



no wallbox. no problem.

User manual

NEcharge One



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General information

This user manual contains important information on how to set up and use your NEcharge One and the optional adapter safely.

Before using the NEcharge One for the first time, read the manual carefully, especially the safety instructions.

Legend



Non-switched protective earth conductor



Lowest environmental temperature



Do not dispose in unsorted household waste



Indicates danger.
Failure to follow the safety instructions can result in death and injury as well as damage to the device.



CE-Declaration of Conformity:

The full text of the EU Declaration of Conformity is available on page 11 or at the following internet address:

www.necharge.at/support



Safety instructions

Failure to follow the safety instructions can result in death and injury as well as damage to the device. NEcharge GmbH rejects any liability for any resulting claims

Intended Use

NEcharge One may only be used for charging battery-powered electric vehicles (BEV) and plug-in hybrid vehicles (PHEV). No extension cables or adapters not provided by the manufacturer may be used. The NEcharge One housing must be mounted at least 30 cm above the ground.

Exclusion of Liability

NEcharge GmbH declines any liability for damage caused by disregarding the operating instructions, safety regulations or warnings on the device. Removing and damaging the warning labels attached to the NEcharge One, opening the device or making any modification to the device will result in the loss of any liability and warranty by NEcharge GmbH

If you have any questions, please contact support.

Before starting

The device must be visually inspected for damage to the housing, defects on the type 2 plug, 16 A CEE connector red and on the cables before every use.

The device cannot be put in operation if it is damaged or if the components are damaged or worn out.

A charging environment without direct sunlight is recommended. Do not connect the NEcharge One to sockets through which water can run into the NEcharge One housing or plug.

The optionally supplied adapter may only be used in combination with the NEcharge One and for charging battery electric vehicles (BEV) and plug-in hybrids (PHEV). The use of extension cables, cable drums, multi-socket outlets or third-party adapters is not permitted.

The NEcharge One enclosure must be mounted at least 30 cm above the ground.

National regulations may require lower charging currents, therefore the maximum permitted charging current of the connection must be observed. If this is unknown, charging must be carried out with the lowest charging current.

Store the NEcharge One and the adapter in a clean and dry place when not in use. The cable must be stored rolled up, not bent or twisted.

If you have any questions, please contact support.

⚠ Risk of fire, electric shock, explosion and short circuit

Before disconnecting the 16 A CEE plug, the charging process on the vehicle must be stopped. Unplugging under load can lead to dangerous sparks.

The device can generate sparks that can ignite dust and gases and may not be used in rooms with an increased risk of explosion.

Plug connections are not allowed to be released by applying mechanical force to the cable, but only by interaction with the plug connector system directly.

Only connect the red 16 A CEE connector to a CEE 16 A socket that has been inspected and installed by qualified personnel.

No repairs, modifications or alterations may be carried out on the device. Repairs are only permitted by the manufacturer.

If damage to the NEcharge One occurs during the charging process, disconnect it immediately, if possible by switching off the mains fuse. Never touch electrically conductive parts.

Do not insert any objects into the connector systems.

Technical data

Product features

Dimensions (l, w, h)

302 mm x 124 mm x 93 mm

Weight

NEcharge One 2,5 kg

Adapter domestic plugs 0,4 kg

Connection cable

CEE plug red

Charging output 400 V 3-phase

4,2 kW up to 11 kW

Charging current 400 V 3-phase

up to 16 A

Charging output 230V 1-phasig

1,4 kW up to 2,3 kW

Charging current 230V 1-phasig

up to 10 A

Mains frequency

50 Hz

Environment

Installation location

Indoor and outdoor use without the affect of weather conditions such as rain, snow or direct sunlight

Operating temperatur

-25 to +45 °C / +-5 degrees deviation

Storage temperature

-40 to +85 °C

Altitude

2000 m

Relative humidity

95 %

Status display

yes

Charging current settings

yes

Charging current levels

6 A, 8 A, 10 A, 13 A, 16 A

Protection class

IP67

Protective switch

DC 6 mA

AC 30 mA

Communication interface

WIFI

OCPP 1.6J

Scope of delivery

Mobile charging cable 11 kW

Mode 2 charging cable, 5 meters

Type 2 connector (European Standard)

