

Smappee Pay Station

Installation manual



Document accuracy

The specifications and other information in this document were verified to be accurate and complete at the time of its publication. Due to ongoing product improvement, this information is subject to change at any time without prior notice. For the latest information, see our online documentation: smappee.com/downloads

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1 Introduction

With the Pay Station, an electric vehicle driver has an additional payment option to use a charging station. One time per month, the charging station owner will be reimbursed for all charging sessions on the charging square via the Smappee CPO services.

This installation manual tells you how to install, configure and use the Pay Station. We recommend that you read the contents of this manual carefully, to ensure a safe and proper installation and enable you to use all the advanced features of this product to their full extent.

Support

Only qualified electricians or equivalent may install the Smappee Pay Station. If you have any questions, please contact your service partner.

Please have the following information ready to hand to speed up the process: Article number and serial number which you can find on the identification label of the Pay Station. For more information, refer to Position of the identification label (page 8).



Should your local distributor be unable to help you, or you have a suggestion for us, you can contact Smappee at: support@smappee.com.

Smappee NV
Evolis 104
8530 Harelbeke
Belgium

2 Safety instructions

2.1 Safety warnings and precautions

	WARNING Carrying out electrical work in a home or workplace can be dangerous. The dangerous parts of the electric equipment of the Pay Station are installed behind the protective cover. The user can safely operate the payment terminal of the Pay Station. Only certified electricians may carry out the installation, which must be in accordance with the national safety regulations.
	CAUTION Risk of electric shock. Refer to the accompanying documentation whenever you see this symbol.

Please observe the following safety precautions to avoid potential electric shock, fire, or personal injury:

Use the correct tools and provide sufficient material resources and protection measures.

- The Pay Station is, when installed correctly, intended to be used by untrained individuals.
- Switch off electrical power supply to your Pay Station before installation or maintenance work.
- Do not use the Pay Station if it is damaged or defective.
- Do not immerse the Pay Station in water or any other liquids.
- Do not expose the Pay Station to heat, flame or extreme cold.
- Do not attempt to open, repair, or service any parts. Contact Smappee or your service partner for further information.
- Only use the Pay Station under the specified operating conditions.
- Do not allow children to operate the Pay Station.
- When the Pay Station is in use, adult supervision of any children present is required.

2.2 Maintenance

- Observe the maintenance schedule (page 29).
- Clean the outside only with a dry, clean cloth.
- Do not use abrasive agents or solvents.
- May not be carried out during rain or if air humidity exceeds 95%.

2.3 Transport and storage

- Disconnect electrical power supply before removing the Pay Station for storage or relocation.
- Only transport and store the Pay Station in its original packaging. No liability for damage incurred will be accepted if the Pay Station is transported in non-standard packaging.
- Store the Pay Station in a dry environment within the temperature range specified in the technical specifications.

3 Overview of the Pay Station

3.1 Models

Pay Station

Article no.	EAN	Description
PAY-STATION	5425036934467	Smappee Pay Station

Accessories (not included)

Article no.	EAN	Description
FLOOR-PLATE-TUBE120	5425036934719	Floor plate for EV One or Pay Station 120 mm x 120 mm

3.2 Components

The Smappee Pay Station has the following primary components:

- Housing
- Payment terminal at the front of the Pay Station
- Frame
- Anchor

3.3 Directional determination

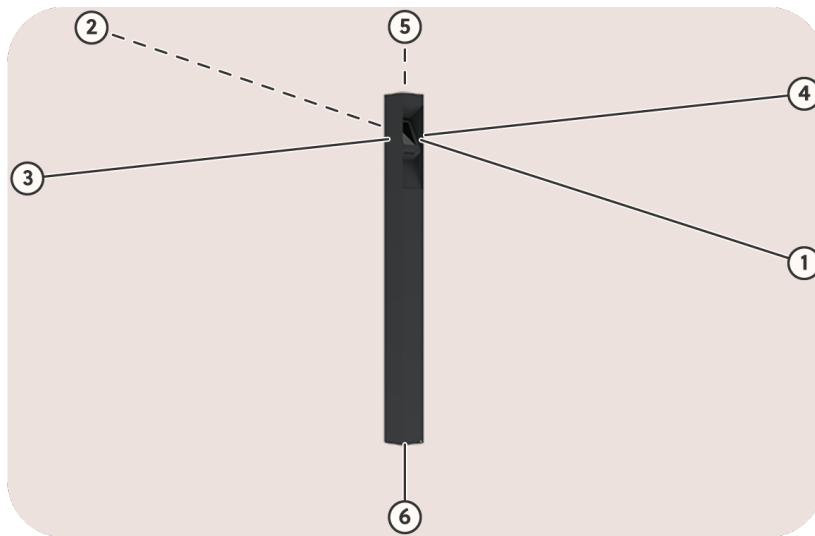


Image 1: Directional determination

Id	Description
1	Front
2	Rear
3	Left
4	Right
5	Top
6	Bottom

3.4 Identification label of the Pay Station

Position of the identification label

The identification label is attached to the inner structure. To remove the outer housing, refer to page 13.

