



Source 2

EN Installation & Setup Guide



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Introduction

Before installing the product, please read the important product and safety guide at volttime.com/manuals. Here you can also find other versions and languages.

This installation and setup guide includes:

- Mounting and wiring up Source 2
- Configure the product
- LED status description

To install and configure a Volt Time charger, a mobile device with an internet connection is required as well as an internet source connected to the charger (Ethernet or an optional 4G LTE connection).

WARNINGS AND CAUTIONS



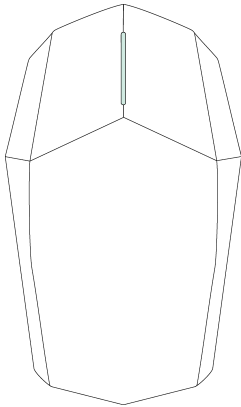
Whenever a condition, hazard or unsafe practice can result in serious personal injury or death, a **WARNING** will be indicated.



WARNING: Volt Time stipulates that the installation as well as all maintenance or reparation on this product must be performed by a certified electrician. All applicable local, regional and national regulations for electrical installations must be followed.

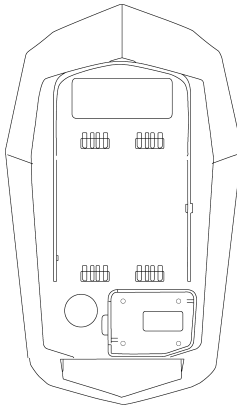


Product overview



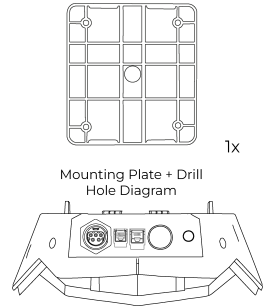
Front

LED indicator and RFID sensor on the front of the casing.



Back

Retains all the electronics internally to charge your vehicle, with easy mounting options on the back.



Connectivity

With three connectivity ports at the bottom, the installation is made completely plug-and-play.

Parts:



4x

PZ2 M5x50
Screw



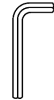
1x

H3 M4x20
Bolt



4x

M8X60
Wall Plug



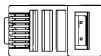
1x

H3 Hex
Key



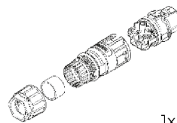
1x

RFID
Card



2x

RJ45
Connector



1x

AC Mains



1x

RJ45
Sleeve



Before installation

The following prerequisites are mandatory to fully commission the product:

- A mobile device with internet connection.
- Volt Time “Installer App” on a mobile device.
- The product with an internet connection.
 - ! Without the Business Upgrade the product **requires** a CAT5(e) ethernet cable for internet.
- Upstream Circuit Breaker and RCD Type A (30mA).
- Load & Solar Module requires an (extra) CAT5(e) ethernet cable.
- Please install the protection covers into the RJ12 and RJ45 ports at the bottom of the product.

Optimal charging

For an optimal charging experience the following is recommended:

- To avoid overloading the main fuses of the building the Load & Solar module is recommended. This module will dynamically adjust the maximum current of the product and provides the option to charge fully on surplus Solar Energy.
To install the Load & Solar module, go to <https://volttime.com/manuals> to download the Load & Solar module alternative entry manual.
- A 3-phase installation of the product is recommended if possible.
- Always use the largest available cable cross-section. The entry via the back can go up to 10mm².



CAUTION: The grid type as well as cable-cross sections should be determined by the electrician before installing the product.



Installation

WARNING: Prior to the installation of the product, the power supply must be switched off. Make sure to follow this manual closely, and with extreme caution.

The instructions and procedures discussed in this manual must be followed and applied at all times, or it will result in an invalidated installation. This will cause Volt Time B.V. and its partners to waive all liability and claims for compensation.



Installations and maintenance on this product must only be performed by qualified and authorised personnel. Any technical support or repairs on the product must be executed by Volt Time or a pre-approved Volt Time certified company.

