

# ETREL INCH

## QUICK USER MANUAL



Figure 2: Etrele INCH with socket

1. LCD screen	4. Confirmation button
2. Status light	5. Socket
3. Settings button	6. Maintenance doors

### ETREL INCH DESCRIPTION

Etrele INCH is a smart charging station that can predict your EV charging habits and help you charge the car by the time you need it, at the lowest possible cost. Charging station comes with the LCD screen that guides you through the charging process and provides important charging information.

### QUICK GUIDE

**Step 1: WAKE** - touch the screen.

**Step 2: AUTHORISE** - swipe the RFID card below the LCD touch screen.

**Step 4: CONNECT THE CABLE** – plug in charging cable into the socket and car

**Step 5: STOP CHARGING** – end the charging session directly in your car

**Step 6: AUTHORISE** - swipe the RFID card below the LCD touch screen.

**Step 7: DISCONNECT THE CABLE** – plug out charging cable from the socket.

## CHARGING SESSION

When the charging station is ready to be used you can simply follow the procedures described on the Etrek INCH's LCD screen.

You can choose between two charging modes:

- Fast charging (default)
- Interactive charging

Charging modes are chosen during the charging session.

During the fast charging your EV will be charged with the max available charging power as fast as possible. Max power is set by the installer based on the grid capabilities where charging station is installed.

When Interactive charging is chosen charging schedule will be modified based on the inserted departure time or if it is not inserted based on historic session data. Historic data is used from the first charging session onward. More charging session means more accurate session prognosis and schedules. Charging schedule will be created based on electricity prices, other loads and PV production to make sure EV is charged in appropriate time while taking in consideration other constraints.

## CHARGING PROCEDURE

### Step1: WAKE

When you come to the charging station its LCD screen will likely be in the screen saver mode. You can wake it up by simply tapping the screen.

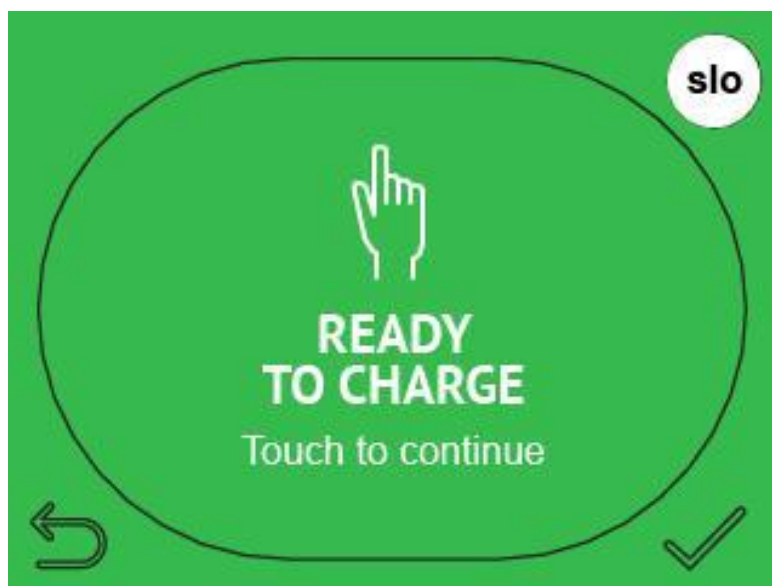


Figure 7: Screen saver

## Step2: AUTHORISATION

Depending on the charging station authentication mode chosen different screens will be shown that will need different actions from user in order to continue with the charging session.

If authentication is needed you can simply press the authentication you will use to authorize and continue with the charging session.

