

Mobility Wallbox Home / Home Pro

Charging station

Operating Instructions



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1 About these operating instructions

The operating instructions are intended for persons who are to operate and clean the product.

- ▶ Read the operating instructions completely before operating the product.
- ▶ Keep the operating instructions after reading them.

The operating instructions are part of the product.

- ▶ If you pass the product on to third parties, also pass on the operating instructions and the applicable documents.

1.1 Applicable documents

- Safety instructions
- Instructions for assembly and disassembly
- Instructions for system networking

All documents can be downloaded from the website www.lappmobility.com.

1.2 Means of representation and symbols

- ▶ Instruction for action
- Enumeration

WARNING!

An information with the signal word "**WARNING**" warns of a danger that can result in serious injuries or death if it is not avoided.

CAUTION!

An information with the signal word "**CAUTION**" warns of a danger that can result in injuries if it is not avoided.

NOTICE!

An information with the signal word "**NOTICE**" warns of a danger that can result in damage to property or malfunction of the product if it is not avoided.



Reference to a qualified electrician



Reference to further documentation



Reference to required tools

2 For your safety

2.1 Intended use

The product is intended for charging electric vehicles and hybrid vehicles that can be charged with Mode 3 and Type 2 connector. Only an original Lapp Mobility charging cable may be used for charging. To charge a vehicle with Type 1 connector, a standard-compliant adapter cable is required. Extension cables must not be used.

The product may only be operated when it is mounted in one of the following ways:

- on a wall
- freestanding, only with original accessories for freestanding mounting from Lapp Mobility.

For safe operation of the product, a type A residual current circuit breaker is required in the building installation or in the product. A product without an integrated type A residual current device may only be operated if it is connected to a house installation with a type A residual current circuit breaker.

For safe operation of the product, a circuit breaker is required in the building installation (see technical data).

The product is intended for use in accordance with these operating instructions. Any use of the product that deviates from these operating instructions is considered improper.

Observe the country-specific requirements of IEC 61851-1.

2.2 Safety instructions

Danger to life due to electric shock

There is a risk of electric shock when working on the electrical installation of the product.



- ▶ All work on the domestic installation and the electrical installation of the product may only be carried out by a qualified electrician.

There is a risk of electric shock if damaged cables are used.

- ▶ Do not operate the product without a residual current circuit breaker or a miniature circuit breaker.
- ▶ Check the charging cable for obvious damage before each use.
- ▶ Protect the product and the charging cable from direct sunlight.
- ▶ Only use the product if the charging cable is undamaged.

If water enters the product, there is a risk of electric shock.

- ▶ Have the product mounted according to the specified IP protection degree.
- ▶ Do not use a high-pressure cleaner to clean the product.
- ▶ Only use a soft, dry cloth to clean the product.

Risk of injury due to damaged product

A damaged product can lead to unforeseeable malfunctions and hazards.

- ▶ Check the product and its accessories for obvious damage before each use.
- ▶ Only use the product and its accessories if all parts have not been damaged.

2.3 Modification of the product

The product must not be structurally or technically modified. Structural and technical modifications impair the safety and functionality of the product.