All applicable local, regional and national laws and regulations must be adhered to at all times.

Do **not** install or use the product in case of damage as it can lead to unsafe or hazardous conditions which may result in electrical shock or (potentially fatal) injury.

Avoid placing the product in a location exposed to direct sunlight or extreme weather/temperature conditions.



Installation procedures

Source 2 has two types of installation procedures which should be determined before starting the installation.

- Installing the product via the entry on the rear (maximum cable-cross section is 10mm²).
- Installing the product with the AC Mains Connector set (maximum cable-cross section is 6mm²).

To install the product using the entry on the rear, follow this document.

For installations using the AC Mains Connector, scan the following QR code to find Installation Guide:



Or go to <https://voltime.com/manuals> to download the manual for wiring through the back.



Installing the App

1. Scan the QR code to download the Volt Time Installer App and create a free account.
2. Log in with your (newly created) Installer account.
3. Enter the serial number and unique pincode found on the side and bottom of the product respectively.
4. Check the installation requirements via the installer app and return to this guide afterwards.

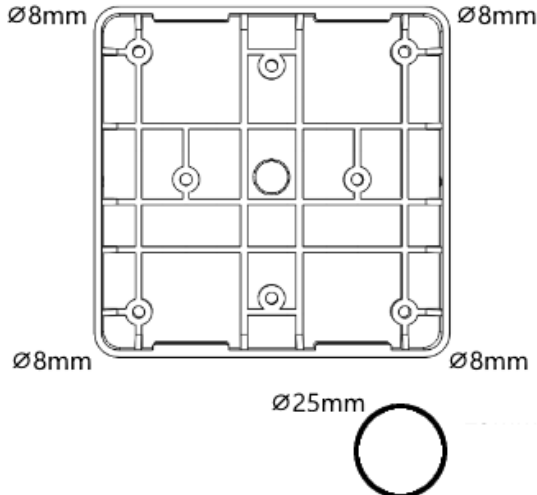


Or go to <https://volttime.com/installer> to install the Volt Time Installer App to your mobile device.



Installing the mounting plate

1. Hold the mounting plate drawing against the wall and make sure it is level.
2. Recommended installation height is 120cm. Minimum installation height is 90cm.
3. The drawing has 4 screw locations. Drill these 4 holes with an 8mm drill bit.
4. The drawing has 1 big drill hole at the bottom. Drill this hole with a 25mm drill bit so that the AC mains cable can be connected through the back of the charger.
5. Push M8 wall plugs (4x) into the drilled holes.
6. Place the mounting plate with the flat edge against the wall and the slits of the mounting plate pointing up- and downwards.
7. Screw the mounting plate against the wall using PZ2 screws (4x).



CAUTION: The installation wall must cover the entire backplate and should be perfectly flat.



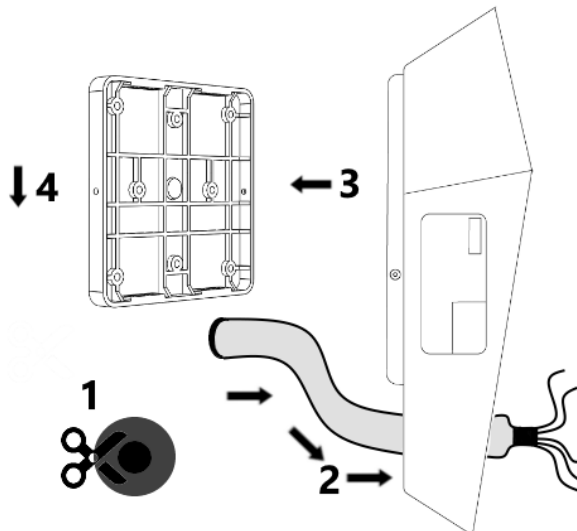
Mounting the Source 2

Before mounting the Source 2, unscrew the 9 screws at the back of the product and take off the cover.



CAUTION: For a socket variant, the cover can not be stored separately as wires will still be connected to the internals. Proceed with caution.

1. Cut the tip from the throughput on the back of the product as well as 4 extra cuts 90 degrees from each other.
2. Gently push the AC Mains cable through the throughput.
 - (Optionally) Push one (or two) CAT5(e) ethernet cable(s) through the throughput for an internet connection and/or Load Management installation. Source 2 without Business Upgrade **requires** at least one ethernet cable for an internet connection.
3. Place the product over the mounting plate so that the mounting hooks fit into the 4 slits of the plate.
4. Slide the product downwards until it snaps in place. **Do not** lock the product onto the mounting plate yet with the locking bolt.





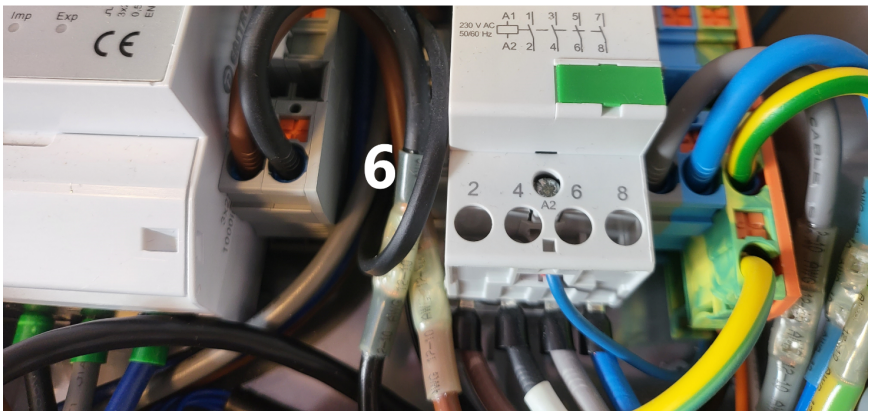
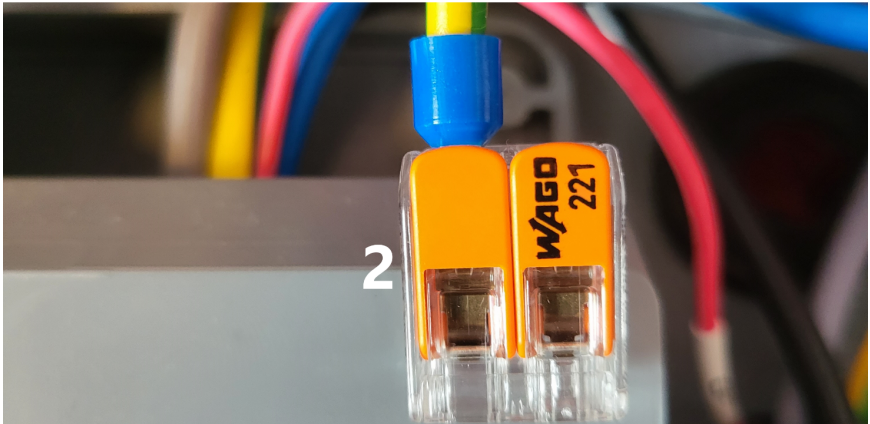
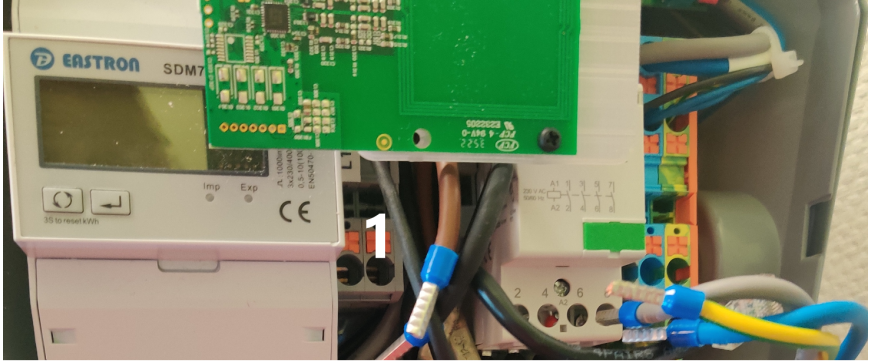
Connecting the cables

Power cable

1. Disconnect the AC Mains Power Connector from the 5 terminals L1, L2, L3, N, PE inside the product.
2. Cap off the 5 wires from the AC Mains Power Connector with a wire nut, splicing connector or lustre terminal.
3. Strip 200mm off the sheath (AC-IN Mains cable).
4. Strip 12mm off the wires.
5. You can use stranded or solid cores. For stranded cores make sure to use ferrules accordingly.
6. Connect the wires to the 5 terminals inside the product:

Earthing System	Power Connection Volt Time Source 2 Terminal connection				
	PE	N	L1	L2	L3
TN/TT (230V)	PE	N	L1		
TN/TT (400V)	PE	N	L1	L2	L3
IT (230V)	PE	L1	L2		

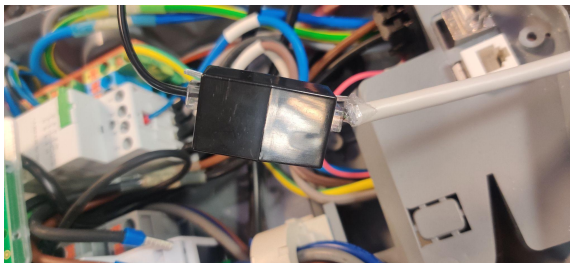
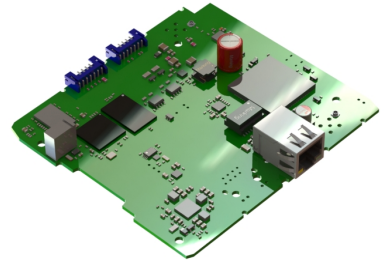
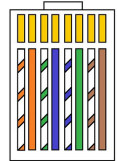
See next page for pictures





Ethernet connection

1. Use a CAT5(e) ethernet cable with a maximum length of 100m. Source 2 (without business upgrade) **requires** an ethernet cable with internet connection to function. For Power Sharing functionality, an ethernet cable is **always** required.
2. Strip 12.5mm from the sheath on each end of the cable.
3. Crimp the RJ45 connectors onto both ends of the CAT5(e) cable.
4. Test the ethernet cable using a LAN Cable Tester.
5. Take out the existing ethernet cable from the RJ45 port on the top of the computer board.
6. Disconnect the existing ethernet cable from the RJ45 port inside the product on the top computer board.
7. Connect the ethernet cable to the Router/Switch inside the building as well as the RJ45 port on the top computer board.
8. To connect the RJ12 ethernet cable to the charger for Load & Solar balancing, take out the RJ12 cable from the port at the bottom of the product and connect the RJ12 coupler as preparation to the internal RJ12 cable. To install the Load & Solar module, go to <https://volttime.com/manuals>, download the **Load & Solar guide** and follow the installation procedure before continuing.