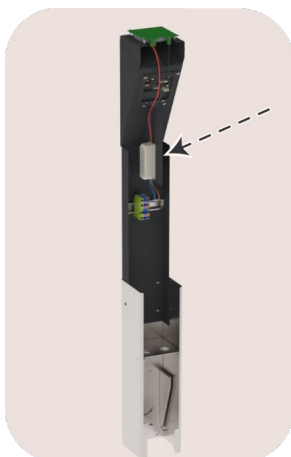


Image 2: Position of the identification label

Content of the identification label

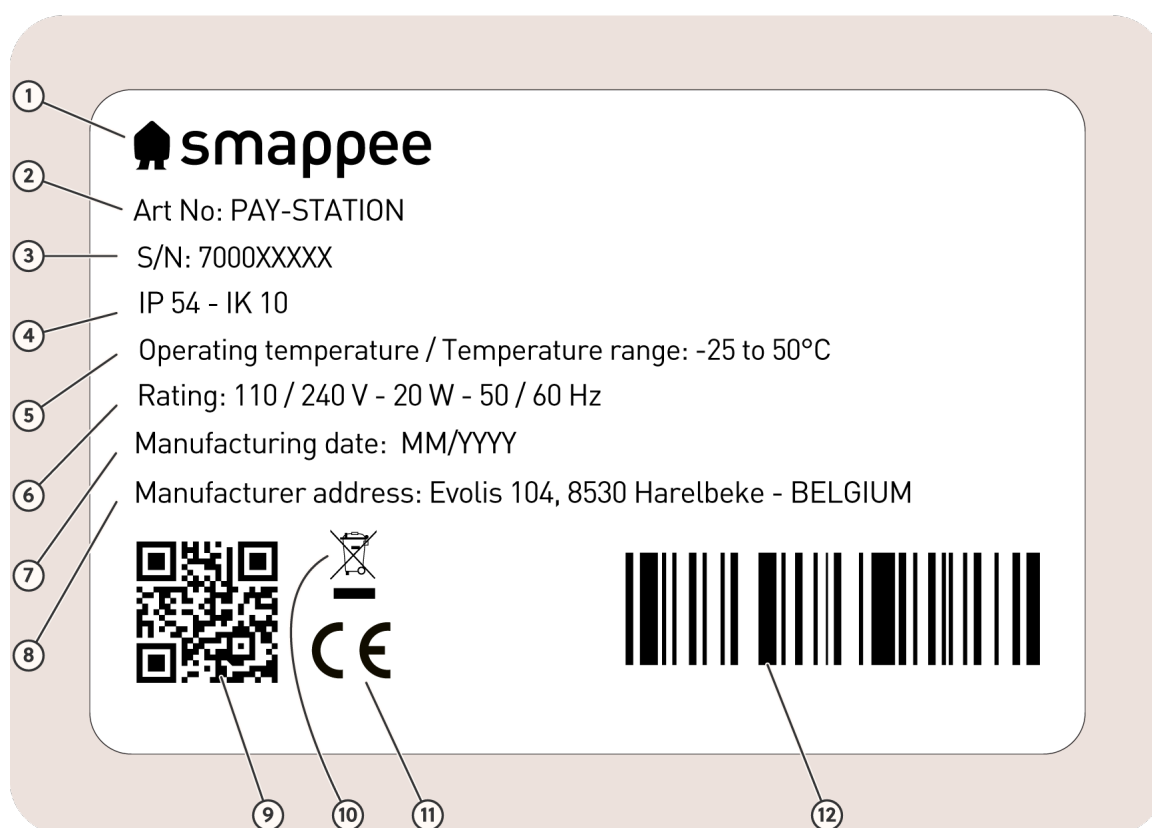


Image 3: Identification label

No.	Description
1	Manufacturer
2	Article number
3	Serial number
4	IP rating and IK rating
5	Operating temperature
6	Electrical rating
7	Manufacturing date
8	Address of the manufacturer
9	QR code containing article number and serial number
10	Waste disposal symbol
11	CE
12	EAN code

3.5 Technical specifications of the Pay Station

Feature	Description
Physical properties	
Dimensions	1450 mm x 120 mm x 120 mm
Weight (excluding packaging)	11.6 kg
Power supply	3G2.5 (1P + N + PE)
Stationary / moveable	Fixed installation
External design	Enclosed assembly
Mounting method	Floor mounted
Technical features	
Rating	110 / 240 V – 20 W – 50 / 60 Hz
Required external circuit breaker	1 x 2P (single-phase) breaker of maximum 20A, type B or C
Product certifications	CE, PCI PTS 6.X, EMVL1/L2, payWave, PayPass, ExpressPay, D-PAS, InteracFlash, J-Speedy, FeliCa, UnionPay UICS, TQM, Mifare, DESfire
Interfaces & Connectivity	
Display of the payment terminal	5" colour TFT LCD with capacitive touch panel 1280 x 720 pixels
Connectivity	Ethernet 100BASE-T, 4G LTE
Environment	
Enclosure material	Magnelis (structure), aluminium (housing)
Enclosure standard colours	RAL 7021 (black grey)
Protection degree	IP 54
Mechanical impact protection	IK 10
Environmental conditions	Indoor and outdoor use
Operating temperature	-25 °C to 50 °C
Storage temperature	-25 °C to 60 °C
Relative humidity	0 % – 95 %, non-condensing
Maximum installation altitude	0 – 2000 m
Access	Locations with restricted and non-restricted access



NOTE

- The operating temperature assumes the ambient temperature of a product delivered in the default enclosure colour RAL 7021 (black grey). Direct exposure to sunlight may have an adverse effect on the temperature range.
- Where products are exposed to the elements of nature, the enclosure can be subject to gradual aging of the material, which can result in product discolouration over time. Therefore, wherever possible, place the product in a sheltered place to optimise the life of the materials.

