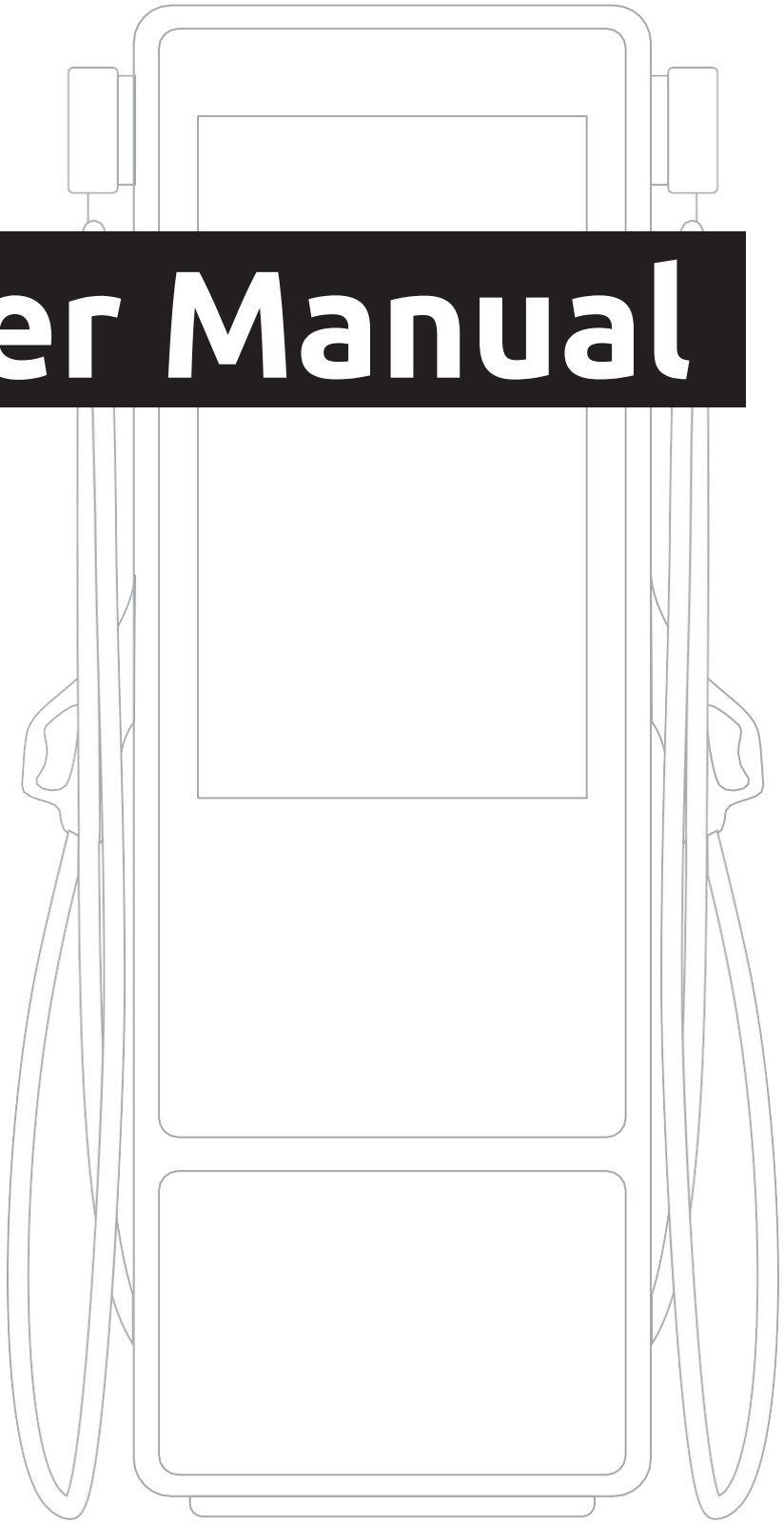
blueberry

# User Manual



PRODUCT DOCUMENTATION 1.0

Powered by i-charging

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# blueberry

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blueberry

# 1. ABOUT THE MANUAL

The purpose of this manual is to provide the operation instructions for blueberry product line.

Please make sure that this manual is carefully read and ensure that all safety notices given are followed.

All technical details, specifications and design characteristics of the product may change without prior notice. The content of this document was carefully checked, however, in case of any inaccuracy, the user is asked to report it to i-charging. This manual should be saved for future reference.

