

# EVEUS

## PRO

EVEUS – Safety zone

## User Manual

### CHARGING SEQUENCE

- ⚡ Plug the EVSE to the AC socket 120V...240V 50/60Hz.
- ⚡ Change settings if needed.
- ⚡ Plug a charging connector into a vehicle.
- ⚡ Wait until the car is fully charged (or stop charging by unplugging the charging connector).
- ⚡ If needed, disconnect the EVSE from the AC socket. If not needed, keep it plugged in.

### COMMON OPERATIONS AND DESCRIPTION

The charger display interface has two modes: "Pro" and "Normal". The choice of display mode is in the web interface settings. In "Normal" mode: **Short Press** the button on the device body to change the current strength. **Long Press** the button to switch to "Pro" mode, the transition back to "Normal" mode occurs automatically after 1 minute of inactivity. In Pro mode: **Short Press** the button to move between interface items (*move mode*). **Long Press** the button to change a parameter (*edit mode*). Exit back to *move mode* by **long** pressing or automatically after 10 seconds. The **red** cursor indicates *move mode* and highlights the currently selected parameter. The **green** cursor corresponds to the *edit mode*. The screen automatically turns off after 60 seconds, and reactivation occurs with a **short** button press. **Gray** color shows inactive functions. White color shows active ones.

### «PRO» DISPLAY INTERFACE

Description of the parameters on the display of the charger.

1. Charger status.
2. Charger IP address.
3. Firmware version.
4. Maximum allowed current.
5. Current power.
6. Available current in adaptive mode.
7. Voltage threshold for adaptive mode.
8. Measured current.
9. Measured input voltage.
10. Time and electricity consumed for the charging session.



11. Independent electricity meter A
12. Independent electricity meter B
13. Total electricity counter for all time
14. Control and ground status
15. A) Adaptive mode  
T) Time limit  
E) Energy limit  
M) Money limit  
Schedule 1  
Schedule 2  
S) Charge now - ignore all limits and schedules  
R) Current limit to 16A
16. Charger status
17. Built-in battery voltage
18. Current time

## Charger Status (1)

1. **White Battery** – Ready to charge.
2. **Green** – Charging in progress.
3. **Blue** – Paused by vehicle.
4. **Red** – Error
5. **Gray** – Blocked

## Protective ground control (14)

In the active state (white icon), the charger will monitor the presence of grounding and block the device if there is no grounding. A missing ground is shown with a crossed-out icon. In the inactive state (grey icon), only the ground state is displayed, with no blocking. This feature depends on the local standards and may not be available.

## STATUS

«Normal» mode	«Pro» mode	Web-Interface	Description
<b>Errors</b>			
Current Limit	Status Good	Ready/Charging/Waiting	No errors or restrictions
LEAKAGE	Leakage!	High/Low Leakage	The RCD worked. Leakage current exceeded.
NO GROUND	No ground!	No ground	There is no proper grounding.
TEMP RELAY	Overheat!	Overtemperature	Exceeded temperature in the controller or mains plug.
TEMP PLUG	Overheat!	Input socket overheating	
OVERCURRENT	Overcurrent!	Overcurrent	Exceeding the set current by 150%.
OVERVOLTAGE	Overvoltage!	Overvoltage	Mains voltage is higher than 260 V~.
RELAY ERROR	Relay error!	relay error	Relay is not operating correctly.
UNDERVOLTAGE	Voltage < 180V	Low voltage	The voltage is below the set threshold.
INTERNAL ERR	Internal error		Restart the charger or contact support.
UNKNOWN	EVSE state minus EVSE state F	-	Change the timer type in the web application.
UNKNOWN	Evse state D		Restart the charger or contact support.
UNKNOWN	Evse state E		Restart the charger or contact support.
<b>Limits and schedule</b>			
LIMIT BY TIME	Blocked by T value	Limited by time	Time limit exceeded
LIMIT BY ENERGY	Blocked by E value	Limited by energy	Electricity limit exceeded
LIMIT BY MONEY	Blocked by M value	Limited by money	Money limit exceeded
SCHEDULE	Blocked by Schedule	Limited by schedule	Charging blocked by schedule
DISABLED	Blocked by User	Limited by user	Charging blocked via the web interface

