compliant with EN 61008(RCCB), EN 61009(RCBO) or EN 60947-2.

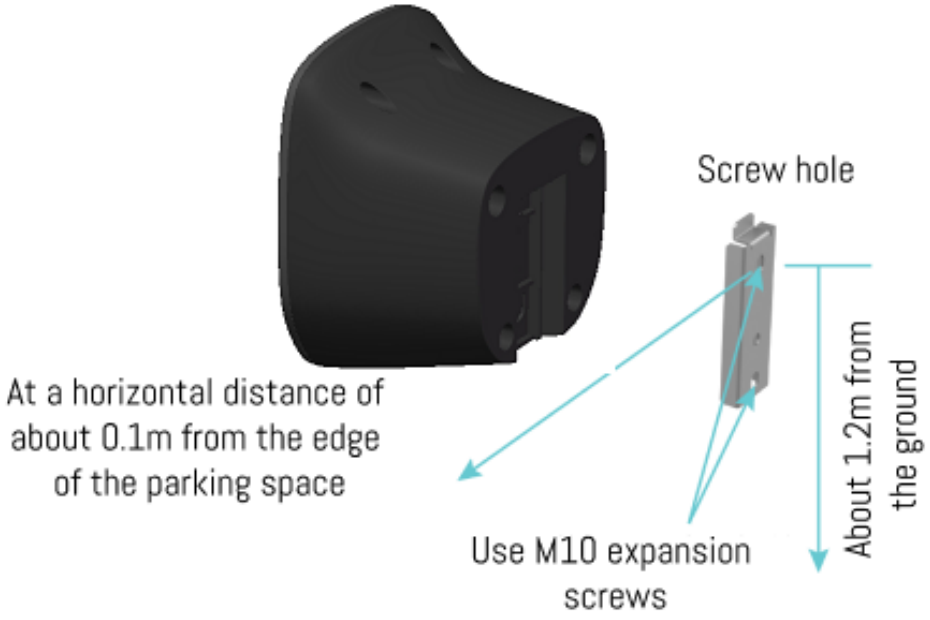
Step 4: Check that the electrical connection is secure before powering on.



Connector Holder Installation

Step 1: Use the M10 expansion screws to install the base plate relative to the connector holder as indicated in the figure below.

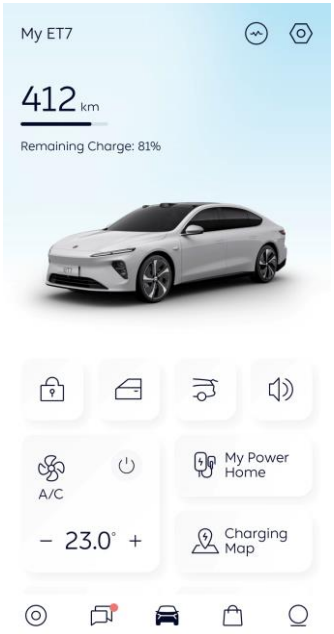
Step 2: After installing and securing the base plate in place, insert the connector holder into the slot on the base plate and fix the connector holder to the base plate.



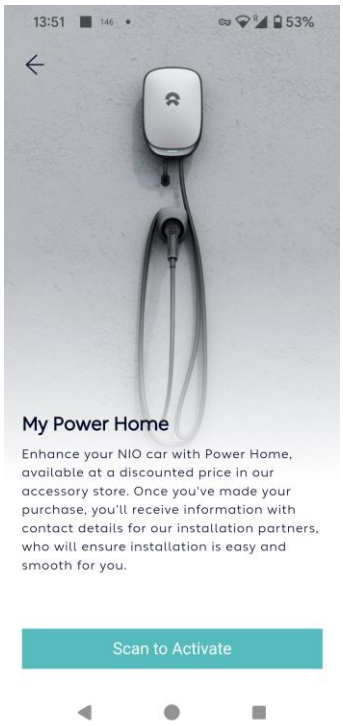
Activating Power Home 3.0 and setting up maximum charging current