# 2. SAFETY INSTRUCTIONS

This manual must be read carefully before the installation and operation of the blueberry charging station. Incorrect operation as a result of non-compliance with the instructions provided by this manual may lead to severe injuries or damages.

The working steps described must only be carried out by qualified personnel who, based on their knowledge and experience, can assess, and carry out all steps described in this manual and recognize potential hazards. The blueberry charging station shall be installed, connected, and approved for operation according to local codes and regulations. Under no circumstances the compliance with the information in this manual relieve the user to comply with all applicable local codes and safety standards.

The user must under no circumstances make any changes to the blueberry charging station or use it in a manner that was not designed for. Any disregard of this instruction represents a safety risk and will void the warranty with immediate effect.

Damages that may occur resulting from custom installations, that are not described in this document are not i-charging responsibility.

In case of an emergency, the main switch of the switchboard power supply shall be turned off.

In case of fire, the main switch of the switchboard power supply shall also be turned off and the source of the flame must be eliminated with a class C fire extinguisher. All components of blueberry charging station are self-extinguishable which means that in case of fire, once the source of the flame has been removed, it will cease burning.

# 2.1. Safety Notices

Special warnings and safety measures may appear throughout this document or on the equipment to warn of potential hazards or to call attention.

The symbols carry the following meanings:

---

**RISK OF ELECTRIC SHOCK!**

Procedures marked with this symbol must not be carried out under any circumstances. Actions contrary to these safety notices may lead to severe injury and death.

---

**WARNING!**

Procedures marked with this symbol should be carried out with special care. Hazards that may lead to personal injuries.

---

**CAUTION!**

Procedures marked with this symbol must be carried out with special care.
Hazards that may lead to damage in the equipment itself or to other electric devices.

---

**PLEASE NOTE!**

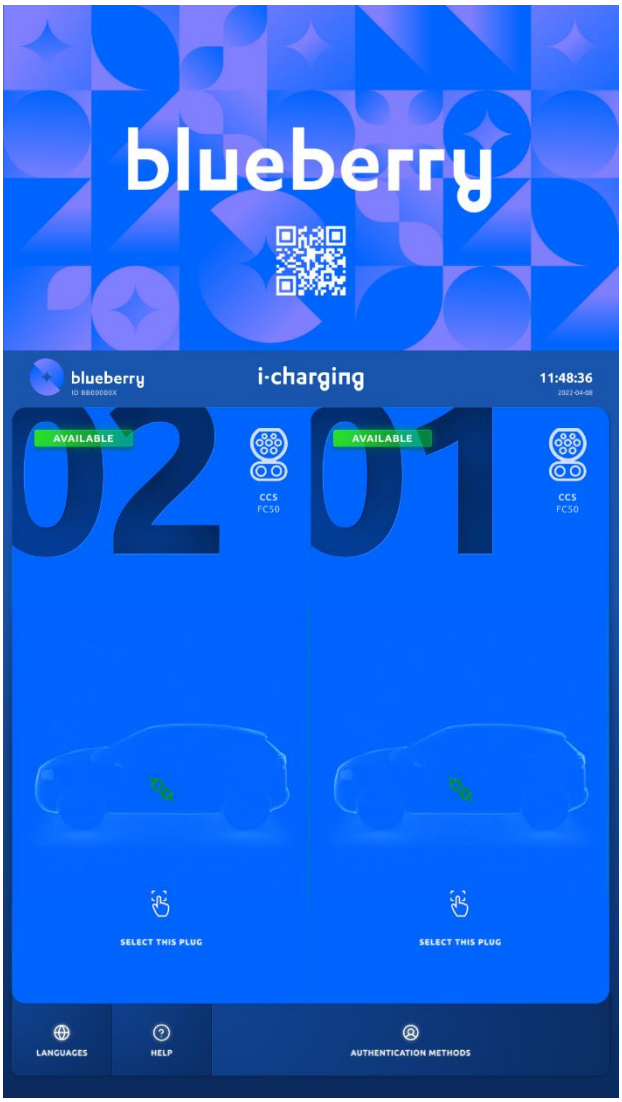
Sections marked with this symbol are intended to draw attention to important information that is necessary for the reliable operation of the blueberry charging station.

---

# 3. USER GUIDE

## 3.1. Human Machine Interface

The blueberry charging station is designed to be easy to operate and to be used by everyone. It has a full HD touchscreen display with 32'' which is partitioned in different areas as shown see in the figure below.




