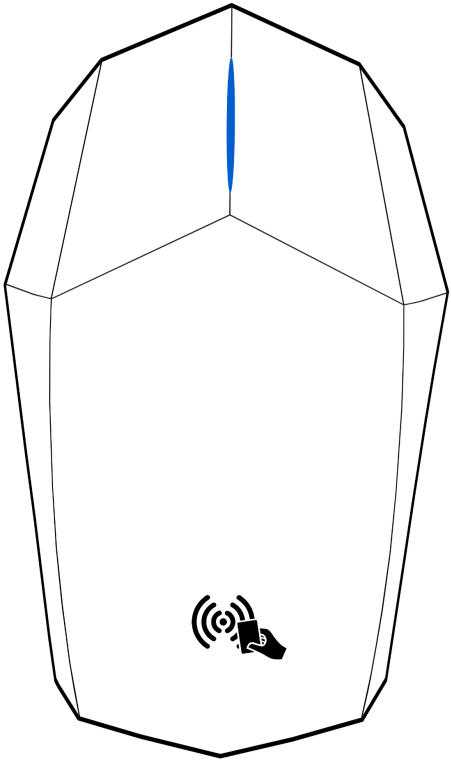
Quick Manual

Installation & configuration instructions



Languages

Downloading the Quick Manual

Volt Time is focused on a sustainable and better future. In order to achieve this the Quick Manual has been printed in English only.

To download the Quick Manual in a different language, and to download the Full Manual, follow these steps:

→ Go to https://portal.volttime.com/resource-center
or
→ Scan the following QR code:

→ Download the newest Quick or Full manual in your desired Language.

Item Reference

TX10 screw (10x):

PZ2 screw (4x):

H3 screw (1x):

M8 wall plug (4x):

RJ45 connector (2x):

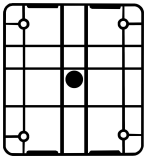
RJ12 connector (2x):

H3 allen key (1x):

TX10 allen key (1x):

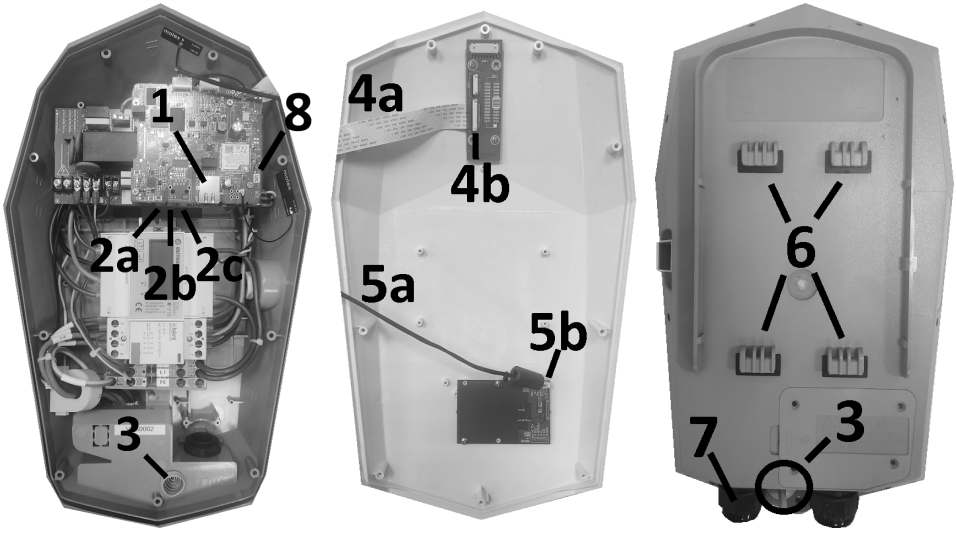
RFID card (1x):

Mounting plate (1x):



Optional: CT terminal (1-3x):

Optional: CT Clamp (1-3x)

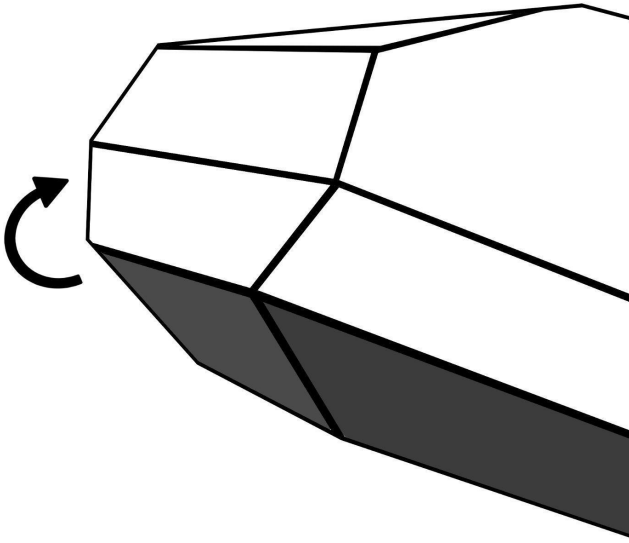


#1	Ethernet port	**#5a/b**	RFID cable & port
#2a/b/c	CT ports 3, 2, 1 respectively	**#6**	Mounting hooks
#3	Ethernet grommet	**#7**	AC_IN swivel
#4a/b	LED cable & port	**#8**	SIM slot