4 Preparing the installation of the Pay Station

The first step is to prepare the physical installation of the Pay Station as described in this chapter.

4.1 Installation prerequisites

- Obtain all necessary permits from the relevant local authority.
- Local regulations may be applicable and can vary depending upon the region or country.
- Make sure that there is sufficient space around the Pay Station as specified in the IEC 60204-1 standard.
- Refer to local wiring regulations to select the conductor sizes and use only copper conductors.
- Make sure that the installation area of the Pay Station is adequate for usability. The power supply connection must be protected against short-circuiting and over-current with an individual circuit breaker. Refer to Technical specifications (page 10).

Route the power supply cable to the position where the Pay Station will be installed together with a network cable for the internet connection. This optional network cable can be used if the wireless connection is not sufficient and vice versa.



NOTE

Make sure that there is at least 100 cm 3G2.5 power supply and 150 cm network cable length available at the location of the Pay Station to be able to connect it easily.

- Use the supplied anchor (page 13) or the optional floorplate (page 19) to attach the Pay Station.

4.2 Tools (not included)

- Screwdrivers
- 2.5 mm hex screwdriver
- 8 mm socket wrench with extension bar
- Multimeter and earth ground meter
- Wire stripper and cutter
- Needle-nose pliers
- Ferrules crimper (only for stranded power supply cables)
- RJ45 crimping tool

4.3 Supplies (not included)

- Power supply cable
- Ferrules, when using stranded power supply cables
- Circuit breaker for power supply
- Network cable and RJ45 connectors, minimum Cat 5 depending on the environment, if using wired internet connection

4.4 Prepare the foundation for the Pay Station

Context



NOTE

This section is only relevant if you use the optional floorplate to attach the Pay Station. If you use the anchor, go to Prepare the Pay Station (page 13).

A stable and level ground needs to be prepared in advance and there must be a power supply cable and a network cable. The surface of the ground must be solid to allow the usage of concrete anchors and avoid moisture from the soil.

We recommend a levelled concrete foundation at ground level. This can be a polished concrete floor in a parking garage or a flat surface for installation of the charging stations and a Pay Station.

Instructions

Proceed as follows.

1. Make a foundation hole large enough.
Depending on the subsoil, the size may vary. Please refer to the technical specifications of size and weight to determine and construct a solid foundation for the Pay Station.
When dimensioning the foundation, it is advisable to carry out a static load capacity analysis according to the relevant standards.

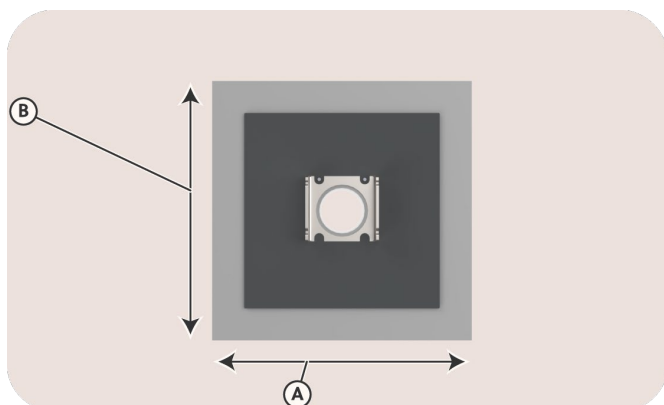


Image 4: View on the minimum dimensions ($A \times B = 0.40 \text{ m} \times 0.40 \text{ m}$ or $1.31 \text{ ft} \times 1.31 \text{ ft}$)

2. Route the power supply cable and the network cable to the location of the Pay Station.

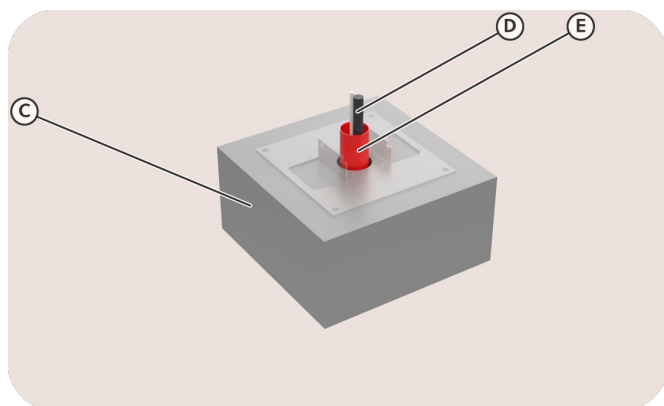


Image 5: Example of a solid foundation (C), with cables (D) in a flexible conduit system (E)

3. Fill foundation hole with concrete.

Wait for the concrete to cure before going to the next steps.

4.5 Prepare the Pay Station

Context

For safe and compact transport of the Pay Station:

- The outer housing is attached to the inner structure of the Pay Station.
- The anchor components are attached inside the structure.

You need to prepare the Pay Station for installation.

Instructions

Proceed as follows.

1. Remove the cardboard packaging.
Keep in mind to store the cardboard, as this can be used to safely store the outer housing while installing the Pay Station.
2. Unscrew the two bottom screws at the front that hold the outer housing.
Make sure to keep the screws for later closure of the Pay Station.