A. For the user - activating Power Home 3.0:

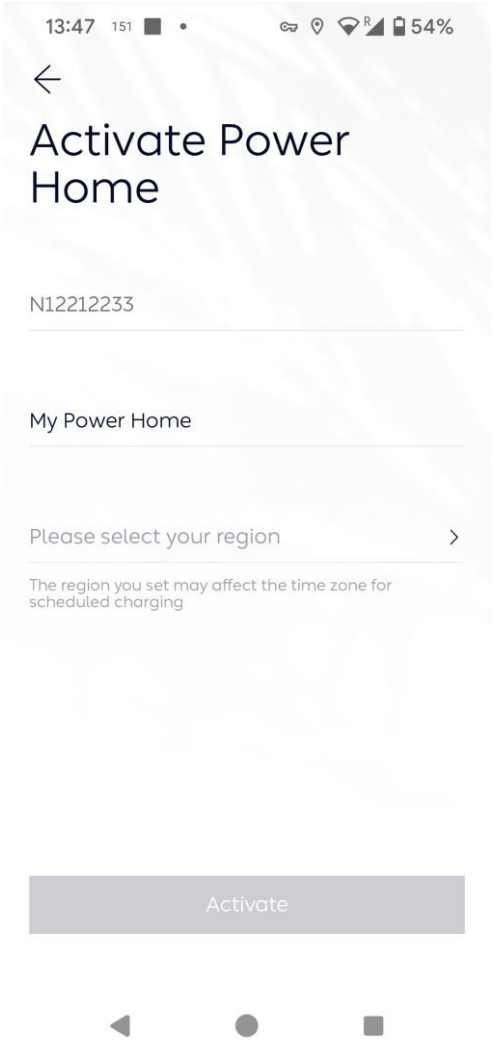
Step 1: Open the NIO app and go to *My Vehicle* and then select *My Power Home*.



Step 2: Scan the QR Code located on the Power Home 3.0 to activate the charging device.



Step 3: Name your wallbox and enter the usage location of the charging device.



B. For the electrician, setting the maximum charging current when installing the Power Home 3.0 (optional):

Notice: This function may not be available to all countries.

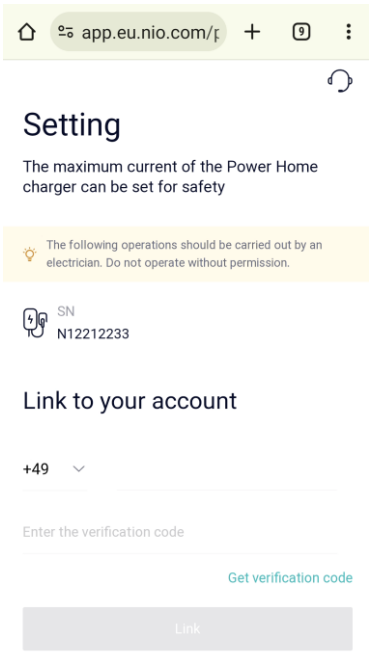
Notice: This feature requires a 4G network signal to function.

Warning: The maximum charging current of the Power Home 3.0 must be set to the maximum current that the wiring and/ or electrical insulation can permanently support. The maximum current can be configured in the NIO app via an account connected to the wallbox. Please verify max current setting in NIO app after set-up.

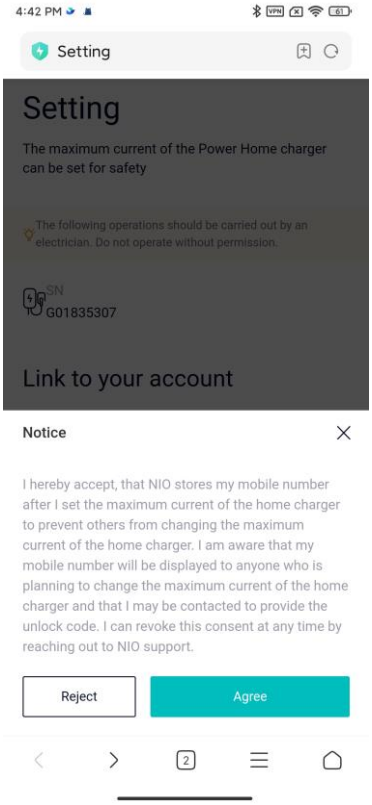
Caution: The setting of the maximum charging current by an electrician serves to operate the wallbox not over the system infrastructure dependent permissible charging current. Therefore, the phone number used to set the maximum charging current (should be the electrician) is linked to the Power Home 3.0. To change the maximum charging current when installed in a different system environment, please contact NIO at the following phone number: 00 8000 999 66 99 (EU toll free number) to unlink the phone number used to set the wallbox.

Step 1: Scan the QR code on the Power Home 3.0 using a QR code scanner on your mobile device. Often this is installed in the camera function of your mobile device. The QR code here is the same QR code that was used to activate the wallbox. For this function, you must allow location access to determine if the function has already been activated in the region.