CEE connector red 16 A, 3-phase

Quick Start Guide

Optional

Adapter domestic plugs

Product overview

(a) 16 A CEE connector (b) Housing (c) NEcharge button (d) LED-display (e) Type 2 connector (f) Label

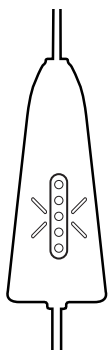


Start-up

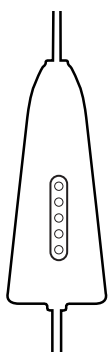
If you experience any problems during start-up of the NEcharge One or if any states on the LED display (d) are not described, please take a look at the chapters "Operating modes" and "Error messages".

- 1** Connect the red 16 A CEE connector (a) to a CEE 16 A socket that has been inspected and installed by qualified personnel.
- 2** Wait until the automatic self-test is successfully completed and the LEDs (d) light up continuously white. The NEcharge One is now ready to charge.
- 3** Optional: To adjust the charge current setting, visible on the label (f), in 5 steps, press and hold the NEcharge button (c) for 3 seconds until the LEDs (d) flash blue. Use the button to make the requested setting (f). The setting will be saved after 30 seconds. In order to enable the communication interface, press and hold the NEcharge button (c) for 10 seconds until the LEDs (d) light up cyan. Further information can be found in the document "User manual NEcharge One OCPP" as download on our homepage.
- 4** Connect the type 2 connector (e) to your vehicle.
- 5** The active charging process is indicated by green pulsing LEDs (d). Charging is stopped when the LEDs (d) are continuously green.
- 6** To unlock and unplug the NEcharge One, stop the charging procedure using your car control system.

Operating modes

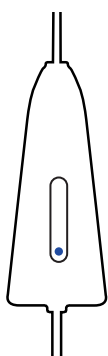


Self-test in progress – LED flashes white (d)

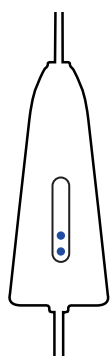


Self-test successfully completed – LED-display continuously white (d)

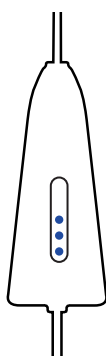
1 LED



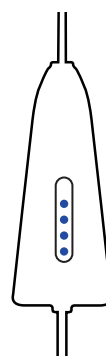
2 LED



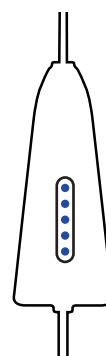
3 LED



4 LED



5 LED



Display 6 A

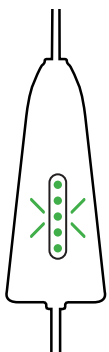
Display 8 A

Display 10 A

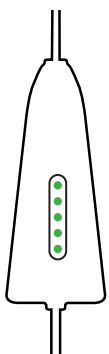
Display 13 A

Display 16 A

Charging

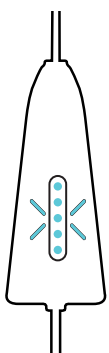


Active charging – LED-display pulsing green (d)



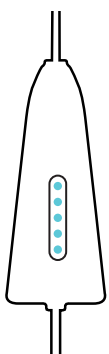
Charging completed – LED-display continuously green (d)

Communication interface



OCPP configuration mode – LED display pulsating cyan (d)

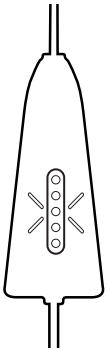
Further information can be found in the document "[User manual NEcharge One OCPP](#)" as download on our homepage.



OCPP mode – LED display continuously cyan (d)

Further information can be found in the document "[User manual NEcharge One OCPP](#)" as download on our homepage.

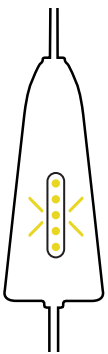
Error message



Continuous self-test – LED display pulsating white (d)

Reason: 1. over- or undervoltage
2. overtemperature of the 16 A CEE connector (a) or the housing (b)

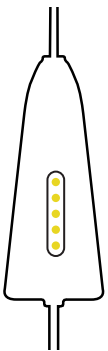
Information: The self-test will continue as long as the main power supply voltage or the operating temperature are not in the specified range.