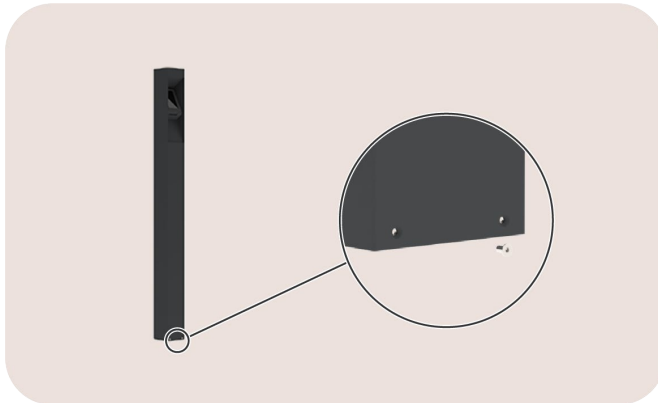


Image 6: Front view on the Pay Station

3. Slide the outer housing upwards, of the internal structure.



NOTE

The internal structure can be divided into two parts in function of a smooth installation of the anchor. We recommend that you do not skip the next steps 4 and 5.

4. Unscrew the four nuts that hold the top part of the Pay Station.
Make sure to keep all fasteners.

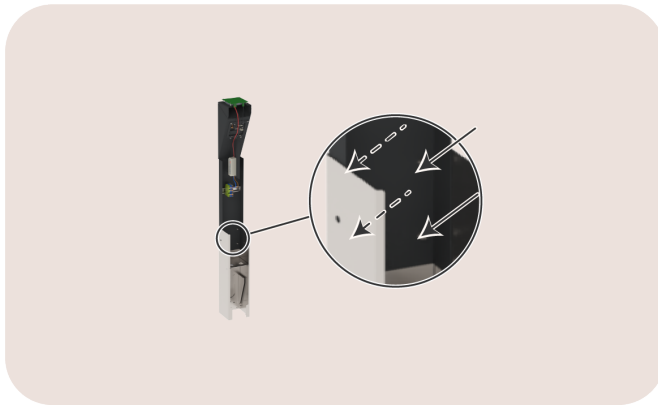


Image 7: Rear view on the Pay Station

5. Remove the top part of the Pay Station and set it aside in a safe location.
No wires need to be disconnected, nor components removed.

As a result, the Pay Station is prepared for the next steps.

4.6 Assemble the anchor of the Pay Station

Context



NOTE

This section is only relevant if you install the Pay Station at ground level with the supplied anchor. If you use the floorplate, go to Installation and configuration (page 17).

Instructions

Proceed as follows.

1. Remove the anchor components from the inner structure.
Unscrew the two nuts that hold the three anchor components to the inner structure.



Image 8: Rear view on the bottom part of the Pay Station

2. Attach the component (1) to the inner structure (3).
 - Use the supplied lock nuts.
 - Make sure it is attached to the open side of the inner structure.
 - Make sure its lip is at the outer side.
3. Attach the two components (2) to the left and right of the inner structure (3).
There is no specified left or right component.

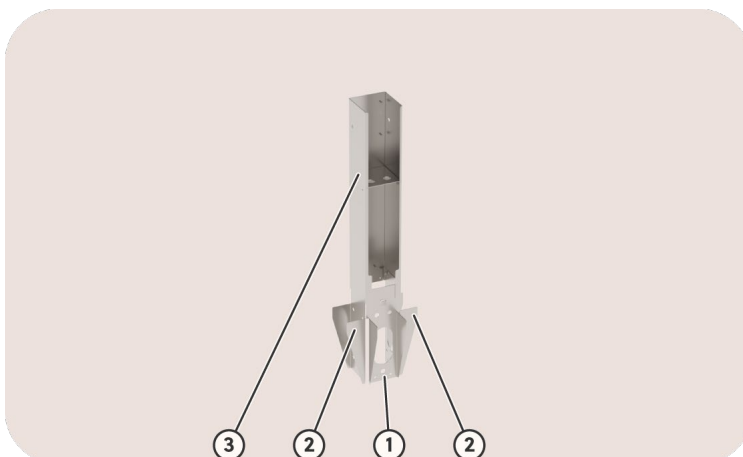


Image 9: Rear view on the anchor assembly

As a result, the anchor is ready for installation.

4.7 Install the anchor of the Pay Station

Context



NOTE

This section is only relevant if you install the Pay Station at ground level with the supplied anchor. If you use the floorplate, go to Installation and configuration (page 17).

A stable and level ground needs to be prepared in advance. We advise a levelled concrete foundation at ground level minus the height of the anchor (40 cm).

The open side of the inner structure gives the rear of the Pay Station.

The top of the lip gives the bottom of the Pay Station.