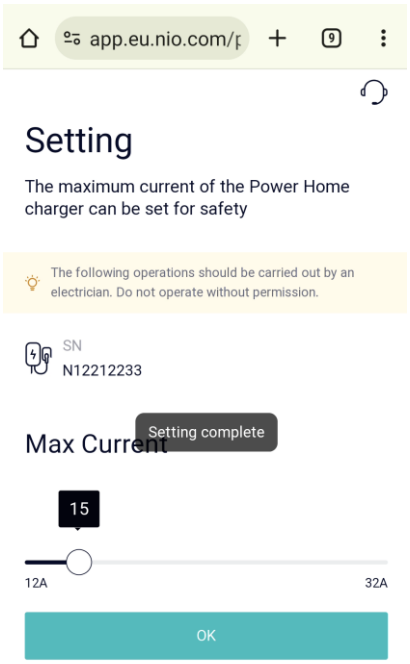
Step 2: Open the NIO website referenced in the QR code and enter your phone number to obtain a verification code.



Step 3: Enter the verification code and accept the terms and conditions.



Step 4: Set the maximum charging current and confirm your input.



C. Changing the maximum charging current within the maximum charging current setting.

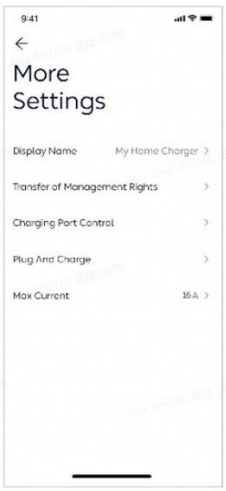
Warning: The maximum charging current of the Power Home 3.0 must be set to the maximum current that the wiring and/or electrical insulation can support permanently. The maximum current can be configured in the NIO app via an account connected to the wallbox.

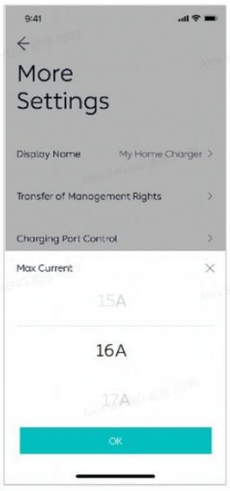
Note: If *B. For the electrician - setting the maximum charging current during the installation of the wallbox (optional)* has not been done, you have the option to set the maximum charging current between 12 - 32 A.

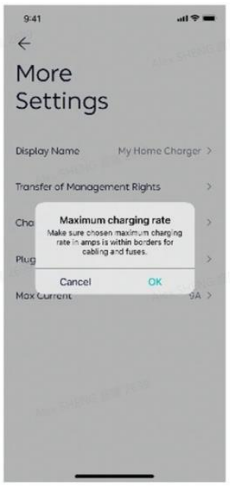
Step 1: Open the NIO APP and go to the settings of your wallbox.

Step 2: Under maximum charging current, you can select the maximum charging current of your wallbox.

Step 3: Confirm the entry.


9:41
More Settings
Display Name
My Home Charger
Transfer of Management Rights
Charging Port Control
Plug And Charge
Max Current
16 A


9:41
More Settings
Display Name
My Home Charger
Transfer of Management Rights
Charging Port Control
Max Current
15A
16A
17A
OK


9:41
More Settings
Display Name
My Home Charger
Transfer of Management Rights
Maximum charging rate
Make sure chosen maximum charging rate in amps is within borders for cabling and fuses.
Cancel
OK


9:41
More Settings
Display Name
My Home Charger
Transfer of Management Rights
Charging Port Control
Set successfully
Plug And Charge
Max Current
16 A

Charging Guide

Charging Connector

When the Power Home 3.0 is powered on and in the idle state, the indicator light on the charger is constant blue.

Insert the charging connector completely in the AC charging port of the vehicle.

Charging

Plug and Charge

- The charging starts immediately. The indicator light on the charger pulses blue and that on the vehicle flashes incrementally.
- The factory default setting is "Plug and Charge for ALL Vehicles".

Note: When "Plug and Charge with Bluetooth Connection" is enabled, the charging starts automatically when the charger is connected via Bluetooth from your mobile phone. Otherwise, you must start charging manually from the NIO app.

Scheduled Charge

- After the charging connector is connected, the charger does not start charging until the scheduled time, and its indicator light shows constant amber during the waiting period.
- The charging starts automatically when the scheduled time arrives, with the indicator light on the charger pulsating blue. By default, the charging ends when the vehicle is fully charged. You can also set the charging time.