**Operator Free Content Area**

Static images or videos

**Charging Area**

Main operation area for the charging process

**Toolbar**

Auxiliar operation area to support the charging process. It includes authentication, language definition and help.

After an inactivity timeout, the display will change to a screensaver and a full screen for advertising will appear.

**PLEASE NOTE!**
The operator free content area is defined by the charging owner, both on full screen or in operation modes.
i-charging is not responsible for the content defined by the station owner and accepts no responsibility or liability for the accuracy or the completeness of the information and materials, as well as its content infringing any law or patent or copyright, or be considered inappropriate or offensive.

### 3.1.1. Charging Station Status

Blueberry charging station has two ways of showing the status of each output:

1. A long-range indication through the LEDs above each cradle
2. Through the operation area on the display

Each LED's color indicates a different charging station status:

- Green: Available
- Blue: In use
- Red: Unavailable

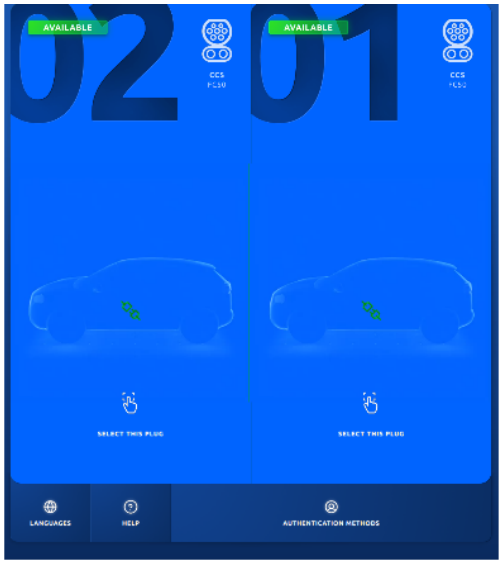
### 3.1.2. Authentication Methods

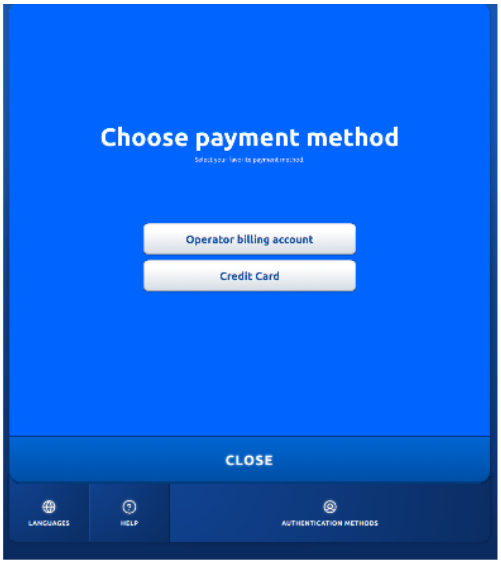
The blueberry allows three types of authentication: RFID Card, i-charging APP or Guest. The details of each type of authentication are presented below. Depending on the Charge Point Operator other types of authentication can be supported, for example: Plug&Charge; CPO APP; bank card; free access with no authentication.

**RFID Card**: The user only must hold the RFID card over the card reader to be authenticated.

**App**: The user must download the blueberry mobile app from its application marketplace or he can scan the QR code below. After that, he must authenticate himself in a i-charging station using his current operator RFID card. Then, the user just needs to pair his account with his phone application selecting the PAIR APP option in the bottom of the display.