3 Product overview

3.1 Product components

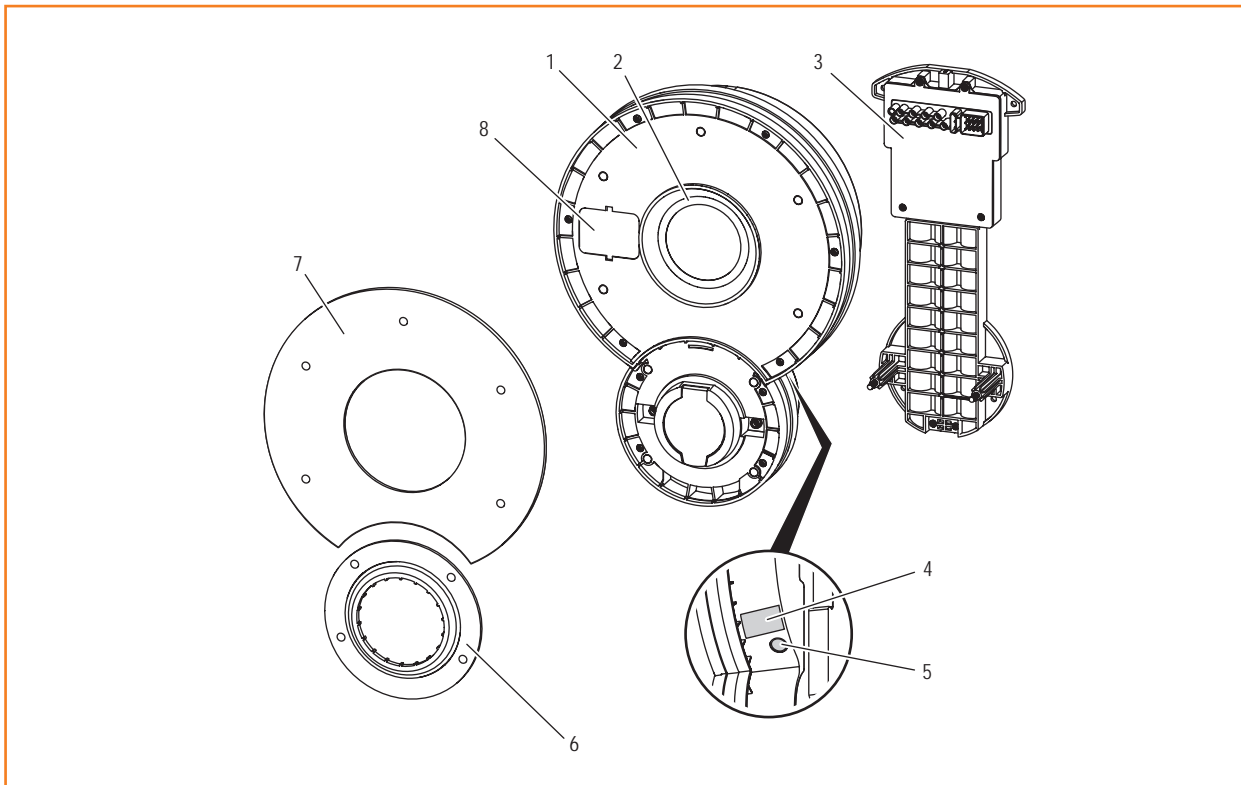





Fig. 1 Overview of the product components

Pos.	Name	Description
1	Housing	
2	LED display	for displaying the operating status
3	Mounting plate	for mounting the product on a wall
4	Nameplate	with serial number and connection data of the product
5	On/off button	for switching the product on and off
6	Cover, small	
7	Cover, big	
8	Maintenance lid	for testing the optional residual current circuit breaker

LED indicator

The colour of the LED indicator shows the operating status of the product.

Colour	Meaning
 Green	The product is switched on and ready for operation.
 Blue	The product has detected a connection to a vehicle and is ready for charging or charging is in progress.
 Red	The product has detected a fault and is disconnecting from the vehicle.

3.2 Product functions

As soon as the charging process starts, the vehicle locks the plug of the charging cable in the socket of the vehicle and the charging station locks the plug in the socket of the charging station. This prevents the charging process from being interrupted prematurely by disconnecting the charging cable.

Response in the event of a malfunction

If the product detects a malfunction, the LED indicator lights up red. If the product is connected to a vehicle, the product disconnects from the vehicle. In this case, the plug of the charging cable can be unlocked via the vehicle software. The plug on the product is automatically unlocked.

In the event of a power failure, you can unlock the plug on the vehicle via the vehicle software. The plug on the product unlocks automatically.