Opening the charger

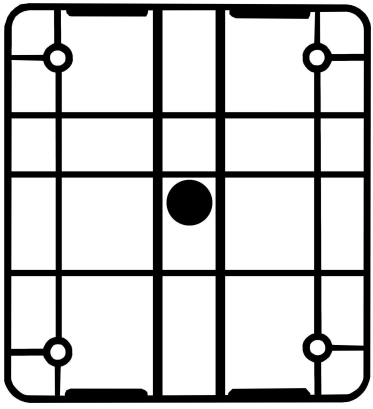
1. Take the front cover off the charger.
2. Place the front cover with the round side upwards if you lay the cover on the ground. Be careful with sharp materials!
3. Put the charger, cover and accessories at the installation site.

Open carefully in direction of arrow



Mounting the back plate

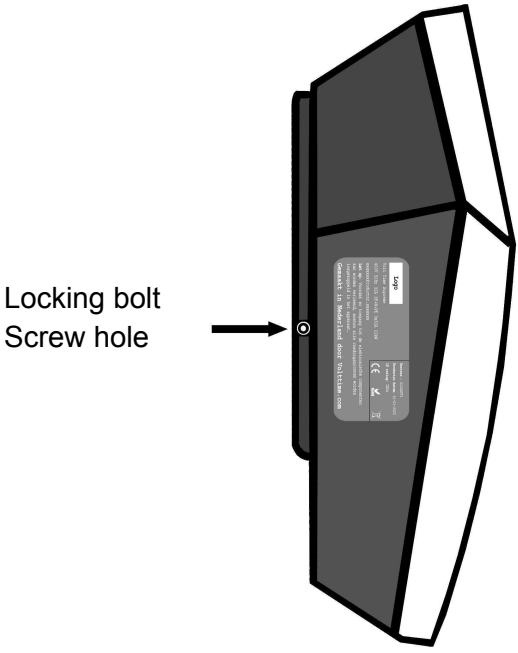
1. Hold the mounting plate drawing against the wall and make sure it's level.
2. The drawing has 4 screw holes. Drill these 4 holes with an 8mm drill bit.
3. Push M8 wall plugs (4x) into the drilled holes.
4. Place the mounting plate with the flat edge against the wall and the slits pointing up- and downwards.
5. Screw the mounting plate against the wall using the PZ2 screws (4x).



This is what you should see when you attach the mounting plate with its flat edge against the wall.

Mounting the charger

1. Slide the charger over the mounting plate. The 4 hooks on the back of the charger (#6) should slide into the slits of the mounting plate.
2. Fasten the H3 screw (1x) in the left screwhole close to the wall.[1]

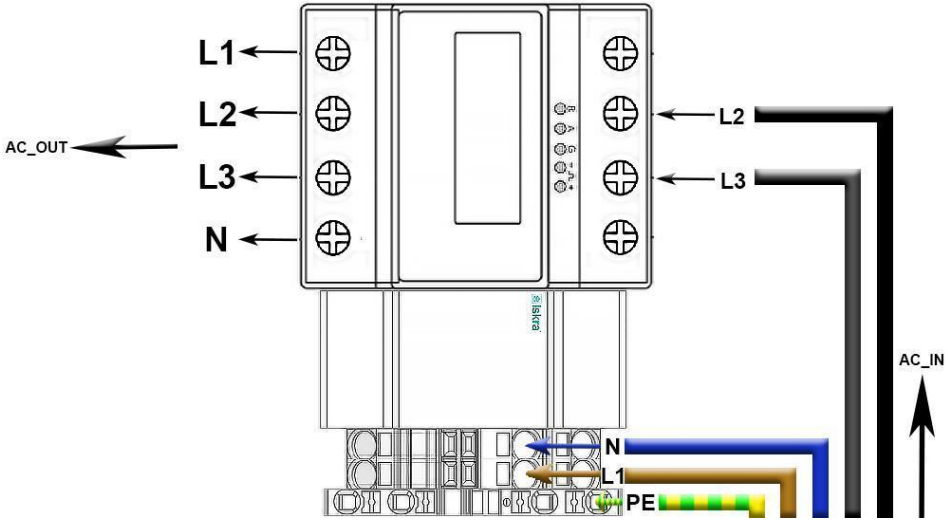


[1] *Use the H3 Allen Key provided*

Connecting the cables

Power cable

1. Cut the right hand swivel if the cable has a diameter between 16mm and 20mm.
2. Feed the AC_IN mains through the right hand swivel (#7).
3. All cables must be stripped 12mm to expose the cores.
4. Live 1, Neutral and Earth need to be connected in the designated terminal blocks. Live 2 and Live 3 need to be connected in their designated port of the kWh meter when applicable. See schematic below:



Ethernet cable

1. Cut the grommets tip at the backside of the charger (#3).
2. Feed the ethernet cable through the grommet.
3. Clamp the RJ45 connector to the ethernet cable.
4. Connect the ethernet cable to the RJ45 port on the top circuit board (#1).