### DIRECT CONNECTION TO THE EVSE VIA WI-FI

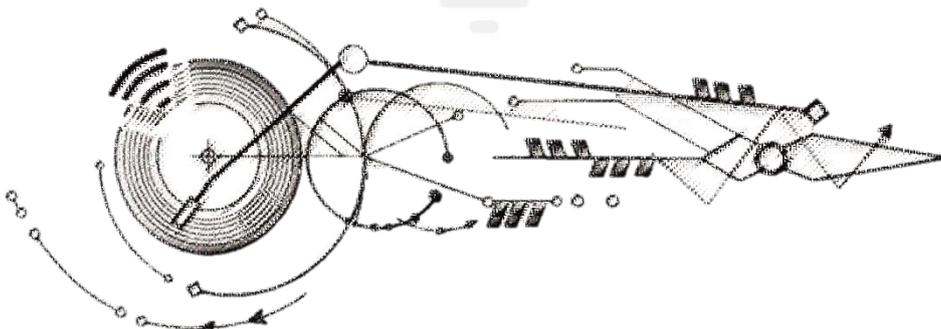
- ✦ If necessary, turn off the mobile internet on the device. This only applies to some devices.
- ✦ Turn on Wi-Fi on this device.
- ✦ In the menu of available Wi-Fi networks, find and connect to **AP\_EVSE\_XXXX** (serial number).
- ✦ In the browser's address bar, enter the IP address of the charger **192.168.4.1** or scan the QR code and follow the link.



### CONNECTING THE CHARGER TO THE WI-FI ROUTER

After connecting the charger to a Wi-Fi router, you can connect to it from any device within your local network.

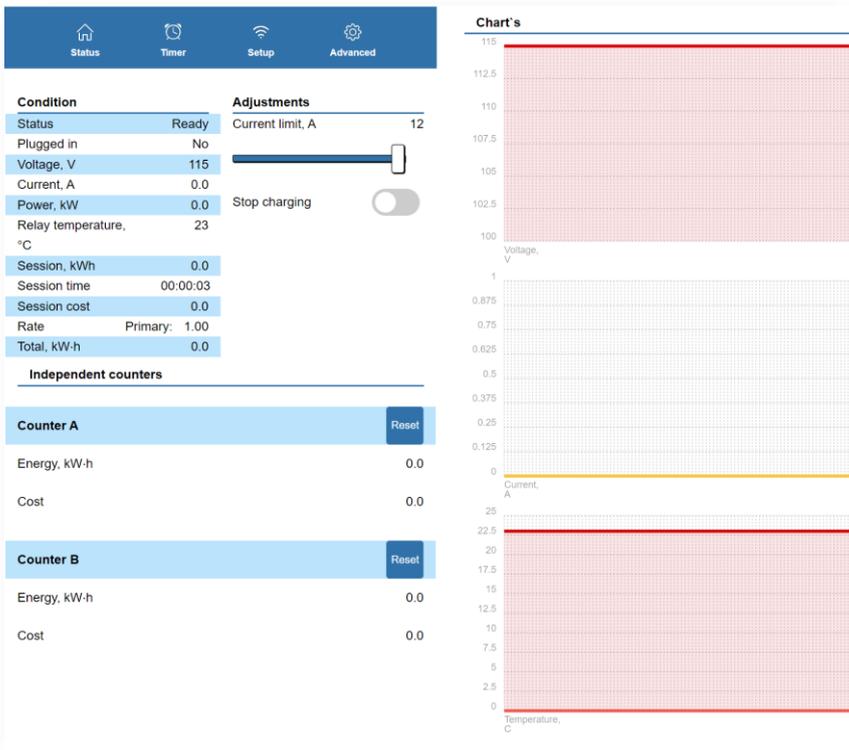
- ✦ Make a direct connection as described in the chapter above.
- ✦ In the web application, go to the "Settings" tab and set the "Connect to Network" slider to the active state.
- ✦ Press the "Search" button and wait until available Wi-Fi networks are found.
- ✦ From the list of found networks, select the one you want to connect to and click on it. The name of this network will automatically populate the SSID Name field in the Wi-Fi Network Configuration section.
- ✦ Enter the password for the Wi-Fi network in the SSID Password field in the "WiFi Network Configuration" section and click the "Save" button.
- ✦ The charger will reboot for the changes to take effect.
- ✦ The charger display will show the new IP address given by your router. To connect to the web interface, enter this IP address in the browser address bar, on a device connected to the same WiFi network.