Communication capability

The product can be connected to external interfaces, for example to connect to an energy management system. This connection is described in a separate document (see instructions for system networking).

4 Unpacking and checking the scope of delivery

4.1 Unpacking

- ▶ Remove all parts of the product, including the documents supplied, from the packaging.
- ▶ Keep the packaging so that you can store the unassembled product in it (see chapter 5 on page 10).

4.2 Checking the scope of delivery

- ▶ Check that the scope of delivery is complete and that all parts are undamaged.

Item	Quantity
Housing	1
Mounting plate	1
Strain relief	1
Dowel, 8 x 50 mm	4
Lag screw, 5 x 50 mm	4
Washer	4
Screw 3.5 x 16 mm	1
Screw 4 x 12 mm	6
Cover, small	1
Cover, big	1
Closing cap for conductor bushing (right and left)	1 each
Safety instructions	1
Instructions for assembly and disassembly	1

5 Storing the product

 **WARNING!**

Risk of injury due to damaged product

The product meets the requirements for protection degree IP54 only when mounted in the installation position, on a wall or on the original equipment for freestanding installation. If stored improperly, the dismantled product may be damaged by penetrating dust, dirt or moisture. The operational safety of an improperly stored product is therefore not guaranteed.

- ▶ Protect the unassembled product from dust, dirt and moisture, e.g. by storing it in its original packaging.
-
- ▶ Store the product in accordance with the recommended ambient conditions (see Technical data on page 21).

6 Preparing the installation

6.1 Choosing an installation site

- ▶ Choose an installation site that meets the following requirements:
 - level, plumb wall
 - sufficient space for the product (see Technical data on page 21)
 - suitable environmental conditions (see Technical data on page 21)
 - no direct sunlight

6.2 Commissioning the installation



Danger to life due to electric shock

There is a risk of electric shock when working on the electrical installation of the product.

- ▶ Never install the product yourself.
 - ▶ Ask a qualified electrician to install the product.
-



Risk of injury due to damaged product

A damaged or incomplete product can lead to malfunctions and hazards.

- ▶ Only have the product assembled if all items in the scope of delivery are complete and undamaged.
-

6.3 Replacing the covers

The covers and the housing are equipped with magnets that keep the covers in place on the housing. You can replace the mounted covers at any time.

Detaching the covers from the housing



Required tools: flat dismantling wedge (not included in the scope of delivery)

NOTICE!

Damage to the covers caused by improper tools

The covers and the housing can be damaged by tools with sharp edges.

- ▶ Use a flat dismantling wedge to remove the covers.

NOTICE!

Damage to the covers due to falling

As soon as you lift a cover off the housing at one point, the entire cover comes off. Falling covers can be damaged.

- ▶ Hold the cover while detaching it from the housing.
- ▶ Use a flat dismantling wedge to detach the mounted covers from the housing (see Fig. 2).

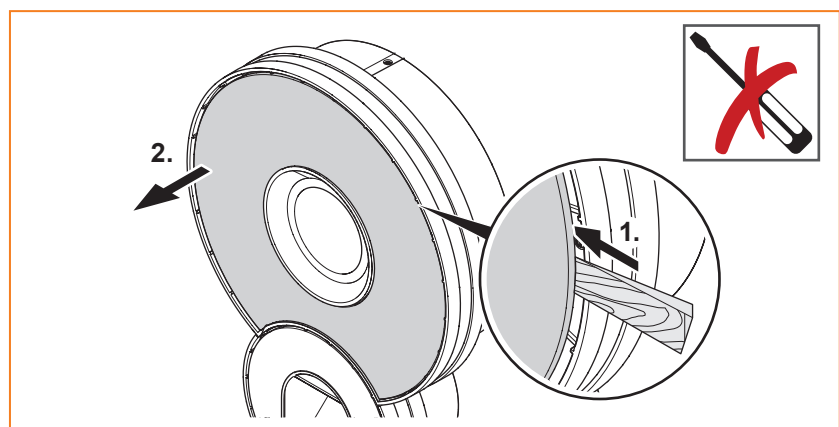


Fig. 2 Detaching the cover from the housing

Attaching the covers to the housing

NOTICE!

