

Quick Manual

Installation & configuration instructions





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CHARGING SYSTEMS



Languages

Downloading the manual(s)

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

To download all the available manuals in the same or a different language and to get more help during installation, follow these steps:

 \rightarrow Go to **portal.volttime.com/installers** or \rightarrow Scan the following QR code:



 \rightarrow Download the newest manual(s) in your desired language.

 \rightarrow Go to the configuration tool and get a step by step explanation.





Item Reference

T10 screw (10x):

PZ2 screw (4x):

H3 screw (1x):







M8 wall plug (4x):

RJ45 connector (2x):

Mounting plate (1x):







H3 allen key (1x):

T10 allen key (1x):

RFID card (1x):







CT terminal (3x):

CT Clamps (3x)







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#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 ¹

¹ You can find the SIM slot at the bottom of the upper computerboard on the right side of the board.





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 mounting hooks (#6) on the back of the charger should slide into the slits.
- 2. Do not fasten the H3 screw (1x) in the screw hole on the left side of the charging station yet.







Connecting the cables

Power cable

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- Remove the inner sealing ring of the right hand swivel if the cable has a diameter between 16mm and 20mm.
- Feed the AC_IN mains through the right hand swivel (#7).
- 3. Strip the AC_IN mains 200mm and its cables 12mm to expose the cores.
- 4. Live 1, Neutral and Earth need to be connected in the designated terminal blocks.
- 5. Connect Live 2 and Live 3 to their designated port on the right side of the kWh meter when applicable. See schematic below:



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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 with the right color code (see picture).
- 4. Connect the ethernet cable to the RJ45 port on the top circuit board (#1).



Dynamic Source Balancing²

- 1. Connect CT clamps to CT terminals (blue).
 - Optionally: Extend CT clamp wire with CAT5(e) data cable via a spring cage terminal clamp per wire (Wago/Phoenix). See diagram on next page.
- 2. Connect CT terminal to CT1 for one Phase Dynamic Source Balancing. See diagram on the next page.
- 3. Connect CT terminals to CT1, CT2 and CT3 for three phase Dynamic Source Balancing. See diagram on the next page.
- 4. If phase rotation is applied, see full manual for more information.

² Dynamic Source Balancing is Dynamic Load + Solar Balancing.





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Closing the charger

- 1. <u>Double-check your installation. Make sure all</u> <u>cables are fitted correctly and securely.</u>
- 2. Fill out the commissioning report and save carefully.³
- 3. Take out the sticker with credentials inside the charging station and place the sticker on the last page of this document. Give this document to the owner.
- 4. Connect the LED and RFID cable to the cover. See installation diagrams on the next page.
 - a. LED
 - 1. Open the black connector.
 - 2. Insert the Flat Flex Cable. Blue side points upwards.
 - 3. Close the black connector.
 - b. RFID
 - 1. Click the RFID cable in its port. Only one way is possible.
- 5. Close the cover.
 - a. <u>Make sure that the RFID + LED cable are</u> not stuck between the cover and back.
- 6. Slide the charger temporarily from its wall bracket and lay the charging station on your arm.
- Fasten T10 screws (9x) tightly in every screw hole on the back of the charger.⁴
- Fasten the H3 screw (1x) in the left screwhole close to the wall⁵. See <u>Mounting the charger</u>.
- 9. Turn on the charger by engaging the circuit breaker in the fuse box.

⁴ Use the T10 Allen Key provided. ⁵ Use the H3 Allen Key provided.



³ Volt Time can ask for the commissioning report for warranty inquiries. Failure to produce the report may result in a void warranty.



LED connection







Configuration

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.

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





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CSMS configuration (Backoffice)

Charger with backoffice:

1. "Authorisation Strategy" \rightarrow OFF

Remote via OCPP

Put websocket URL in "CSMS server address"

CSMS Server Address

 \times

ws://ocpp.e-flux.nl/1.6/e-flux

Chargepoint ID = "Charger Identitity" Charger Identity

VT_0004272

Charger without backoffice:





Charging with RFID authorisation:

1. "RFID Enabled" \rightarrow ON "Sound Enabled" \rightarrow ON "RFID Enabled" \rightarrow Sound Enabled 2. "Default ID Tag mode" \rightarrow OFF Authorisation Required



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Charging without RFID authorisation:

1. "RFID Enabled" \rightarrow OFF

"Default ID Tag mode" \rightarrow ON

RFID Disabled 🕡 Default Id Tag used.