Error: No protective earth conductor – LED pulsating yellow (d).

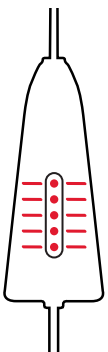
Reason: Detection of a missing protective conductor at 16 A CEE plug (a).

Information: The device can be operated without protective conductor (IT networks). By pressing the NEcharge button (c), a charging process without protective conductor can be initiated.



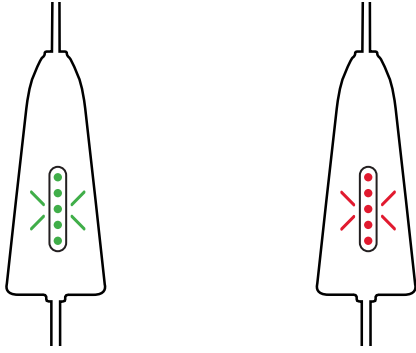
Initialisation: Charging without a protective earth conductor – LED yellow steady light for 30 seconds (d)

Information: Charging without a protective earth conductor is initialized. Another self-test is then carried out.



Error: Permanent – LED flashing red (d)

Information: Please disconnect type 2 connector (e) and 16 A CEE connector (a) and restart start up. If this error still occurs, contact support.



Error: Temporary – LED-display (d) alternating pulsating green and red

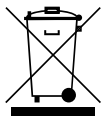
Reason: 1. Over or under voltage
2. Overtemperature of the 16 A CEE connector (a) or housing (b)

Information: As long as the main power supply voltage or the operating temperature are not in the specified range, the charging process is paused.

Cleaning and maintenance

The NECharge One must be disconnected from the car and main power supply before cleaning. The device can be cleaned with a slightly moist wipe. Do not use any aggressive cleaning products or solvents. The device is maintenance-free (see safety instructions / start-up).

Disposal



The "Do not dispose of with unsorted municipal waste" symbol requires separate disposal of used electronic equipment waste. According to the WEEE directive, electronic equipment (may contain potentially dangerous and environment-hazardous substances) must not be disposed of with household waste after the end of use. Take the device to a designated collection point for used electronic equipment waste in accordance with national legal regulations. Dispose of the product packaging in an appropriate manner so that it can be recycled.

The manufacturer participates in recycling schemes under the WEEE Directive Germany: WEEE-Reg.-Nr. DE 62457147

CE-Certification

The manufacturer is fully responsible for issuing the CE-Certification:

NEcharge GmbH
Johann-Sebastian-Bach-Gasse 16
8010 Graz
Austria

Identification and specification of the product for which this CE-Declaration has been issued:

Product name: NEcharge One

Mobile charging cable: Maximum charging output 11 kW, maximum charging current 16 A

Approved use: NEcharge One and the supplied Adapter domestic plugs may only be used for charging battery electric vehicles (BEV) and plug-in hybrid vehicles (PHEV). No extension cables or adapters, not provided by the manufacturer, may be used. The NEcharge One housing must be mounted at least 30 cm above the ground.

The manufacturer declares the conformity of the product as described above with the following relevant regulations of the European Union when used as approved:

E DIN EN IEC 62752
In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)

DIN EN IEC 61851-1
Amendment 1:2021-06 Conductive charging systems for electric vehicles

E DIN EN IEC 62196-1
Plugs, sockets, vehicle couplers and vehicle connectors - Conductive charging of electric vehicles

DIN EN 60309-1
Plugs, sockets and couplings for industrial applications

Directive 2014/35/EU
electrical equipment (low voltage directive)

Directive 2014/30/EU
electromagnetic compatibility (EMC-directive)

Directive 2011/65/EU
Hazardous substances in electrical and electronic equipment (RoHS)

RED Directive 2014/53/EU

Signed for and on behalf of the manufacturer:



Graz, 01.04.2023
NEcharge GmbH

Patrick Hierhold,
CTO/COO



Support

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