Instructions

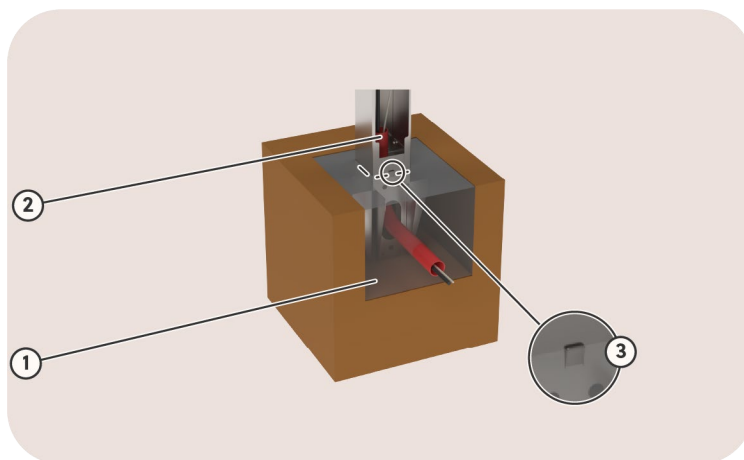


Image 10: Rear view on the anchor installation

Proceed as follows.

1. Make a foundation hole large enough to accommodate the anchor.
Depending on the subsoil, the size may vary. Please refer to the technical specifications of size and weight to determine the dimensions for a solid foundation for the Pay Station.
2. Route the power supply and optional network cable in a flexible conduit system through the inner structure of the Pay Station.
3. Fill the foundation hole with concrete.
 - It is normal that some concrete gets into the holes, which makes the anchor better attached to the foundation.
 - Make sure the top of the lip is above the concrete.
 - Make sure the inner structure is level in all directions.



NOTE

- Use two magnetic spirit levels to easily adjust the angle of the anchor.
- Use concrete with very fast hardening to keep the angle of the anchor.

Wait for the concrete to cure before going to the next steps.

5 Installation and configuration



CAUTION

The installation must be carried out by a qualified professional who has read this manual and works in compliance with IEC 60364 standards. Neglecting this may lead to severe injuries or hazardous situations while working with electricity.



CAUTION

The electric system must be entirely disconnected from every power source prior to performing installation or maintenance work. Make sure it is not possible to connect the electric current during installation. Put up caution tape and warning signs to mark the work areas. Make sure no unauthorised people can enter the work areas.



CAUTION

The Pay Station contains electric components that may still contain electrical charge after being disconnected. Wait at least 10 seconds after disconnection before commencing work.

This procedure describes the required steps for the physical installation of the Pay Station:

1. Attach the Pay Station (page 17)
2. Connect the power supply of the Pay Station (page 21)
3. Connect the Pay Station to the internet (page 22)
4. Complete the installation of the Pay Station (page 23)

After the physical installation, the configuration can be done. For more information, refer to Configure the Pay Station (page 24).

5.1 Attach the Pay Station

The supplied anchor or a floorplate must be used to attach the Pay Station. For more information, refer to:

- Attach the Pay Station to the anchor (page 18)
- Attach the Pay Station to the floorplate (page 19)

Attach the Pay Station to the anchor

Context



NOTE

This section is only relevant if you use the supplied anchor to attach the Pay Station. If you use the floorplate, refer to Attach the Pay Station to the floorplate (page 19).

You have divided the Pay Station into two parts and used the bottom part during installation of the anchor. For more information, refer to:

- Prepare the Pay Station (page 13)
- Assemble the anchor of the Pay Station (page 15)
- Install the anchor of the Pay Station (page 16)

Instructions

Attach the top part to the bottom part. Make sure to use the fasteners.

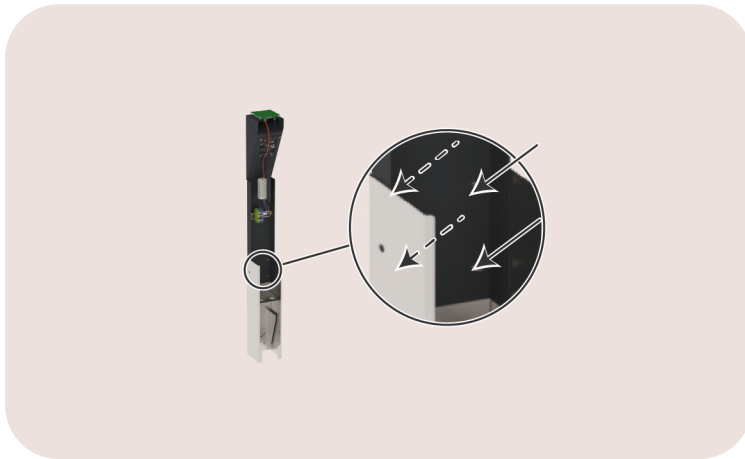


Image 11: Rear view on the Pay Station

Attach the Pay Station to the floorplate

Prerequisites



NOTE

This section is only relevant if you use the optional floorplate to attach the Pay Station. If you use the anchor, refer to Assemble the anchor of the Pay Station (page 13).

We recommend a levelled concrete foundation at ground level. This can be a polished concrete floor in a parking garage or a flat surface for installation of the charging stations.

Route the power supply cable and the network cable through the central opening of the floorplate.