## WEB-INTERFACE

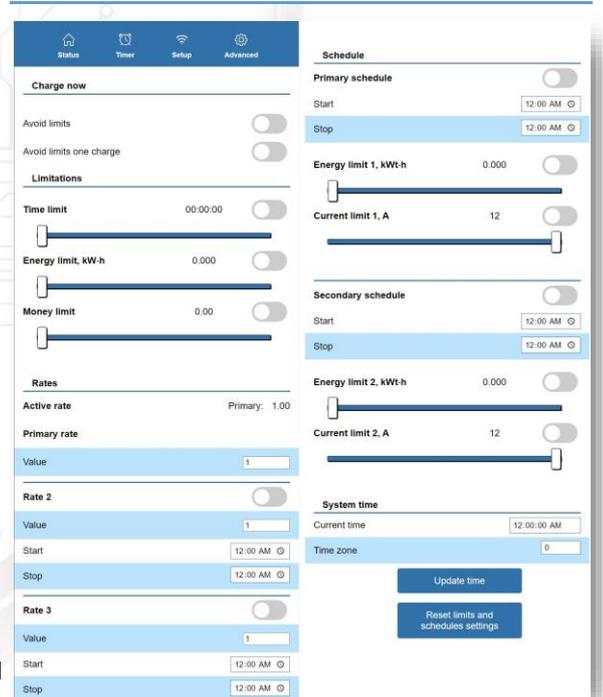
Allows you to configure or monitor the readings of the charger through any browser after connecting to Wi-Fi.

### Tab «Status»



- ✦ **Status** – Real-time status of the EVSE.
- ✦ **Plugged in** – state of connection of the charging connector to the car.
- ✦ **Voltage** – Input voltage.
- ✦ **Current** – Measured current.
- ✦ **Power** – Measured power.
- ✦ **Relay temperature** – Temperature of the relays.
- ✦ **Session** – Electricity consumed during the current session.
- ✦ **Session time** – Elapsed time since the beginning of the current session.
- ✦ **Session cost** – Amount in currency for the current session.
- ✦ **Rate** – Current rate and price.
- ✦ **Total** – Total energy meter for all time.
- ✦ **Counter A/B** – Independent counters which store separated energy and cost history.
- ↔ **Current limit** – Adjustment of the maximum allowable charging current.
- 🔘 **Stop charging** – Stop charging session.
- Charts** – real-time graphs: voltage, current and temperature of the board.

### Tab «Timer»



- 🔘 **Avoid limits** – Disable all limits on the current page.
- 🔘 **Avoid limits one charge** – Disable all limits for the one charging session.
- 🔘 **Time Limit** – The charger will turn off after reaching the time limit. The slider sets the value in hours.
- 🔘 **Energy Limit** – The charger will turn off after reaching the energy limit. The slider sets the value in kWh.
- 🔘 **Money Limit** – The charger will turn off after reaching the cost limit. Cost is calculated by multiplying the rate by kWh.
- ✦ **Primary rate value** – Common cost of electricity per kWh.
- ✦ **Rate 2/3** – The cost of electricity per kWh during the set time period. Priority is higher than the primary rate.
- 🔘 **Rate 1/2** – Activate current rate.
- 🔘 **Primary/Secondary schedule** - Sets the time range in which charging is allowed.
- 🔘 **Energy Limit 1/2** – Disables charging when the power limit set by the slider is reached. Works only within the specified time range.
- 🔘 **Current Limit 1/2** – Allowed charge current for the given time range. Works only within the specified time range.
- ✦ **Current time** – system time of the real-time clock module.
- ✦ **Time zone** – Time zone to set according to your geographic location.
- 🔘 **Update time** – Set up the system time equal to the time on the connected device.
- 🔘 **Reset limits and schedules settings** – Disable all limitations on the current tab.

## Tab «Setup»

**WiFi AP Configuration**

AP Name: Grizzl-E\_CDC8

AP Password: [input field]

Confirm password: [input field]

**Local WiFi configuration**

Connection:

WiFi Name: ssid

WiFi Password: [input field]

Confirm password: [input field]

Connect by MAC address:

MAC address of the router: [input field]

**Available networks**

Search [button] Save [button]

**WiFi info**

Local IP address: N/A

MAC address of the unit: 24:D7:EB:23:CD:C

**Page access**

Name: [input field]

Password: [input field]

Confirm password: [input field]

Save [button]

⚡ **AP Name** – The name of the charger's Wi-Fi network.

⚡ **AP Password** – Password from the Wi-Fi network of the charger. By default, there is no password. However, you need to enter one to prevent unauthorized access to the device.

**Connection** – Allows charger to connect to the router using the data entered below.

⚡ **Local IP address** – The IP address given to the charger by the router's DHCP server. By which you can connect to the charger.

⚡ **MAC address of the unit** – MAC address of the charger.

⚡ **Wi-Fi Name** – Wi-Fi network of your router to connect to the charging station.

⚡ **Wi-Fi Password** – Wi-Fi password for your router.

**Connect by MAC address** – Connects the charger to a router with a specific mac-address, which must be entered in the field below. It may be necessary when several routers have the same SSID name in the signal reception area.

⚡ **Name** – Login to access the web interface page. No value is set by default.

⚡ **Password** – Password to access the web interface page. No value is set by default.