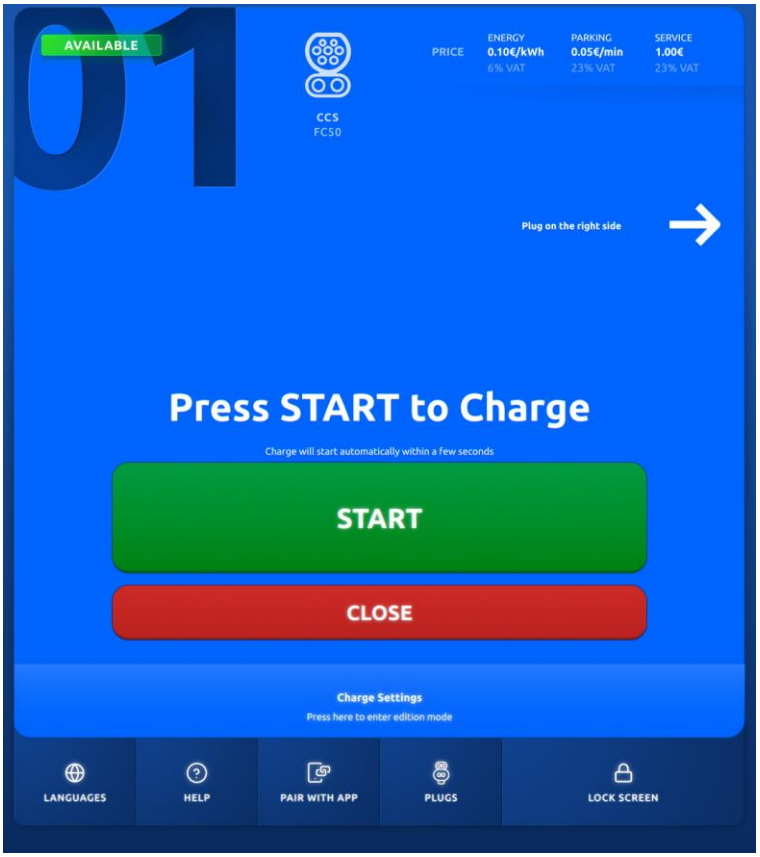
**Payment method**: The user must choose the plug he will use to charge the electric vehicle and then he will choose an authentication method. If credit card is used, to finish the charging session, the user must use the last 4 digits of the credit card number to unlock the charging session.



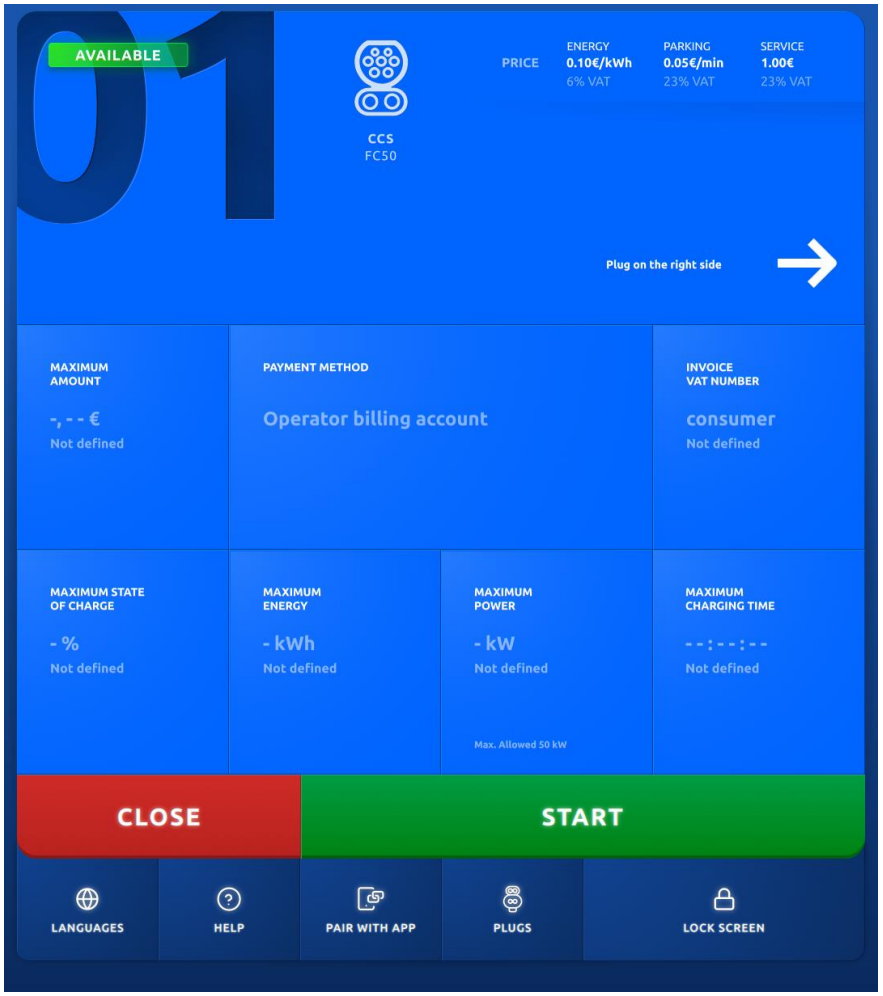
### 3.1.3. Start Charging

After successfully authenticated, the user has the possibility to start charge or choose the settings for the charging session that he will initiate.