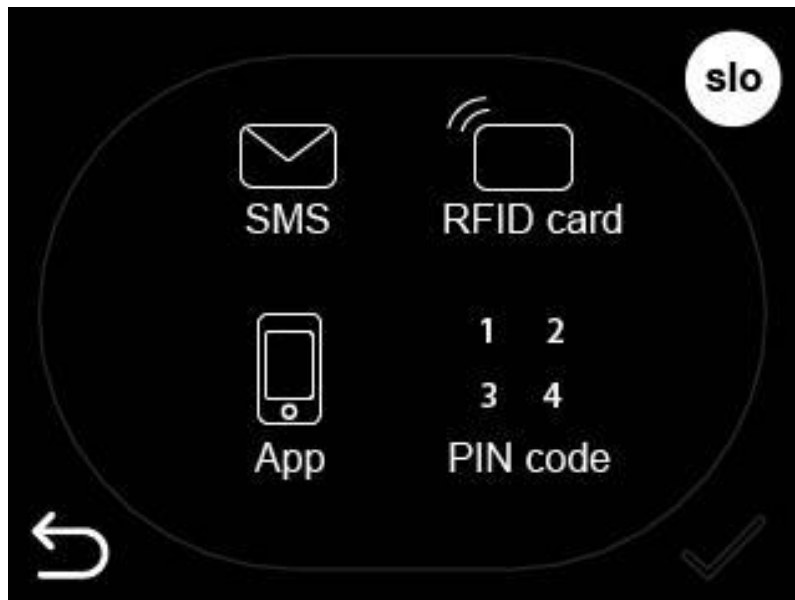


Figure 8: Chose authorisation method

### a. Swipe RFID card

By simply swiping the RFID card below the LCD touch screen where the RFID module is installed you can authorize on the charging station and begin the charging session

### b. Insert pin

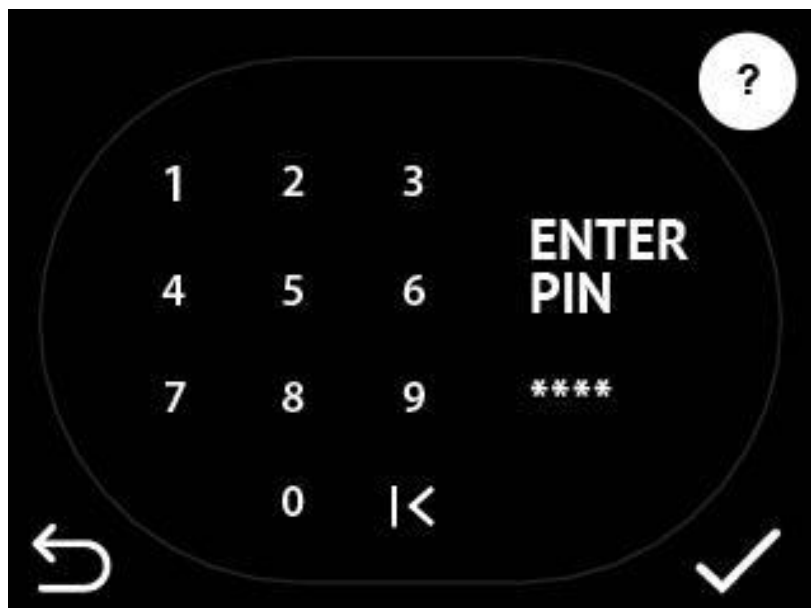


Figure 9: Insert PIN code

### c. Use mobile app to authenticate

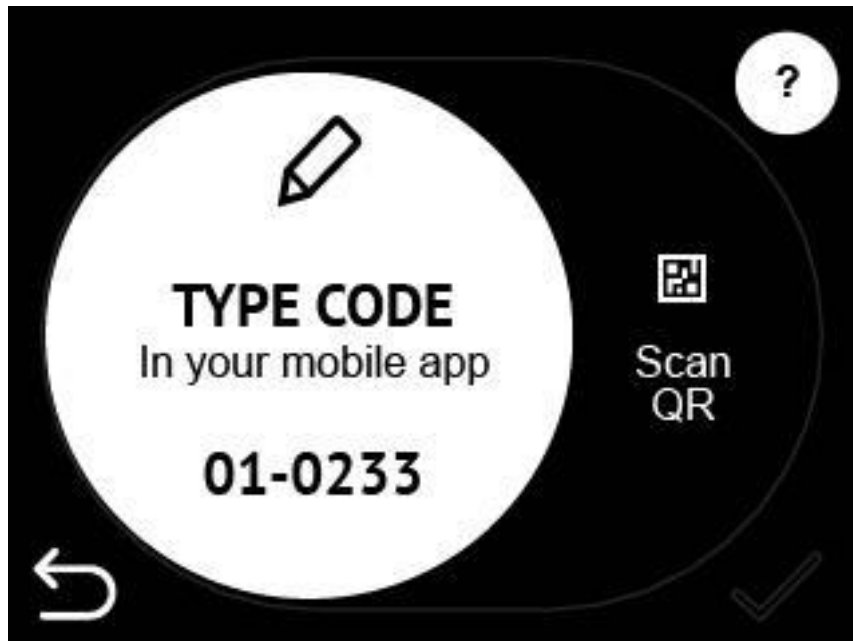


Figure 10: Insert charging station's EVSE code



Figure 11: Scan QR code

You can either type the code of the station to your mobile app or scan QR code with mobile.