**Search** – Search for available Wi-Fi networks within the charger range. For subsequent connection to your local network. Network name [RSSI: signal strength] [mac-address]

**Save** – Saves changes to all settings above this button. Be very careful when saving. If you forget your charging connection data, you will lose access to the web interface!

## Tab «Advanced»

**Condition**

Status: Ready

Voltage, V: 115

Current, A: 0.0

Power, kW: 0.0

Current limit, A: 12

**Adaptive**

Adaptive mode:

Type: Voltage

**Other**

Timer type: noPWM

Minimal voltage, V: 90

Language: EN

Factory reset: [Reset button]

**Session history**

Date	Energy	Time	Money
01/01 00:00:05	0.0	00:00:03	0.00
01/01 00:00:00	0.0	00:00:00	0.00
01/01 00:00:00	0.0	00:00:00	0.00
01/01 00:00:00	0.0	00:00:00	0.00

Section "Condition" – duplicates basic info from the Tab "Status".

**Adaptive mode** - Activates the adaptive mode of the charger. The charger monitors the input voltage and, if necessary, reduces the current consumption to avoid voltage drop.

**Type** - Select the type of adaptive mode.

Voltage - reduces the current if the input voltage is below the set threshold.

Auto - reduces current according to the following scheme:

⚡ Voltage - 6 % Current - 20 %

⚡ Voltage - 8 % Current - 30 %

⚡ Voltage - 10 % Current = minimal (usual 7A)

Power – reduces the current if the total power loss is more than 200W.

**Timer type** – Selects the method of achieving the delayed charging. Change only if you experience difficulties in the operation of the timer. Choose an option in which the machine performs as expected.

**Minimal voltage** - Depending on the voltage range, you can set a lower limit below which the charger will not charge the car.

**Language** – Select an interface language.

**Factory reset** – Resets charger to the factory state.

**Session history** – Shows the statistical history and the date of the last 4 charging sessions.

## LIMITATIONS

- ✦ The device is operable at voltages of 90V - 260V, however, charging an electric vehicle is possible only if the input voltage corresponds to the range specified by the manufacturer of a particular EV. Successful charging is not guaranteed if the network does not provide optimal voltage at the lowest possible charger current of 7A.
- ✦ It is forbidden to use the device during a thunderstorm. The device protects against voltage surges; however, the user must ensure protection against lightning or other acts of nature.
- ✦ It is forbidden to connect the device to a three-phase network without a neutral wire (380V). The device must be powered from a network not exceeding 260V.
- ✦ When charging with a device in a modification with a current higher than 16A, when using an adapter for a Schuko household plug, the charging current must be limited to a maximum of 16A. It is forbidden to set the charge current if it exceeds the maximum allowable current of one or more elements of your engineering network.
- ✦ Do not use an extension cord for charging.
- ✦ It is forbidden to open the device (if the seal is missing or damaged, the warranty will be void).
- ✦ The input sockets and plug must be located in a place protected from atmospheric precipitation.

## WARRANTY

All chargers are covered by a 1-year warranty, subject to the requirements of this manual's "Restrictions" paragraph. The user can check the performance of the device within 14 days from the date of purchase. If, within 14 days, problems with performance were identified, the shipping costs are covered by the manufacturer. During the warranty period, shipping to the manufacturer is paid by the user. In the event of a warranty repair, return shipping is free. If, during the diagnostics, non-compliance with the "Restrictions" clause was revealed, the repair is not covered by the warranty. The warranty does not cover plugs, as the contact quality depends on the user's socket. Claims for burning and melting of forks are not accepted. During the entire period of operation, the manufacturer's information support is available to the user on all issues related to the charger.

## SPECIFICATIONS

Input voltage range	<b>90V-260V~, 50-60 Hz</b>
Maximum current (depends on the certain model)	<b>16A /32A /40A</b>
Digital overvoltage protection	<b>260 V~</b>
Physical overvoltage protection	<b>275 V~</b>
Digital protection against overcharging current (short circuit)	<b>150% over set current</b>
Charger controller temperature protection	<b>NTC 80°C</b>
Input power plug temperature control	<b>NTC 80°C</b>
GFCI Circuit	<b>30mA</b>
IPS Display	<b>2"</b>
Scheduled charging	<b>Presented</b>
Protective ground control	<b>Presented</b>
Charging current adjustment	<b>7 Amp - 16 Amp step 1 Amp 16 Amp+ step 2 Amp</b>
Wi-Fi connectivity	<b>Presented</b>
Adaptive current mode	<b>3 types</b>
IP Level of the charger	<b>IP56</b>
Adapter for charging from a household outlet	<b>Presented in models M32 or M40</b>