Context

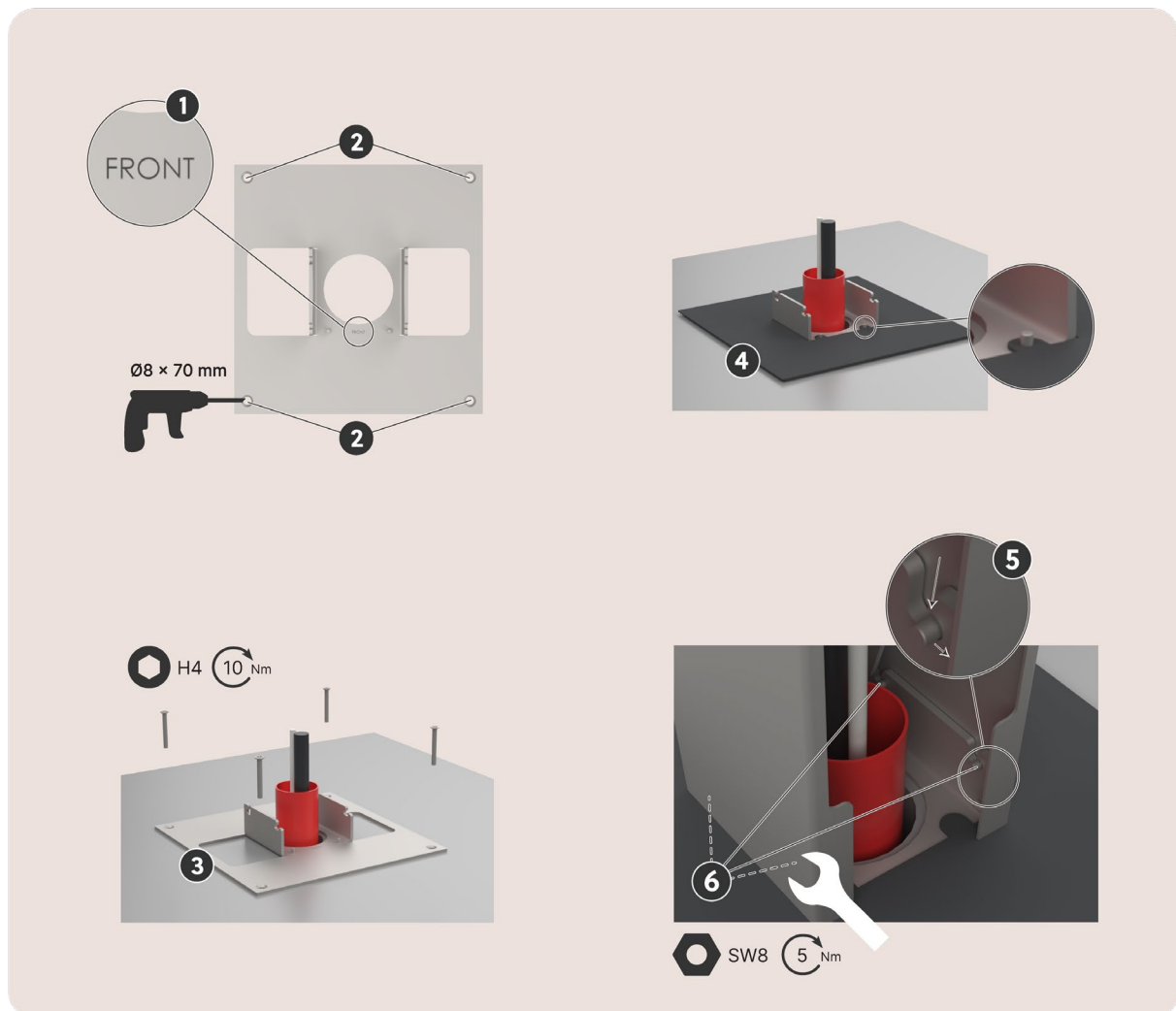


Image 12: View on the image from the quick install guide

Instructions

Proceed as follows.

1. Put the floorplate in the correct position.
Pay attention to turn it with the FRONT indication to the side where the payment terminal will come.
2. Drill the four holes of Ø 8 x 70 mm.
Make sure the hole is free of small particles.
3. Attach the floorplate to the foundation.
Insert the anchor screw until the head is at the same level as the floorplate.
Use a hammer if necessary.
Tighten the screws to 10 Nm with a hex key 4.
4. Put the cover plate over the floorplate.
There is only one direction the studs fit into the holes at the front.
5. Put the structure over the floorplate.
Move vertically in the slot and then move horizontally.
6. Tighten the four nuts.
The nuts are supplied with the Pay Station.
Tighten the nuts to 5 Nm with an 8 mm socket.

As a result, the structure is locked to the floorplate.

5.2 Connect the power supply of the Pay Station

Context

A Pay Station has its own circuit breaker. For more information, refer to Installation prerequisites (page 11).

Instructions

1. Guide the power supply cable through the cable gland.
Tighten the cable gland.

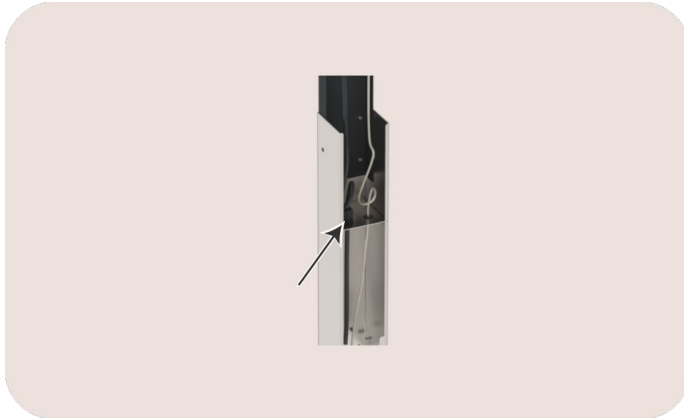


Image 13: View on the holes for the cable entry

2. Cut the power supply cable to the sufficient length.
For stranded wires, add a wire end ferrule to each conductor.
3. Connect the power supply wires as follows:

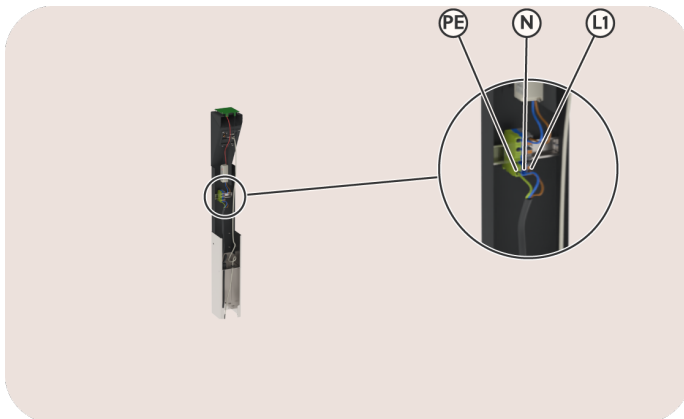


Image 14: View on the power supply connection

- Connect the neutral conductor to the blue terminal block N.
- Connect the phase conductor to the brown terminal block L1.
- Connect the protective earth conductor to the green/yellow terminal block PE.

As a result, the Pay Station is almost ready for power.

5.3 Connect the Pay Station to the internet

Context



NOTE

This section is only relevant if you use a wired internet connection for the Pay Station. If you use wireless connection, go to Complete the installation of the Pay Station (page 23).

Instructions

Proceed as follows.

1. Guide the network cable through the cable entry.
For the optional network cable, you will need to cut a small cross into the rubber seal.

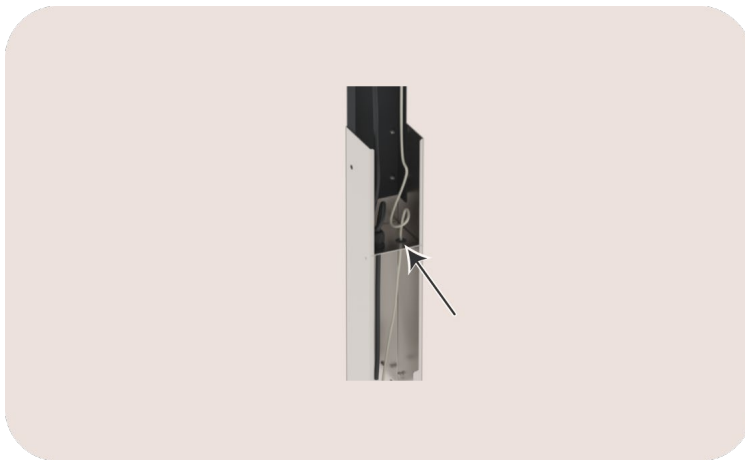


Image 15: View on the holes for the cable entry

2. Cut the network cable to the necessary length.
3. Attach the RJ45 connector (not supplied).
4. Put the connector in the RJ45 port.

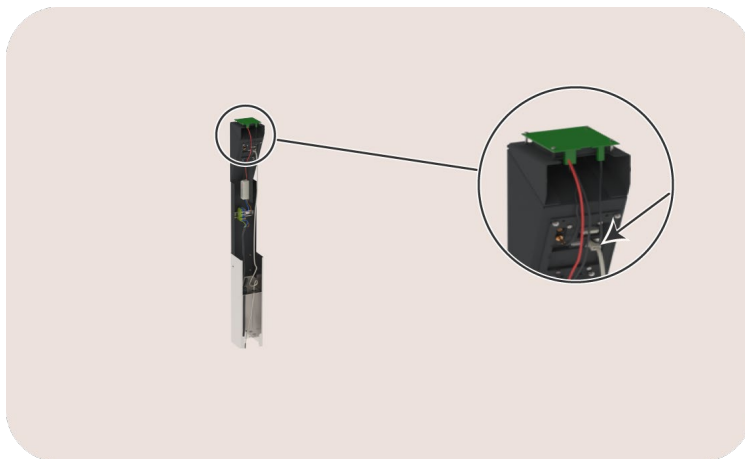


Image 16: View on the RJ45 port

As a result, the installation can be completed.

5.4 Complete the installation of the Pay Station

Prerequisites



CAUTION

Risk of electric shock.

Make sure no tools are in the Pay Station and people stand free from the Pay Station.

Instructions

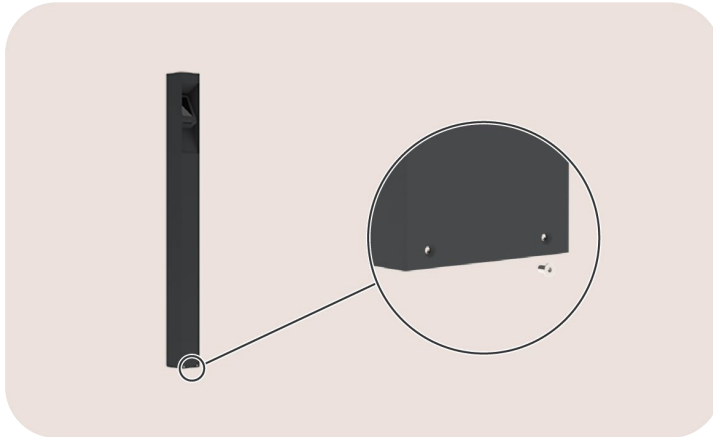


Image 17: Front view on the Pay Station

Proceed as follows.