### 3.1.4. Charging Settings

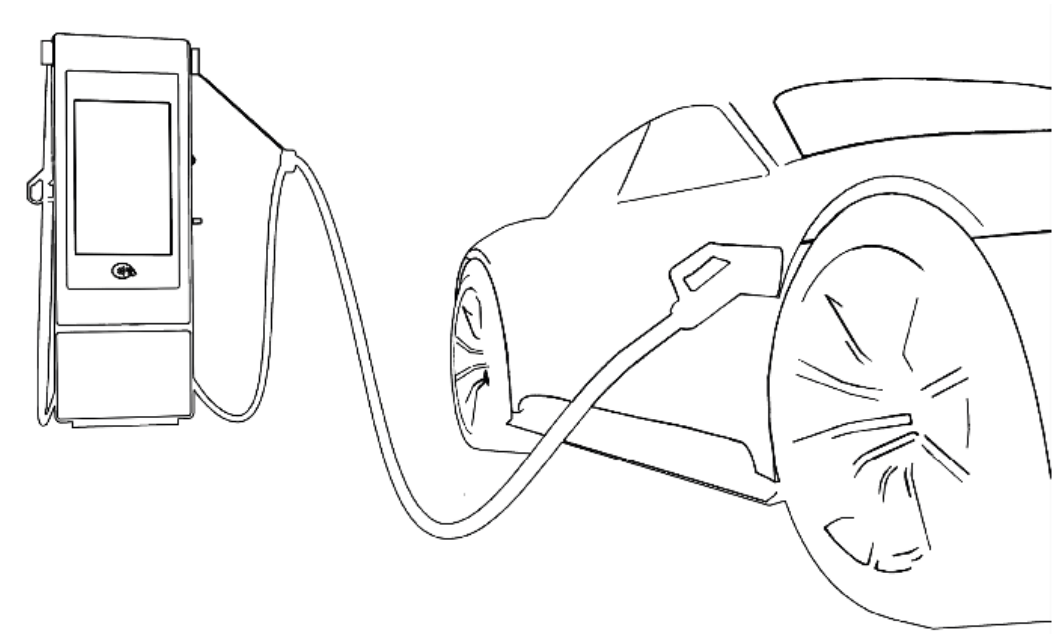
Before starting to charge, the user has the possibility to choose the settings for the charging session that he will initiate. For example, the maximum amount to spend in that charging session, the maximum state of charge, the maximum energy or the maximum charging time. The payment method used for the charging session will be shown in the charging settings.



## 3.2. Cable Management

The blueberry has also a cable management system that that can reach up to 4.7m and allows an easy handling of the cable. When needed, the user just has to grab the cable, and the system will give the cable needed without any effort.

After charging, when the user puts the connector on the holder, the system will retract the cable as easy as when it was extended.



# 3.3. Charging Sequences

To start and stop a charging session please follow the operations sequences described in this chapter. The brief description of the meaning of each symbol is presented below.