Optional: Dynamic Load Balancing

1. Connect the CT clamps to the CT terminals provided. It is possible to extend the CT clamp cable with an ethernet cable using a spring cage terminal clamp per wire.
2. Connect the terminals to the main electronic board:
    a. Connect the CT terminals to CT1, CT2 and CT3 ports (#2a/b/c) for a three phase installation.
    b. For a one phase installation only connect one CT terminal to CT1 (#2a).
3. Clamp CT1, CT2 and CT3 to the site's mains above the main switch inside the fuse box. CT1 for Live 1 (L1), CT2 for Live 2 (L2) and CT3 for Live 3 (L3). **Make sure the arrow on the CT clamps are pointing from the net to the fusebox!**

Closing the charger

1. Double-check your installation. Make sure all cables are fitted correctly and securely.
2. Fill out the commissioning report and save carefully.[2]
3. Connect the LED and RFID cable to the cover
    a. The LED cable (#4a) is connected by opening the black slide connector “HMI_2” (#4b) of the LED board, pushing the cable with the blue side upwards into the connector and closing the black slide connector.
    b. The RFID cable (#5a) is connected to the i2c port (#5b) on the RFID scanner.
4. Close the cover.
5. Fasten T10 screws (9x) tightly in every screw hole on the back of the charger.[3]
6. Turn on the charger by engaging the circuit breaker in the fuse box.

[2] *Volt Time can ask for the commissioning report for warranty inquiries. Failure to produce the report may result in a void warranty.*
[3] *Use the T10 Allen Key provided.*

Configuration

Start

The Volt Time charger can be configured via its onboard WiFi network, which will turn on automatically once the charger is installed and turned on. The network name (SSID) can be found on the sticker inside the charger.

Use a computer or mobile device that can connect to this WiFi network to configure the charger.

WiFi configuration

1. Connect to the WiFi SSID (VoltTimeXXXXXXX) with the password found on a sticker inside the Volt Time charger.
2. Scan the QR-code on the left side of the charger or fill in "**10.10.0.1"** in the URL field of your internet browser.
3. Log in to the configuration tool with the "Installer" credentials found on the sticker inside the charger.

Configuration details

In the configuration tool you can find different pages in the left hand side menu.

For the full configuration of the Volt Time charger, refer to the Full Manual.

CSMS configuration (Backoffice)

1. Place the backoffice URL into the **CSMS Server Address.**
2. Keep **Charger Identity** untouched.
3. Enable **Offline Authorisation** if the charger should be offline installed.
4. For Plug & Charge:
    a. Disable the RFID slider.
    b. Enable default ID Tag Mode to send a static UID to the backoffice for automatic reimbursement.
    c. If Plug & Charge should be enabled without reimbursement, Default ID Tag Mode should be disabled and Offline Authorisation enabled.

“Installer” page

On this page the charger installation details can be configured.

1. Charger Current Limit is the maximum installation current and can be used to set its maximum output.
2. Fill in the installer information in the “installer info” tab.
3. Configure phase rotation in the “Phase Connection” field.
4. External Metering can be selected to prepare Dynamic Load Balancing on the Load tab. Select CT clamps to enable Dynamic Load Balancing.
5. Set the CT clamps to its maximum measuring current. Volt Time clamps are 80A by default.
6. Set the CT clamp measuring method:
    a. "Source" is for battery measurements
    b. "Site" is for Dynamic Load Balancing
    c. "Load" is for Dynamic Solar Balancing

“Load” page

Dynamic Load Balancing can be configured on this page.

1. Enable Load Balancing
2. Choose the Load Balancing mode (Static or Dynamic).
    a. Static: The charger will default to its “Charger Current Limit” set in the Installer page.
    b. Dynamic: The charger will measure the building's power consumption and adjust its output accordingly.
3. Set a margin in Amp. The charger will calculate its power output and keep the margin between total available installation current and output power.
4. Set the total Installation max current in Site Supply.

Log-in credentials

<u>If you lose your login credentials, Volt Time cannot retrieve them. Always save them!</u>

You can find the charger details on the sticker inside the charger. The sticker contains usernames, passwords and WiFi information which are unique to every charger.
As an installer you can use the Installer credentials and as the driver the EV credentials.

The Installer credentials can **only** be used by **professionals** certified according to Volt Time and local regulations.

<u>Installers: Give these credentials to the owner of the charger!</u>

Paste credentials label here