1. Take a photo of the identification label.
For more information, refer to Position of the identification label (page 8).
The identification label has necessary information to configure the Pay Station.
2. Slide the housing over the inner structure.
Make sure the opening is in line with the payment terminal on the inner structure.
3. Tighten the screws at the bottom of the housing.
These screws are removed when preparing the installation (page 13).
4. Start the power supply to the power supply cable.
The display shows a QR code for configuration by your customer.

As a result, the Pay Station is ready to be configured.

5.5 Configure the Pay Station

Context

Smappee Services will configure the Pay Station on the charging square according to the needs of the charging station owner.

	NOTE The charging station owner: • Must be registered the organisation for Smappee CPO services. For more information, refer to dashboard.smappee.net/register-charging-host. • Must onboard the organisation for one or more payment terminals. For more information, refer to How to onboard the Smappee Pay Station? – Support. • Should put a marker of the connector number adjacent to each connector of the charging stations. If a charging station has displays, the connector number can be put on the display image.
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Instructions

Send an email, refer to Necessary information to configure the Pay Station (page 27).

As a result, Smappee Services will configure the Pay Station of your charging square and contact you when the Pay Station can be used. For more information, refer to Using the Pay Station (page 25).

6 Using the Pay Station

The users of a charging square can start and stop charging sessions from the Pay Station.

6.1 Start a charging session

Use the payment terminal as follows to start charging:

1. Connect your electric vehicle to the charging station.

	NOTE The charging station display shows: • The electric vehicle is connected, so you know you can go to the Pay Station • The connector number, which you'll need to select on the payment terminal display If the charging station has no display: • The LED of the charging point goes from white to blue, to show the vehicle is connected. • Read the connector number adjacent to the charging point, to select on the payment terminal display.
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2. Go to the Pay Station.
The payment terminal display shows the following instructions.
3. Select the connector number of your connected EV to start the charging session.

	NOTE The payment terminal display only shows connector numbers: • Which have a connected electric vehicle • Where no charging session has been started
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4. Offer your payment method, if applicable:
 - Tap your physical or digitalised payment card in front of the payment terminal display.
 - Insert your electronic payment card in the slot on the bottom of the payment terminal.
 - Swipe your electronic payment card through the slot on the right side of the payment terminal.

As a result, your charging session starts.

6.2 Stop a charging session

Context

You can stop charging:

- From your EV. See also the instruction manual of your EV.
- From the charging station if it has a stop button.
- From the payment terminal. Refer to the following instructions.

Instructions

Proceed as follows.

1. Offer your payment method.
For more information, refer to page 25.
The payment terminal display shows the following instructions.
2. Select the charging station with your connected EV to stop the charging session.
As a result, you can disconnect the charging cable.

Annexes

Necessary information to configure the Pay Station

Mail to: Onboarding@smappeeservices.com

Subject: Necessary information to configure my Pay Station

Hi there,

The Smappee Partner completed the installation of the Pay Station(s). Please find below the necessary information for the configuration:

- Organisation name registered for Smappee CPO services:
- Location of the charging square (full address):
- Serial number of the Pay Station 1 (*):
- Serial number of the Pay Station 2 (*):

The configuration should be as follows, so that only these charging points can start a charging session from the related Pay Station:

Connector number (A)	Serial number of the charging station (B)	Pay Station 1 (C)	Pay Station 2 (D)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

- (*) Each Pay Station has a serial number in the format with 7000xxxxxx. See the photo taken during installation, refer to Complete the installation of the Pay Station (page 23).
- (A) Each connector gets a number, which will be shown on the payment terminal display.
- (B) Each charging station has a serial number in the format 6xxxxxxxxx. If the charging station has two connectors, repeat the serial number in the next row.
- (C), (D) Put an X in the column if the charging point must be shown on this Pay Station. Pay Station 2 and any additional columns are optional.

Declaration of conformity

Declaration of conformity

We,
Smappee nv
Evolis 104
B-8530 Harelbeke, Belgium

following the provision of the following EC Directives:

- 2014/35/EU The Low Voltage Directive
- 2014/30/EU The Electromagnetic Compatibility Directive
- 2011/65/EU RoHS Directive
- 2023/1804 Alternative Fuels Infrastructure Deployment regulation

hereby declare that the product:

SMAPPEE PAY STATION

is in conformity with the applicable requirements

Harelbeke, Belgium, April 16, 2024

Authorized signatory



CEO Smappee



Maintenance schedule

To ensure safe and reliable operation, periodic maintenance and inspections are recommended. The frequency depends on usage and environmental conditions.



WARNING

Before starting maintenance activities, consider all safety precautions as listed in Safety instructions (page 5).

Task	More information
Visual inspection of the Pay Station	Check for visible damage or wear. If necessary, consult an installer for assessment or replacement.
Cleaning	Cleaning is optional and does not affect the operation of the Pay Station. For aesthetic reasons, you may wipe the unit with a dry, clean cloth. Do not use water jets, solvents, or abrasive materials.