Damage to the covers due to falling down

If the magnets of the cover and the housing are not exactly aligned, the cover may fall down and be damaged.

► Make sure that the magnets are aligned and in contact with each other.

► Place each cover on the housing so that the magnets of the cover and the housing are exactly on top of each other (see Fig. 3).

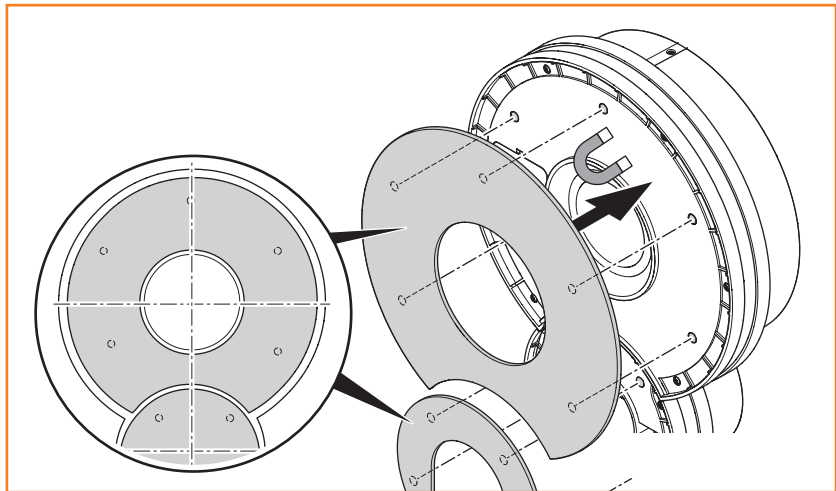


Fig. 3 Attaching the covers to the housing

7 Operating

7.1 Switching on the product

- ▶ Press the on/off button.

The on/off button engages.

The LED indicator flashes green.

As soon as the LED indicator is permanently green, the product is ready for operation.

7.2 Charging the vehicle

Precondition: The product is switched on and the LED display is permanently lit green.

Connecting the vehicle to the product

- ▶ Use the charging cable to establish a connection between the product and the vehicle (see Fig. 4).

The LED indicator lights up blue.

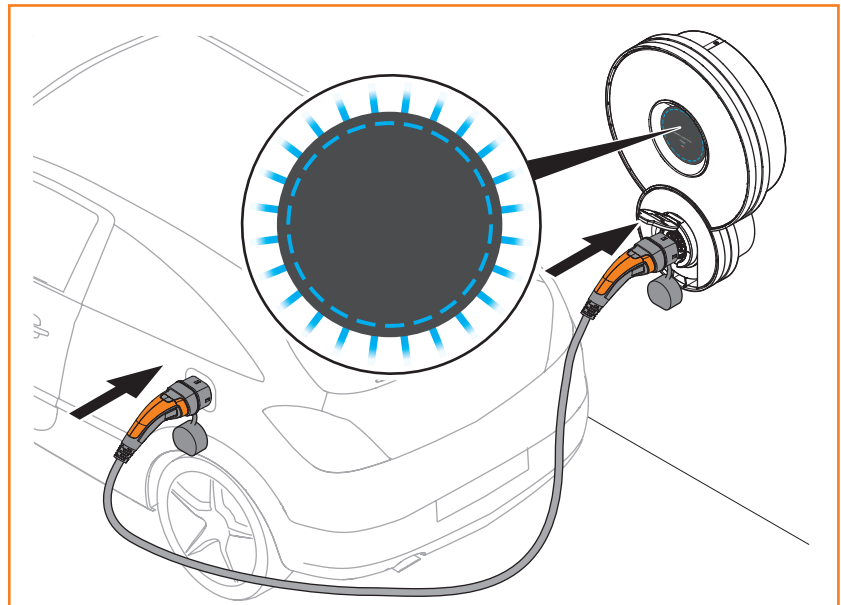


Fig. 4 Connecting the vehicle to the product

Starting the charging process on the vehicle

The blue light of the LED indicator signals that the product has detected a connection to a vehicle and is ready to charge the vehicle. The product does not receive any feedback from the connected vehicle about the power at which the vehicle is being charged.