2. Optional: Always charge with standard RFID tag ("Default ID Tag")

Save

Default Id Tag (Default Id Tag mode only)

[insert UID here]

1. Press "Save".

Network page

۷ 1. On the network page, go to 2. WiFi enabled -> ON	ViFi the WiFi section
Enabled 3. Press "Refresh List" twice. 4. Click on the correct WiFi SS 5. Press "Use as WiFi SSID" (The SSID will be filled in auto 6. Fill in the WiFi password at	Refresh List Use as WIFI SSID VoltTimeProtol 5. @ 100% VoltTime Guest @ 73.8% VoltTime @ 73.8% VoltTime @ 73.8% Bas Bouckeast @ .48.3% pomatically) WiFi PSK.
Volt Time	WIFI PSK Snow
 7. Press "Save" If you press "Save + O switch to the WiFi netwistich to the WiFi netwister able to finish you after the configuration the menu and press "I Charging station switch VOLT VOLT TIME 	Connect" it will automatically work filled in above and you will our configuration. n is finished, press "Logout" in Logout + Drop AdHoc". ches to the WiFi network. <i>V1.1.2 - EN</i>
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1. Place the SIM car 2. fill in the APN sett modem section.	d in the ings of	SIM card SIM slot (#8). the backofficep	rovider in th	ie			
APN	Username		Password	show 🗌			
iot.1nce.net							
3. Press "Restart modem (interface + service)"							
restart modem (interface +	service)	refresh modem info					
4. Check the SCMS Connection Status on the "CSMS" page. This should show "Connected".							
connected							

Installer page

1. Set maximum power of charger for "Charger Currrent Limit" Charger Current Limit [6 - 63A] 25

2. Fill out "Installer Info"

Phase settings

1. Set installed phases for "Installer Phase Selection"







 "External Ena Phase ins "Clamp # "Rating [A "Type" 	$\begin{array}{l} \text{CT Clam}\\ \text{bled}\\ \text{stallation}\\ 1^{"} \rightarrow \text{OI}\\ \lambda]^{"} \rightarrow 80\\ \rightarrow \text{Si}^{"} \end{array}$	Load Balancin ps" → ON N te	ıg (1)							
Clamp #	On/Off	Rating [A]	Туре							
Clamp #1		80	Source	Site	Load					
3-phase installation 1. "Clamp #1,#2,#3"→ ON (3x) 2. "Rating [A]" → 80 (3x) 3. "Type" → Site (3x)										
Clamp #	Un/Uπ	Rating [A]	туре							
Clamp #1	\checkmark	80	Source	Site	Load					
Clamp #2	\checkmark	80	Source	Site	Load					
Clamp #3		80	Source	Site	Load					

Save

1. Press "Save all configuration + calibrate"





Load page

1. "Enabled" → ON Enabled ↓ Load Balancing Enabled

Load Balancing (2)

1. Select **Dynamic** on Load Balancing Mode. Charger will detect available power from the building

Load Balancing Mode

Dynamic

Static Dynamic Import TopUp TopUpEco

2. Set maximum Amps of the building for "Site Limit [A]" Site Limit [A]

25

3. Set static margin between Site Limit and charger output For most Dutch houses (3x25A), Volt Time advises 3A Load Balancing Margin [A]

3

Save

1. Press "Save"



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Info page

1. Go to "Info" page.

2. Go to the "EVSEs" part of the page.

3. Check whether the CT clamp readings for 1 phase or 3 phase installations are correct.

CT Clamps



- On the right side you will see the readings of the clamps in mA (to get the reading in Ampere, divide by one thousand)
- A positive number indicates importing from the grid.
- A negative number indicates exporting from the solar panels to the grid (SURPLUS).
- If importing from the grid is expected and the number next to the CT clamp is negative, switch the **RED** wire and White wire at the blue CT terminal inside the charging station.

4. Check if there are any "Fault" codes generated by the charging station.

Faults



If the page looks like the screenshot above, there are no fault codes generated by the charging station. If there is a fault, the faultcode will be colored RED. Please report the faultcode to the retailing partner.





Log-in credentials

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

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.

Installers: Give these credentials to the owner of the charger!

Paste credentials label here



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