Tap the display to start or to select

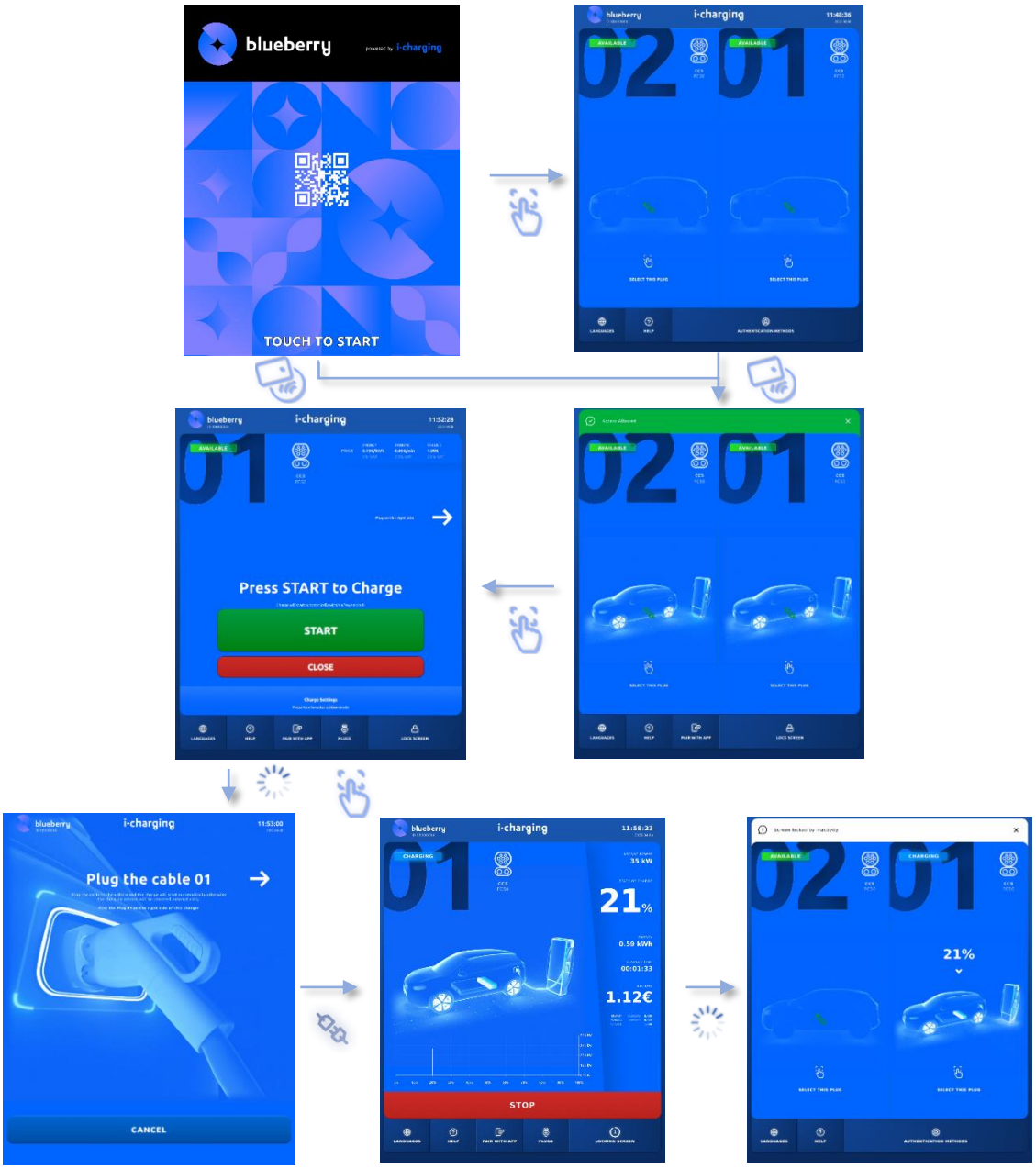
Tap the card

Wait a few seconds

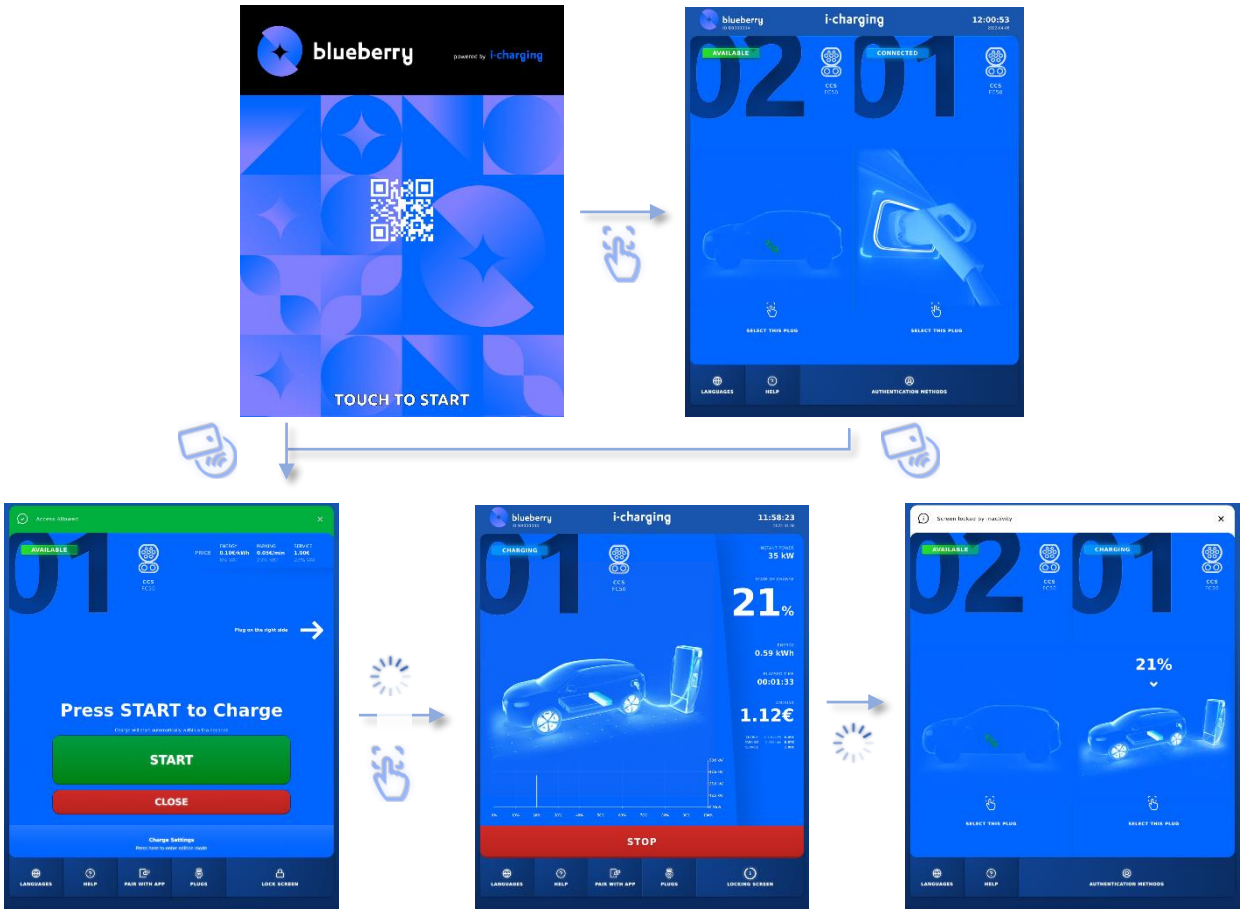
