

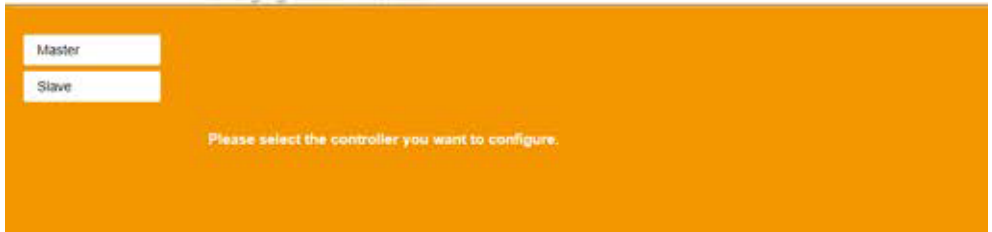
Comissioning

 Comissioning instruction

Commissioning

Before commissioning the Chago Charger must be installed according to the installation instructions.

By default all Chago Chargers are operating in free charging mode (standalone operation). In this free charging mode external communication (Ethernet, 2G/3G) is not active. If the Chago Wallbox is going to be connected to some back-office (online mode), first make sure that the basic functionality is working before establishing communication.



7.1. Connecting to Chago Wallbox

If you want to change the default settings, you must connect to Chago Wallbox via web configuration tool to be able to proceed with the commissioning settings. Use Firefox or Windows Explorer web-browser for configuring.

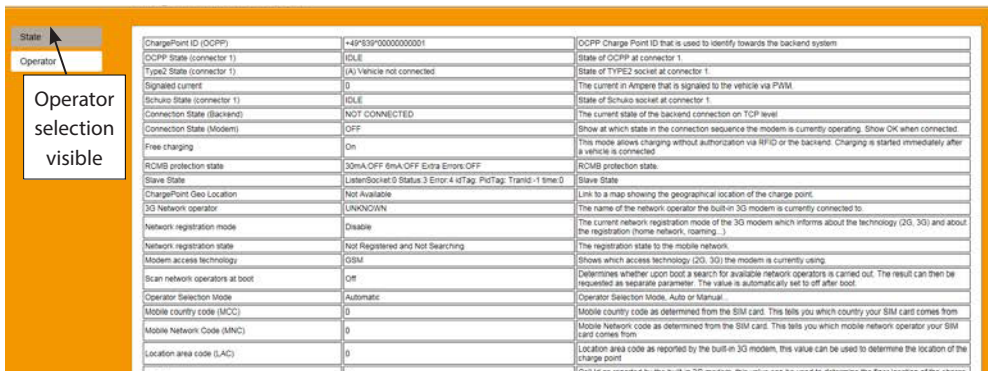
7.2. Configuring to Chago Wallbox

1. If you want to see device status, and settings, login as viewer.

Go to: <http://192.168.123.123/>

Login page opens, select "Master" or "Slave" controller to review settings.

2. If you want to make changes, login as operator.



Connect to SLAVE controller.

Go to: <http://192.168.123.123/operator>

Connect to MASTER controller.

Go to: <http://192.168.123.123:81/operator>

When operator selection is visible you can make changes to connection setting (OCPP, Ethernet, 3G modem etc.)

When browser asks for username and password, enter the following:

User name = operator

Password = yellow_zone

7.3. Commissioning Standalone Charging Point

1.a) Free Charging

By default "Free Charging" is on. Charging starts immediately after a vehicle is connected. Authorization using a RFID tag or via backend is not in use.

Free charging	<input checked="" type="checkbox"/> On	This mode allows charging without authorization via RFID or the backend. Charging is started immediately after a vehicle is connected
If in doubt allow charging	<input type="checkbox"/> Off	This parameter determines whether a client is allowed to charge in case its authorization cannot be processed because the backend is offline or not reachable. If set to ON, the client is allowed to charge even if it cannot get authenticated from the white list nor from local cache.

1. Open the front cover.
2. Switch F01 / F02 ON.
3. Ensure that the DC power supply turns on (green LED).
4. Wait until front cover LED turns from red to green.
Note! The startup takes approx. 1 - 2 minutes.
5. The unit is ready for use in "**Free charging**" mode.

Note! By default the maximum charging current is 32 A. The maximum charging current can be changed. Login to the charging point and enter the new maximum current with parameter "**Operator Current Limit (A)**". Apply changes to Master and Slave controllers separately. See chapter 7.1 and 7.2 for details.

Note! Supply phase configuration. By default the charging point is configured with 3-phase supply. In case of 1-phase supply, change the phase configuration. Login to the charging point and enter the existing phase parameter "**Phases connected to the Charge Point**". Apply changes to Master and Slave controllers separately. See chapter 7.1 and 7.2 for details.

Phases connected to the Charge Point	L1 + L2 + L3	This parameter describes how many and which phases are used
Language of Display	Multi-Language EN-DE-FR-NL	The language of display texts on the LCD display, if available. Only has effect if LCD is configured.
UTC time for housekeeping reboot	1	The UTC hour that is used for house keeping reboots. The charge controller reboots after 30 days to ensure uninterrupted operation. Reboots only occur with no vehicle connected and no customer present. Select a UTC hour in range [0..23]
Operator Current Limit (A)	16	The current in amperes that is signaled to the vehicle for charging. This value must be below the maximum current (see state view) of the charger but can be freely configured, even while charging. NOTE: Value is overwritten when peer group configured.
Temperature Report Delta	2	Temperature change for which a new temperature measurement report is sent to the backend system

1.b) Authorized charging

Charging starts when showing RFID tag to the RFID reader.