Charging Completed

After the charging is completed, the indicator light on the charger turns constant green.

Unlock the vehicle, pull out the charging connector and put it back in the charging cable holder.

Using App

Remote View via 4G

When the charger is located in an area covered by 4G, you can connect to and control it remotely with the NIO app.

Close View & Control via Bluetooth

When the charger is located in an area not covered by 4G, you can connect to and control it via Bluetooth from your mobile phone from a short distance away.

Stay near the charger, enable Bluetooth on your phone, go to "My Charger" in the NIO app, and tap "Connect to Charger".

In the connection dialog that appears, tap "Pair".

Paste the Bluetooth pairing code (copied automatically) into the field to complete connection.

Go back to the NIO app for operations.

Troubleshooting

If the indicator light of the Power Home 3.0 shows constant red, go to the NIO app for troubleshooting.

EU Toll-Free Number: 00 8000 999 66 99

Product Warranty

Warranty Terms

The warranty covers quality issues arising from the design, manufacturing and raw material defects of the NIO Power Home 3.0 charging device. For any issues not covered by the warranty, fees will be charged.

Warranty Period

NIO provides a two-year warranty for the NIO Power Home charging device from the date of delivery.

Warranty Exclusions

This warranty does not cover:

• Aging, damage to the paint, and wear and tear from normal use;

• Repair, modification, disassembly or part replacement by a person or company which is not authorized by NIO;

• Damage caused by improper storage conditions, including but not limited to liquid infiltration;

• Damage, including deformation and staining, caused by incorrect operation, abnormal physical strain, use in abnormal working environments, vandalism or improper use;

• Faults or damage caused by improper installation according to local regulation or failure to follow the instructions in this User Manual;

• Damage caused by faults on the electrical system that the charging device is connected to;

• Damage caused by fire, flood, earthquake and lightning;

• Any other event considered as force majeure under local law.

Disposal

This electronic equipment can not be disposed of with household waste. There may be places that receive and collect old units for free in your area. Follow local regulations for correct and environmentally friendly disposal. If the old electronic equipment contains personal information, you are responsible for deleting it before giving it away.

Declaration of Conformity

EU DECLARATION of CONFORMITY

Identification of the product:	***Power Home 3.0 EU*** ***Electric vehicle charging equipment***
Full name and address of the manufacturer:	***NIO Energy Devices and Equipments (Wuhan) Co., Ltd*** ***Room 219, Building 6, No.117 Zuoling Rd, Zuoling Town, Wuhan, P.R. China***
Product Model:	***PH100 AC 11/400-6R300-EU***

We (the listed manufacturer), declare under our sole responsibility that the object of the declaration described above is in conformity with the following EU Directives:
2014/53/EU, Radio equipment;
2011/65/EU (as amended by 2015/863/EU), RoHS (Restrictions of Hazardous Substances);

References to the relevant harmonized standards used or references to the specifications in relation to which conformity is declared:

The following harmonized standards have been applied:

Radio Spectrum(Article 3.2)：	*EN 300 328 V 2.2.2:2019* *EN 300 330 V 2.1.1:2017* *EN 301 511 V12.5.1:2017* *EN 301 908-1 V 15.2.1:2023* *EN 301 908-2 V 13.1.1:2020* *EN 301 908-13 V 13.2.1:2022*
Health and Safety (Article 3.1a)：	*EN IEC 62311:2020* *EN 62479:2010* *EN IEC 61851-1:2019*
Electromagnetic Compatibility (Article 3.1b):	*EN IEC 61851-21-2:2021* *EN IEC 61000-6-1:2019* *EN IEC 61000-6-3:2021* *EN 301 489-1 V 2.2.3:2019* *EN 301 489-3 V 2.3.2:2023* *EN 301 489-17 V 3.2.4:2020* *EN 301 489-52 V 1.2.1:2021*
RoHS (Restrictions of Hazardous Substances):	*EN IEC 63000:2018*

Subject to correct installation, maintenance and use conforming to its intended purpose, to the applicable regulations and standards, to accepted rules of the art.

This declaration becomes invalid in the case of any modification to the products not

authorized by the manufacturer.

This Declaration of Conformity is issued under the sole responsibility of the manufacturer.

Person signed for and on behalf of the above named manufacturer:

Place and date: *2024/8/29, China*

Name, function: *Guangzhi Tan, Head of Production Management and Operation & Product Development & Director*

Address: *Floor 7-9, Building 23, 1999 Yishan Road, Hongqiao Town, Minhang District, Shanghai, China*

Signature: