



## Level 2 EV Charger **Installation Guide**

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# General Information

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## Important Instructions

This manual contains important instructions for L2 EV Charger. When using electric products, always follow basic precautions, including the following.

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## About This Document

These instructions explain how to use and care for the charger correctly. The Volt charge app has additional instructions, which we recommend you read before using the charger. Follow the operating directions properly for your own safety. We suggest that all L2 EV installations be performed by a qualified electrician, and this charger should not be installed under any circumstances without first speaking with an electrician knowledgeable with your L2 EV, its electrical panel, and wiring. This charger should only be hardwired by qualified, certified electricians.

## Disclaimer of Warranties and Limitation of Liabilities

This manual's content, specs, and pictures are based on the most recent information available at the time of production. Volt Charge has the right to make modifications without notice at any moment. While the material in this manual has been thoroughly examined for accuracy, no warranty is made on the completeness and correctness of the contents, including but not limited to product specs, functions, and pictures. Volt Charge shall not be responsible for any direct, special, incidental, consequential, or economic damages (including lost profits).

## Product Disposal

Since the Volt Charge EV Charger has electronic components, it cannot be disposed of with unsorted household garbage. Inquire with the local authorities about proper disposal. As indicated, the product materials are recyclable.

# Safety instructions

**WARNING:** This manual contains important instructions that cover the safe installation, operation and maintenance of a Volt Charge EV Charger. When using electric equipment, basic precautions should always be followed adhering to local standards.

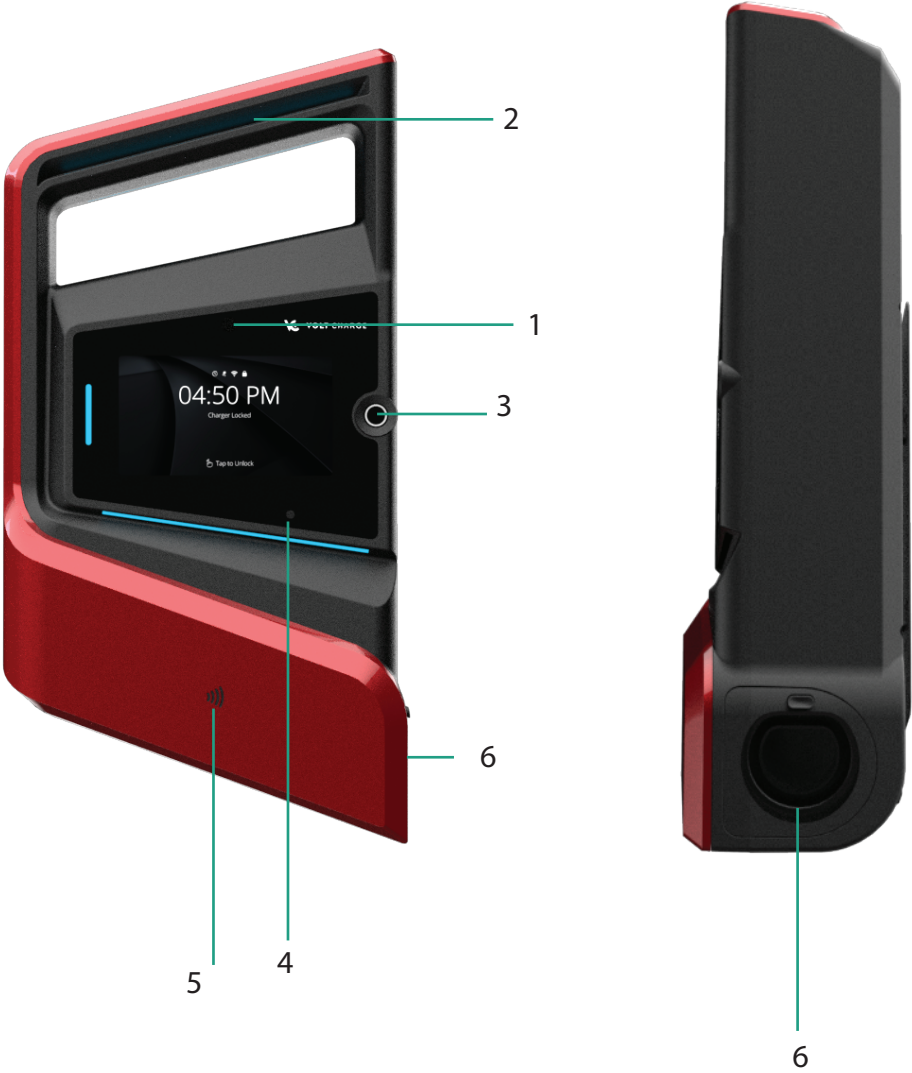
**⚠ WARNING! Risk of electric shock and fire hazard!**

Read all instructions before installing and using your Volt Charge charger.

- Installation, commissioning, maintenance or retrofitting of the charging station must be performed by correctly trained, qualified and authorized electricians who are fully responsible for the compliance with existing standards and installation regulations.
- Please observe that an additional overvoltage protection can be required by vehicles or national regulations. Also note that some countries or vehicle manufacturers may require a different triggering characteristic of the residual current circuit breaker (Type B).
- Do not install or use a damaged device.
- Damaged Ev charging equipment must be taken out of commission and repaired or replaced by a qualified and authorized electrician.
- No unauthorized conversion work and modifications may be made to the charging station.
- No markings (such as safety signs, warnings, wire markings, etc.) may be removed from the charging station.
- Never use faulty, worn-out or dirty charging plugs. Using cable lengthening sets is forbidden.
- This device should be supervised when using around children.
- Do not put fingers into the electric vehicle connector.
- Install your charger in a sufficiently ventilated location and avoid installation in areas with direct sunlight.
- Do not install your EV charger near flammable, explosive, or combustible materials.
- In case of flooding, do not operate your charger while it is your vehicle is submerged in water.
- If your charger was submerged in water due to flooding, have a qualified electrician inspect your charger prior to energizing or using your charger again.



# Product Overview



NO	ITEM
1	Camera
2	RGB Light Strip
3	Button
4	Proximity Sensor
5	RFID Sensor
6	Charging Holster

# Inside the box

## Components



## Included Mounted Parts



wall plug M6\*30mm - 2



wall plug M6\*30mm - 2



wall plug M6\*40mm - 2



wall plug M6\*40mm - 2

## Required Tools



Electric drill



Drill bit 7



spirit level



Measuring Tape



Screw Driver



Marker Pen

# Classification and User Information

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- Power supply input AC supply network
- Electric connection Permanently connected
- Power supply output AC EV supply equipment
- Environment conditions Outdoor use
- Equipment access Non-restricted
- Mounting method Surface mounted stationary
- Electric shock protection- Class I
- Charging Mode Mode 3
- Connection type Case C
- Optional functions Ventilation is not supported
- Adaptors and extensions Charging adaptors or cord extension sets are not allowed

# Specifications

● Manufacturer:	Volt Charge
● Product:	Electric Vehicle L2 Charging Equipment
● Model Number:	VCL2-0220-C1
● Rated Voltage :	230/400Vac
● Rated Frequency:	50/60Hz
● Number of Phases :	L+N+PE / 3L+N+PE
● Rated Current :	32A Max.
● Rated Power :	22kW Max.
● Residual current detection:	DC 6 mA / AC 30 mA
● Connector type	IEC 62196-2 Type 2
● Cable length	5 m
● Smart authentication	ISO/IEC 18092 NFC, ISO 14443 Type A & B, MIFARE®, App
● User interface	7inch colour touch display
● Indicators	Charging Status LED
● Connectivity	Wifi
● Operating Temperature:	-30C to +60C (derating may apply)
● Storage Temperature:	-30C to +70C
● IP Rating:	IP55
● Humidity	≤ 95%RH, non-condensing
● Altitude	2000 m
● Dimensions (H x W x D)	295(L) x 580(H) x 140(D) mm (without cable)
● Weight:	9kg

# Pre Installation

## Before Installing

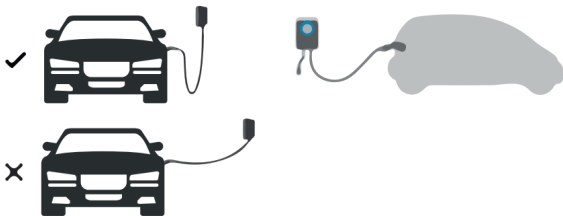


It is recommended that a certified electrician perform all pre-installation wiring after inspection of the existing premises electrical panel and wiring.

Make sure to follow all relevant electrical installation codes and regulations in your region for safety and accessibility.

Ensure the premises electrical system supports a 230/400Vac 32A dedicated circuit for the charger.

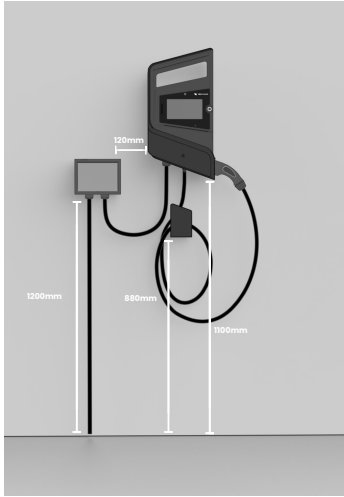
## Installation Location



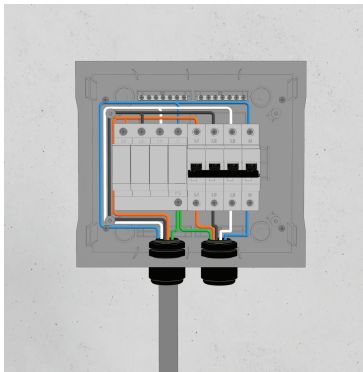
For the charger placement, consider your normal car parking position, and the charge port position.

The charger cable should not be over tensioned when the charger connector is plugged to the vehicle. EV Charger mounting surface should be vertical and have sufficient strength to hold mounting anchors. Ensure there is sufficient signal available.

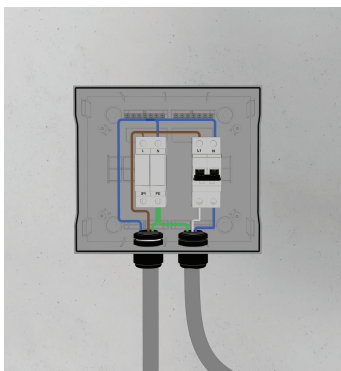
# Electrical Wiring



1. 40A MCB and 40kA SPD should be installed in a enclosure according to the recommended position in the figure. Power supply cable should have minimum 10mm<sup>2</sup> copper conductor cross section. Protective earth conductor should have a minimum 2.5mm<sup>2</sup> copper conductor cross section.

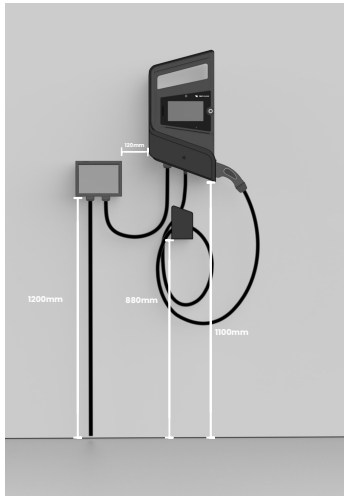


2. Option 1:
  - 400V Three Phase
  - Power supply : 10mm<sup>2</sup> x 4 core Cu (L1 L2 L3 N)
  - Protective earth : 2.5mm<sup>2</sup> x 1 core Cu (PE)
  - MCB : 40A 4POLE TYPE C
  - SPD : 40kA 4POLE
  - CCB : 30mA 4POLE TYPE A (if required)

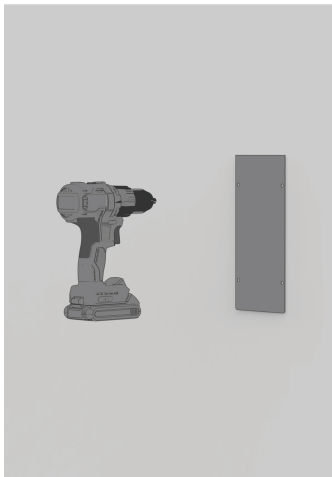


3. Option 2:
  - 230V Single Phase
  - Power supply : 10mm<sup>2</sup> x 2 core Cu (L N)
  - Protective earth : 2.5mm<sup>2</sup> x 1 core Cu (PE)
  - MCB : 40A 2POLE TYPE C
  - SPD : 40kA 2POLE
  - RCCB : 30mA 2POLE TYPE A (if required)

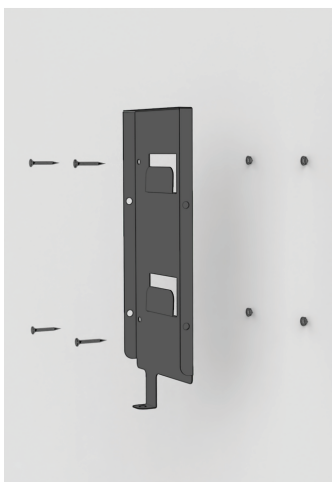
# Charger Installation



1. Carefully take the mounting plate and position it on the wall to mark the location of the walls to drill.

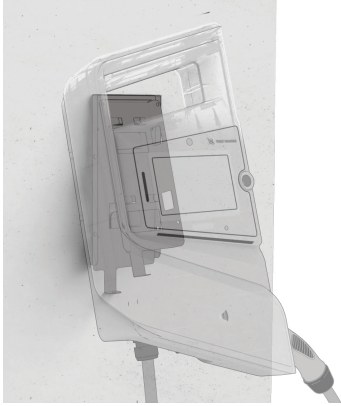


2. Drill four holes with the correct drill bit and install roll-plugs flushed to the wall



3. Place the wall plate and tighten the screws. Do not over tighten the screws.

# Mounting the charger



1. After installing the bracket above, remove the charger packing material and carefully hang the charger on its bracket.



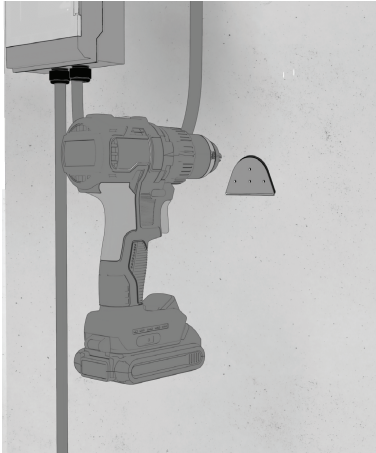
2. Before letting go, check if the charger was properly attached and aligned.



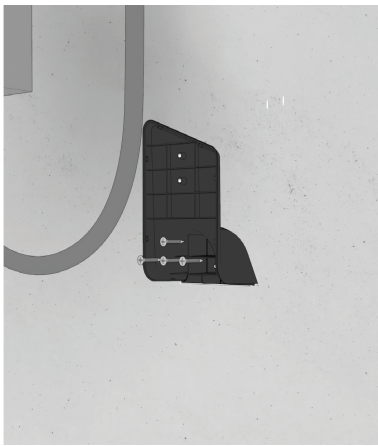
3. Install the safety screw to lock the charger in place.



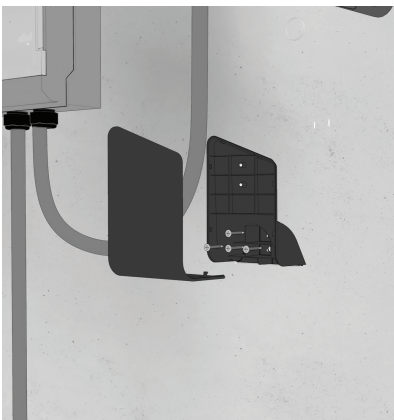
# Holder Installation



1. Drill four holes with the correct drill bit and install roll-plugs flushed to the wall

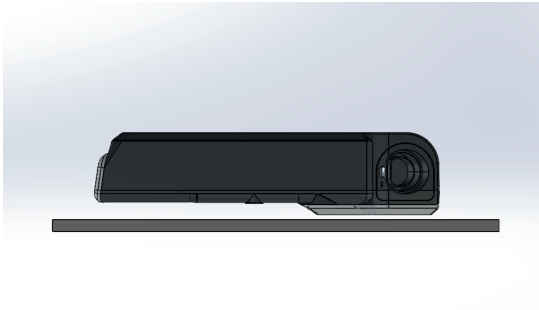


2. Place the back cable holder and tighten the screws. Do not over tighten the screws.

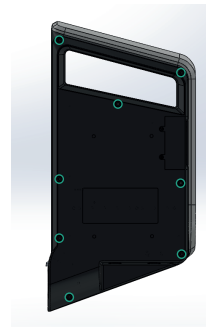


3. Attach the front piece to seal the cable holder.

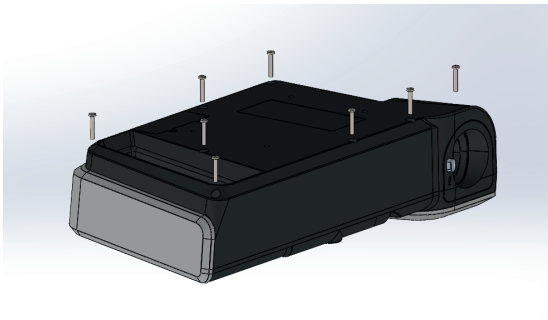
# L 2 Charger Disassembling Procedure



1. Keep front side laying on table



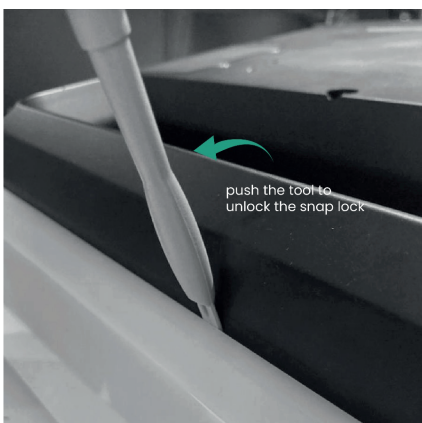
2. Remove 8 nos philips screws (Screw Positions)



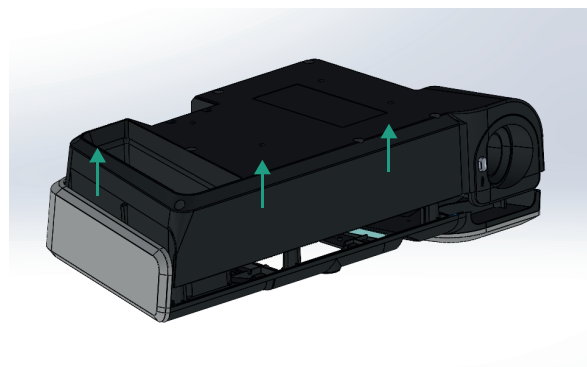
2. Remove 8 nos philips head Screws



3. Insert the tool between the gap and unlock the snap lock

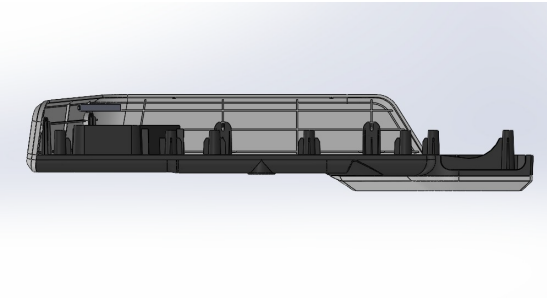


4. Pull the unlocked charger.

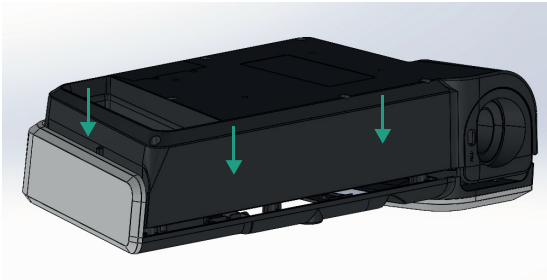


5. Lift the back Panel

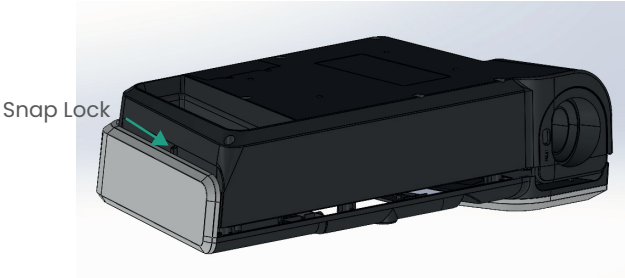
# L 2 Charger Assembly Procedure



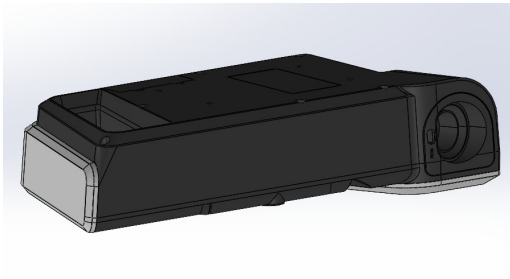
1. Keep the front panel on flat surface



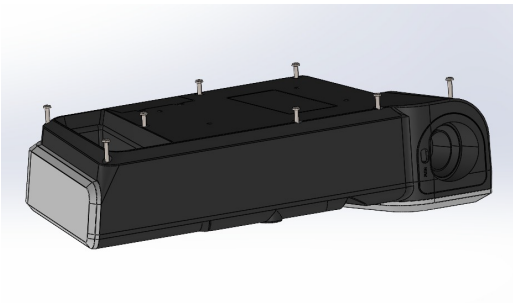
2. Align the back panel and place on the front panel



3. Make sure the snap lock is aligned



4. Fit the Snap lock



5. Tighten the screws with philips head Screw Driver with 1.5 Nm torque

# Connect the Terminals

Use a suitable cable with wire-end ferrules.

A terminal strip with eight terminals. From left to right, they are labeled L1, L2, L3, N, PE, L3, L2, L1, N. Each terminal has a white wire-end ferrule connected to a black cable. The PE terminal is a ground terminal with a screw.

A terminal strip with five terminals. From left to right, they are labeled L1, N, PE, L1, N. Each terminal has a white wire-end ferrule connected to a black cable. The PE terminal is a ground terminal with a screw.

**Note :** It is also possible to use a single-phase connection for the L2 EV Charger. To do so, connect terminals L1, N and PE

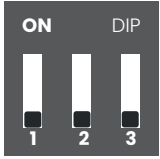
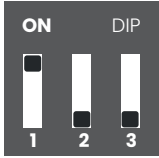
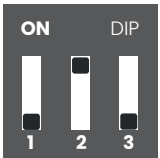
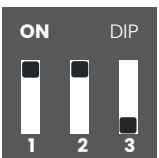
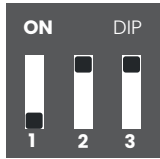
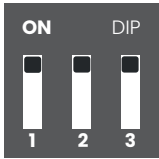
Connect each terminal to the correct connection on the input terminal strip. Then secure the terminal for the input cable correctly.

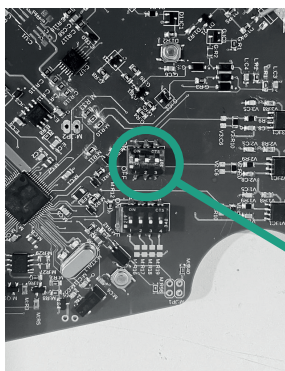
**Note:** Select a suitable cable to comply with all current local, state and national regulations and standards for electrical systems. Ensure that the circuitbreaker is switched off before installation.

# Power Settings

When the EV Charger is delivered from the factory, the L2 EV Charger is set to a maximum charging current of 32 A.

The following settings apply to these versions:

Configuration	Max. rated Current	Configuration	Max. rated Current
000 	0A	100 	20A
001 	10A	101 	24A
010 	12A	110 	28A
011 	16A	111 	32A



Dip Switch