Only the connected vehicle can start the charging process and display the charging progress.

Depending on the connected vehicle, the charging process either starts automatically or you have to start the charging process manually on the connected vehicle.

- ▶ Make sure that the charging process starts. Follow the instructions of the connected vehicle.

The plugs on the vehicle and product are locked.

NOTICE!

Malfunction due to unlocked plug

The plugs on the vehicle and product are locked to prevent interruption of the charging process. Interrupting the charging process can lead to faults in the product and the vehicle software.

- ▶ Check whether the plugs are locked.

7.3 Stopping the charging process

Charging can only be stopped by the software of the connected vehicle. Follow the instructions for your vehicle.

Disconnecting the vehicle from the product

- ▶ Stop the charging process. Follow the instructions for your vehicle.

The connectors on the vehicle and product are unlocked.

- ▶ Make sure that the charging process is finished. Follow the instructions for your vehicle.
- ▶ Remove the charging cable from the vehicle.

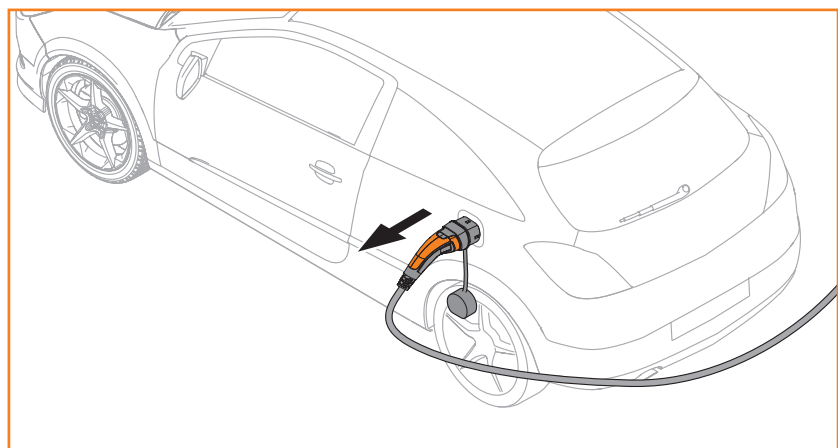


Fig. 5 Disconnecting the vehicle

⚠ CAUTION!**Risk of tripping due to the charging cable lying around**

If the charging cable is lying on the floor, people can trip over it and the charging cable can be damaged by being crushed or kinked.

- ▶ Place the charging cable so that it cannot be crushed or kinked and so that there is no risk of tripping.

7.4 Switching off the product

ⓘ NOTICE!**Malfunction due to premature switching off of the product**

If you switch off the product while it is connected to a vehicle, the product and the vehicle software may malfunction.

- ▶ Make sure that charging is finished and that the product is not connected to a vehicle.
-

- ▶ Press the on/off button.

The LED indicator goes out.

8 Cleaning the product

WARNING!

Danger to life due to electric shock

If water enters the housing, there is a risk of electric shock.

- ▶ Never clean the product with a high-pressure cleaner.
 - ▶ Only clean the product as described in these operating instructions.
-

NOTICE!

Damage to the product due to improper cleaning

Unsuitable cleaning agents can damage the product.

- ▶ Do not use any cleaning agents.
-
- ▶ Wipe the product clean with a soft, dry cloth.