### **Step3: CONNECTING THE CABLE**

After the successful authorization you are going to see the screen with the description to connect the cable.

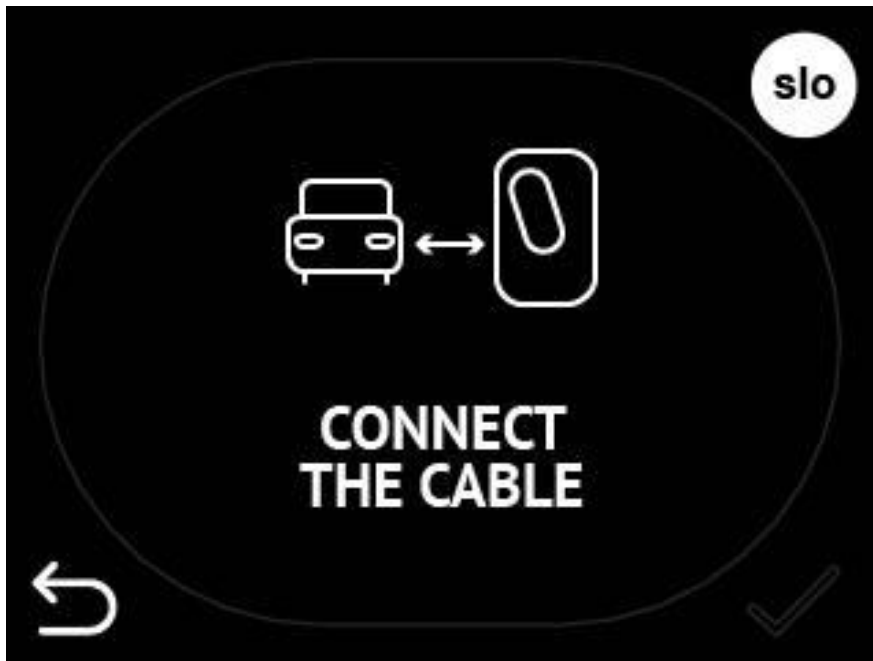


Figure 12: Connect the cable to charging station and EV

If the cable is connected before the authorisation this screen will be left out and after the authorisation next screen “Waiting for vehicle to respond” will be shown. When the cable is connected charging station will start charging as soon as EV responds.



Figure 13: Charging station is waiting for EV to responds and starts charging

#### **Step4: DEPARTURE TIME INPUT**

As soon as the charging session begins you will be presented with the screen to input your departure time. Departure time presented is the one calculated by the

charging station based on you previous charging habits. You can change the presented departure time to make sure you EV is charged.