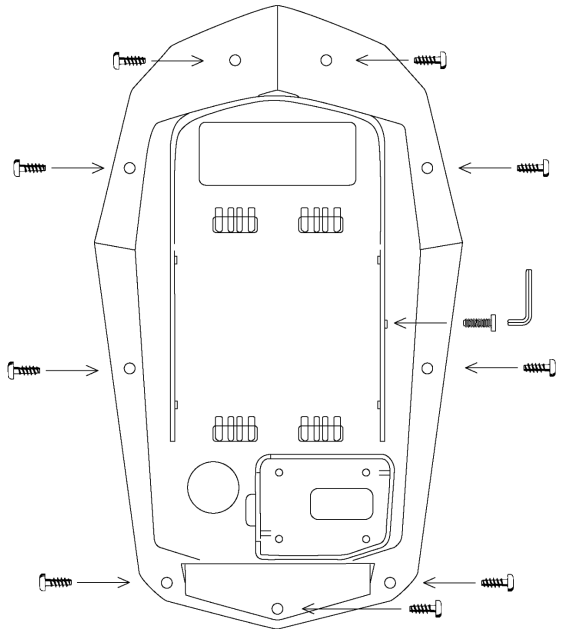
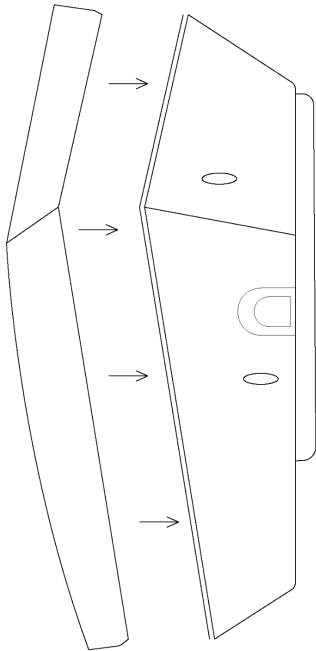


Closing the product



CAUTION: For a socket variant, be careful when closing the product as wiring could get trapped between the housing and the cover. Proceed with caution.

1. Place the cover back onto the product.
2. Slide the product temporarily from the mounting plate and lay the product on your arm.
3. Fasten the 9 screws (T10) with a T10 screwdriver till a torque of 2Nm has been achieved per screw.
4. Slide the product back onto the mounting plate.
5. Fasten the locking bolt (H4) on the left side of the product with the delivered Tool.





Configure the product

1. Turn on the power supply by switching on the Circuit Breaker inside the distribution box. The LED should change to green after a maximum of 3 minutes.
2. Open the Volt Time “Installer App”.
3. Enter the serial number and pincode of the product, found on the left hand side and bottom of the product respectively.
4. Tap “Configure manually”.
5. Select one of the two site setups in the App:

Create new site

If the product is installed at a completely new installation site, click on “Create a new site” and follow the on-screen instructions to configure the product.

Add to existing site

If the product is installed at a site with existing Volt Time chargers, click on “Add to existing site” and follow the on-screen instructions to configure the new product.

6. After the configuration of the newly installed product the LED should be green. Please return to this manual.



Finalise the installation

1. Start a test session by plugging the charging cable into the car. The session should start automatically ("Plug & Charge").

Note:

- A Source 2 fixed cable variant can be connected to the car by plugging the charging cable into the charging port of the car.
 - A Source 2 socket variant can be connected to the car by plugging the male end of the charging cable into the socket of the product and the female end of the charging cable into the charging port of the car.
2. The LED will indicate a successful charging status by showing a dark blue colour during the charging process.
 3. Provide the owner of the product with the pincode.

Well done. You are finished with the installation and configuration of Source 2!




Insulation Test

After the installation of the product, insulation testing can be performed on the installation. During the test, the product has to be disconnected from the installation. If the product is still connected to the installation, the test results may fail or the electronics of the product may get damaged.



Product interface

Light description	Status of charging station
White - Constant	Booting up the product
Green - Constant	Standby, ready for use
LED Blinks 1x	RFID card is scanned
Yellow - Constant	RFID card is authorised for the charging session or the car is connected to the charger.
Red - Blinks 1x	The RFID card is not authorised by the Cloud to start charging.
Light blue - Constant	Waiting for the vehicle to initiate charging or the car is full.
Dark Blue - Constant	Charging in progress
Light blue - Pulsating	Waiting for (Solar) power.
Green and blue - Pulsating	Updating firmware (updating can take up to 15 minutes).
Red - Constant	<p> WARNING Critical error. Check the Installer app for more information. Do not try to charge the vehicle.</p>
Red - Pulsating	Charger is locked



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