Plug the connector

## 3.3.1. Start Charging Sequence

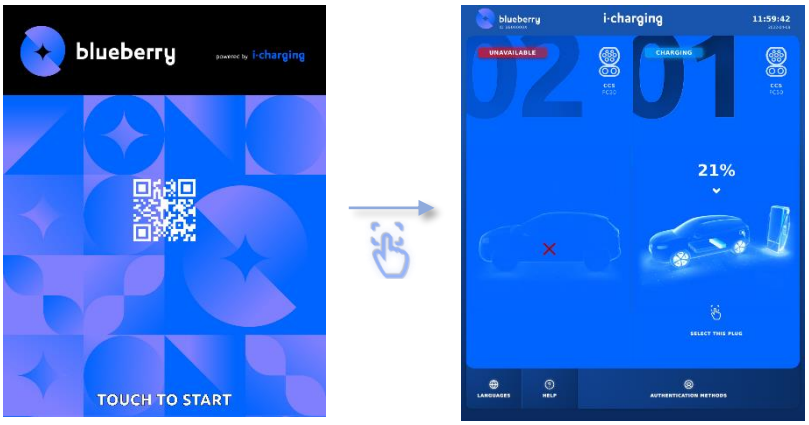
### 3.3.1.1. Charging Sequence when the plug is not yet connected