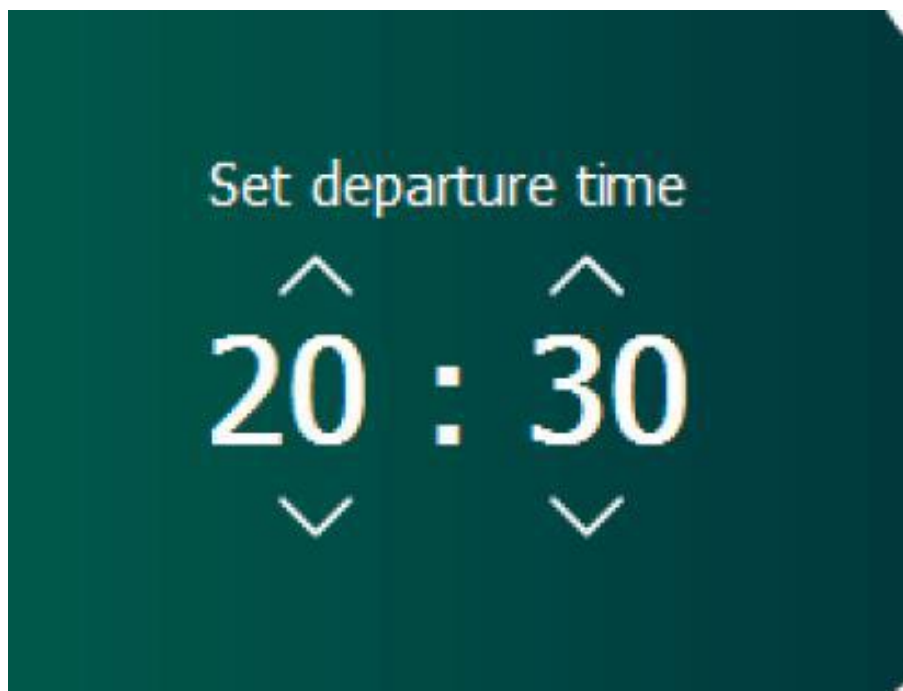


Figure 14: Set the departure time

When the departure time is set or default setting is let through charging data will be shown to you. What charging information is shown to you depends on the settings in the configuration of Web interface. Operator chooses which screens will be displayed.



Figure 15: Example of shown energy on the Etrek INCH LCD screen

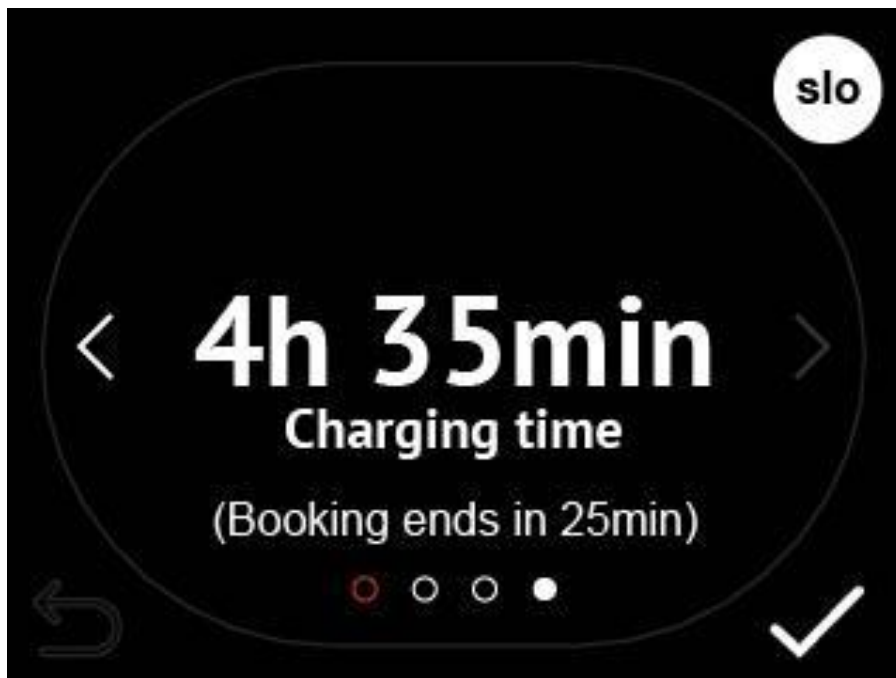


Figure 16: Display of charging time

Check status of the charging station

### STOP THE CHARGING SESSION

When you are next to charging station, you can simply end the charging session directly in your car and by disconnecting the charging cable.

### POSSIBLE EVENTS THAT MAY OCCURE:

STATUS LIGHT	NORMAL OPERATION	PROBLEM	SOLUTION
Fast blinking green light	Charging station's backup batteries are charging. At the first power, up it can take up to 10 min. If backup battery is full green light will blink slowly.	If the light is blinking fast more than 10 min there might be a problem with the backup battery.	Inform the support about the status of your charging station.
Slowly blinking green light	LCD screen is preparing to turn on. Heating system is trying	If the green light is blinking slowly for more than 10 minutes and the	You should call the support.

to heat the LCD before it is turned ON.

LCD hasn't been turned on, there might be a problem with the LCD.

Steady glowing green light

Charging station is ready to be used.

If charging station is not responding after it is powered up, something might be wrong with connection.

Check the protection elements if either RCD or overcurrent protection has been tripped. Activate the protection. If nothing helps call the support or installer.

No lights

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If charging station is not responding after it is powered up, something might be wrong with connection.

Check the protection elements if either RCD or overcurrent protection has been tripped. Activate the protection. If nothing helps call the support or installer.

Green light is blinking

LCD is turned on and charging station is ready to be used. When the LCD starts the logo will be first displayed and after that you can start using the charging station.

LCD is turned on but freezes and is unresponsive.

Try resetting the charging station. If the problem repeats there might be a problem with the software. You should call the support. You can read the resetting procedure in chapter 6 Troubleshooting.