1. Open the front cover.
2. Switch F01 / F02 ON.
3. Ensure that the DC power supply turns on (green LED).
4. Wait until the front cover LED turns from red to green.
Note! The startup takes approx. 1 - 2 minutes.
5. Connect your service laptop to Wallbox by using a micro-USB service port on the controller board.
6. Log in <http://192.168.123.123:81/operator>.
7. Select "**Free charging**" mode off.
8. Add RFID ID's on the internal memory of the charging point:
Note: List of colon-separated IDs for the cache. A maximum of 80 entries are shown. To clear the cache, the list must be empty. The listed IDs are added, while the other cache entries are not deleted.
See the examples below.

List of entries in cache	ad51b6c.3E240811	List of colon-separated IDs for the cache. A maximum of 80 entries are shown. To clear the cache, the list must be empty. The listed IDs are added, while the other
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9. When ready, click "**Save & Restart**" to active the new settings.
10. Wait until the front cover LED turns to green.
11. Close the front cover.

7.4. Commissioning Online Charging Point

2.a) Configuring Ethernet operation

1. Open the front cover.
2. Switch F01 / F02 ON.
3. Ensure that the DC power supply turns on (green LED).
4. Wait until front cover LED turns from red to green.
Note! The startup takes approx. 1 - 2 minutes.
5. Connect your service laptop to Wallbox by using micro-USB service port.
6. Log in <http://192.168.123.123:81/operator>
7. In order to set the unit to online mode the following settings must be activated:

Back-end connection settings:

- ◇ Charging point ID (OCPP), by default serial number of the controller (master / slave)
- ◇ Connection type, select "Ethernet"
- ◇ OCPP mode (depends on the communication protocol the connected back-end supports)
- ◇ SOAP / JSON OCPP URL (back-end connection address), select SOAP or JSON based on used OCPP mode

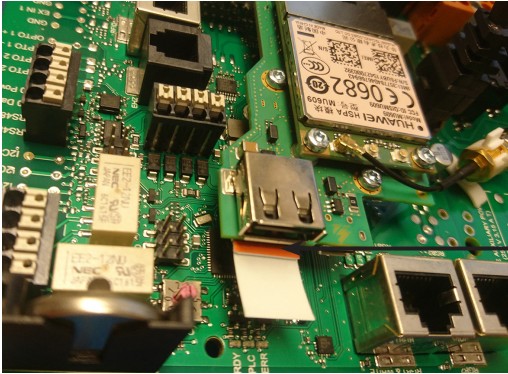
Ethernet connection settings:

- ◇ DHCP in use

8. When ready, click **“Save & Restart”** to activate the new settings.
9. Wait until the front cover LED turns to green.
10. Ensure that the set charging point ID is visible at the used back-end system.
11. Close the front cover.

2.b) Configuring 3G Operation

One “micro-SIM” card is needed per Wallbox unit.



“Micro-SIM” card

If you need to remove the “micro-SIM” card, pull the white tape which is attached on the rear side of the card.

1. Open the front cover.
2. Switch F01 / F02 ON.
3. Ensure that the DC power supply turns on (green LED).
4. Wait until front cover LED turns from red to green.
Note! The startup takes approx. 1 - 2 minutes.
5. Connect your service laptop to Wallbox by using micro-USB service port.
6. Log in <http://192.168.123.123:81/operator>
7. In order to set the unit to online mode the following settings must be activated:

Back-end connection settings:

- ◇ Charging point ID (OCPP), by default serial number of the controller (master / slave)
- ◇ Connection type, select “3G”
- ◇ OCPP mode (depends on the communication protocol the connected back-end supports)
- ◇ SOAP / JSON OCPP URL (back-end connection address), select SOAP or JSON based on used OCPP mode

3G modem settings:

- ◇ APN name (operator dependent)
- ◇ APN username / password (if in use)
- ◇ SIM card PIN number (if NoPin version)

8. When ready, click **“Save & Restart”** to activate the new settings.
9. Wait until the front cover LED turns to green.
10. Ensure that the set charging point ID is visible at the used back-end system.
11. Close the front cover.

8. User Instructions

8.1. User Interfaces

LED signal lights will show the status of the charging point as described below:

Charging point status	LED light	LED operation
Charging point free and ready to use	Green	Stable
RFID read, user login ongoing	Green	Flashing
User login fail, access denied	Red	Stable
User login passed, charging allowed	Green	Waving
While connecting the cable	Green	Flashing twice
Vehicle connected, charging not started	Blue	Waving
Vehicle connected, starts charging	Blue	Waving
Charging ongoing	Blue	Stable
Error state	Red	Stable

8.2. Charging

Free charging

- Plug in your electric vehicle to start charging.
- Unplug your electric vehicle to stop charging.

Charging with RFID

You must have an RFID tag which has a permission to access the charging point.

Start Charging with RFID

- When the charging point is free and the indicator light shows green, you can start a charging event.
- Show the RFID tag to the RFID reading area.
- When the RFID tag is read, the charging point will flash green and verify the user permission to charge. If the user login is failed, the indicator light turns to red. If the user login is passed, the indicator light turns to waving green.
- Now you are logged in to the charging station.
- Plug in the electric vehicle for charging. The indicator light turns to stable blue.

Stop Charging with RFID

- Show the RFID tag to the RFID reading area.
- When you stop the charging event, the indicator light turns to waving green and you are able to unplug the charging cable.
- After you have unplugged, you are logged out from the charging point and the charging point is free for the next user.