### 3.3.1.2. Charging Sequence when the plug is already connected

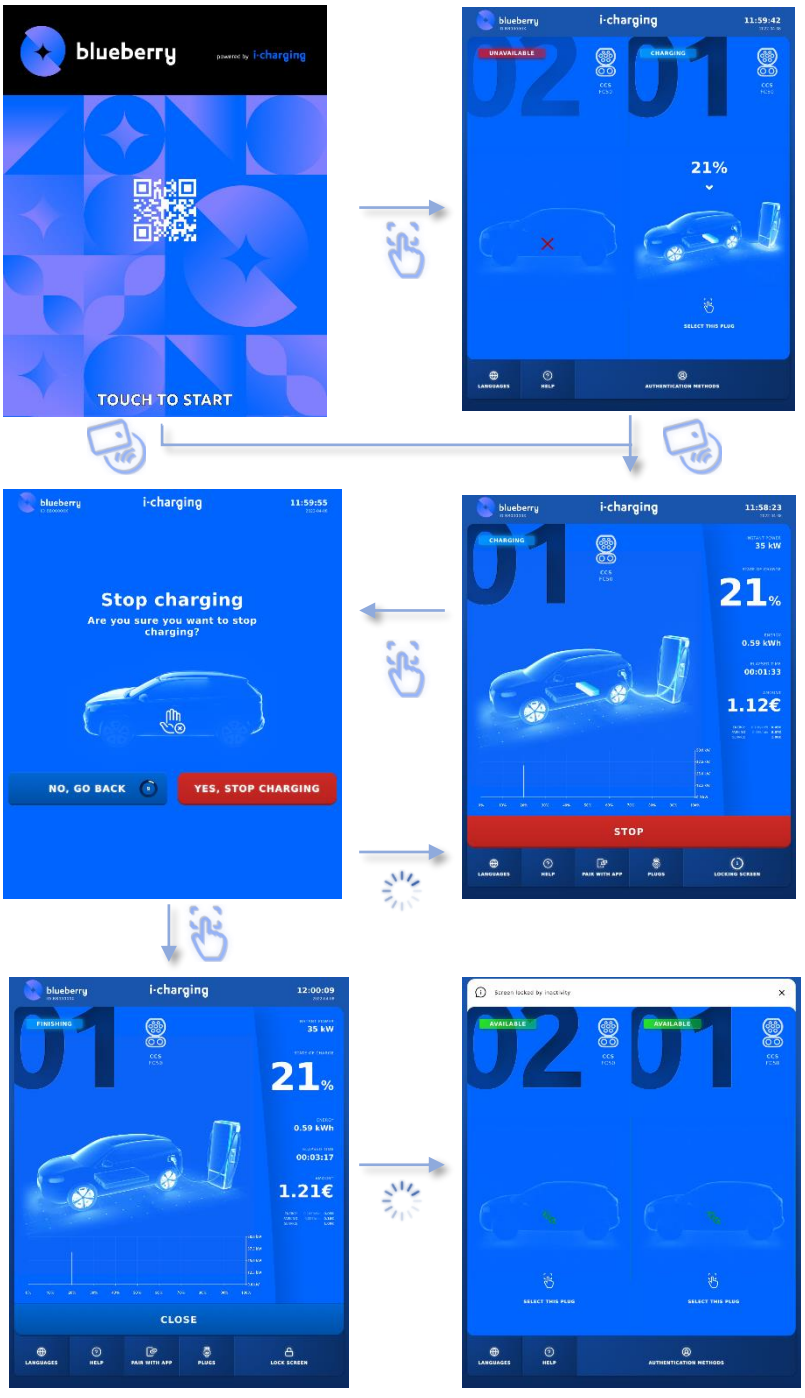



**PLEASE NOTE!**
For blueberry standalone (50 kW), when one output is already in use, if a second driver goes to the charging station, he will see the second plug unavailable. Despite that, if the sequential is enable, the user can authenticate himself, connect the plug and then the charging session will start once the other is finished.

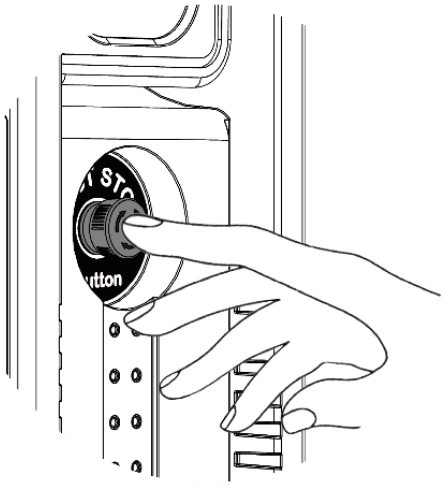


### 3.3.2. Stop Charging Sequence

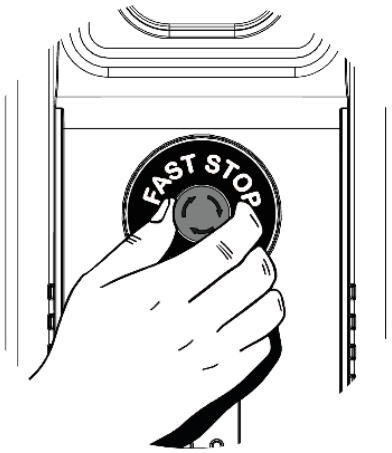
To stop the charging session, the user has to first authenticate himself, as showed in the operation sequence below.



In the event of a problem with the charging process, it is possible to press the fast stop button placed on each side of the blueberry charging station. Once pressed, the charging session will end, and it will only be possible to initiate session again when the button is released. That information will also be displayed on the HMI.



1 – Pressing the fast stop button




2 – Releasing the fast stop button

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