9 Troubleshooting

As soon as the product detects a malfunction, the LED indicator lights up red. The following table describes possible causes of malfunctions and measures for troubleshooting.

- If the fault cannot be remedied with the measures described, ask a qualified electrician to remedy the fault.

Possible cause	Recommended measure
Does your equipment work? – Vehicle – Vehicle software	Refer to the instructions for your vehicle.
Are you trying to charge the vehicle with a connector Type 1?	Use a standardised Type 1 to Type 2 adapter cable.
Does the charging cable show obvious signs of external damage?	Never use a damaged charging cable. Replace the charging cable with an undamaged original charging cable from Lapp Mobility.
Are you using a charging cable from a manufacturer other than Lapp Mobility?	Replace the charging cable with an original Lapp Mobility charging cable.

10 Dismantling the product

 **WARNING!**

Danger to life due to electric shock

There is a risk of electric shock when working on the electrical installation of the product.

- ▶ Ask a qualified electrician to dismantle the product.
-
- ▶ Switch off the product (see chapter 7.4 on page 16).
 - ▶ Clean the product (see chapter 8 on page 17).
 - ▶ Have the product dismantled by a qualified electrician.

11 Disposal of product and packaging



The EU Directive 2012/19/EU regulates the collection and recycling of waste electrical and electronic equipment within the European Union. All products covered by this directive are marked with the symbol of the crossed-out wheeled bin and must not be disposed of with general household waste.

- ▶ At the end of their life cycle, please take these products to your local collection points for treatment, refurbishment and recycling in accordance with your national legislation or return them to Lapp Mobility free of charge.

The packaging of the product, including the special film, is made of environmentally friendly, decomposable materials. The packaging can therefore be disposed of completely with the waste paper.

- ▶ Dispose of the product packaging in accordance with the applicable local regulations.

12 Technical data

	Mobility Wallbox Home / Home Pro
Width x Height x Depth	351 x 486 x 126 mm
Weight	6.06 kg
Impact resistance rating of housing	IK08
Operating temperature¹⁾	-25 °C to +50 °C
Storage temperature¹⁾	-40 °C to +70 °C
Relative humidity during storage	5 % to 95 %
IP degree of protection	IP54
Pollution degree	3
Protection class	I
Nominal voltage	220 ... 240 V / 380 ... 415 V
Nominal current	16 A
Nominal surge voltage	4 kV
Insulation voltage	500 V
Overvoltage category	III
Mains frequency	50 / 60 Hz
Circuit breaker	16 A, to be provided on the installation side
Fuse for the internal supply	8 A, slow-blow
Charging voltage	230 V / 400 V
Max. charging current	16 A
Max. charging power	11 kW
Residual current circuit breaker (RCD)	optional: type A, with protective conductor monitoring
Short circuit fault current C16/C32	6 kA (Energy limiting class 3)
AC fault current	30 mA, to be provided on the installation side
DC residual fault current detection	6 mA, standard
Mains version	TN / TT / IT
Socket according to IEC 62196-1:2014	for charging cable Type 2
Charging mode	3
Supported charging conditions	A, B, C, E, F
EMC classification	Class B
Permissible installation area	freely accessible area

1) no direct sunlight

13 Accessories

A list of available accessories can be found at www.lappmobility.com.

14 CE conformity

The product complies with the requirements of the following EU directives:

- 2014/30/EU Electromagnetic compatibility of electrical and electronic equipment
- 2014/35/EU Making available on the market of electrical equipment designed for use within certain voltage limits
- 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

Applied standards

DIN VDE 0100-722; VDE 0100-722:2016-10

IEC 61851-1, DIN EN 61851-1

DIN EN 61851-21

DIN EN 61851-21-2

IEC 61851-21-2

DIN EN 61851-22

DIN EN 62196-1; VDE 0623-5-1

DIN EN 62196-2; VDE 0623-5-2

DIN EN 50620
