



Freude am Fahren

# BMW Wallbox

Instructions for use





**BMW Wallbox**  
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## Instructions for use

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Translation of the original instructions

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Violations create an obligation to pay compensation.

## Information about this manual

We are delighted that you have decided to purchase a BMW Wallbox.

Please read the instructions for this device carefully before you charge your vehicle. Please always keep this document ready to hand, close to the Wallbox, because it contains important information about charging the high-voltage battery of electric or plug-in hybrid vehicles.

The installation manual must be used for installing the Wallbox, as well as for storage and transportation. The manual contains all the technical data as well as the permitted ambient conditions.

Have fun and enjoy your BMW Wallbox.

Your BMW AG

## Symbols used

At various points in the manual, you will find instructions and warnings of possible dangers. The symbols used have the following meanings:



### WARNING

Means that death or serious injury may occur if the appropriate precautions are not taken. ◀



### CAUTION

Means that material damage or slight injury may occur if the appropriate precautions are not taken. ◀



### ATTENTION

Means that material damage may occur if the appropriate precautions are not taken. ◀



### ESD

This warning draws attention to the potential consequences of contact with electrostatically sensitive components. ◀



### Note

Refers to procedures which do not present any danger of creating injury. ◀

# NOTES

## Safety instructions



### WARNING

- ▷ Electrical danger  
Installation, commissioning, maintenance and retrofitting of the Wallbox must be carried out by appropriately trained, qualified, and authorized electricians<sup>(1)</sup>, who are fully responsible for complying with the applicable standards and installation regulations. For details, see installation manual.
- ▷ Electrical danger/Danger of fire!  
Never use defective, worn, or dirty charger cable connectors.
- ▷ Electrical danger!  
If the status LED is permanently red, disconnect the Wallbox from the power supply until the device has been replaced. The voltage at the charger cable can no longer be switched off.
- ▷ The owner (end customer) must ensure that the Wallbox is only ever operated when it is in perfect condition.
- ▷ The Wallbox must be inspected regularly for defects on the charger cable connector (including charger cable) and for damage to the casing (visual inspection).
- ▷ Repair work on the Wallbox is not permitted for the end customer, and may be carried out only by the manufacturer or by a specialist qualified for the task (replacement of the Wallbox)!
- ▷ A damaged Wallbox must be switched off immediately and replaced.
- ▷ Do not undertake any unauthorized conversions or modifications of the Wallbox!
- ▷ Do not remove any markings such as safety symbols, warnings, performance rating plates, identification plates, or cable markings!
- ▷ The Wallbox does not have a mains switch of its own! The connector plug and the line protection circuit breaker of the building installation serve as the mains isolator.
- ▷ Extension cables must not be used to connect an electric or plug-in hybrid vehicle to the Wallbox.
- ▷ Only electric or plug-in hybrid vehicles or their chargers may be connected. No other electrical loads (e.g. power tools, etc.) must be connected!
- ▷ Use only the plug (and not the cable itself) to pull the charger cable out of the plug holder.
- ▷ Ensure that the charger cable does not become mechanically damaged (kinked, trapped, or driven over) and that the contact area does not come into contact with heat sources, dirt or water.
- ▷ A visual inspection for damage should always be conducted before a charging process. For this, the contact area of the charging plug in particular should be checked for dirt and moisture, the charger cable checked for cuts or abrasions to the insulation, and the cable outlet of the Wallbox checked for firm seat. ◀

<sup>(1)</sup> Persons who, on the basis of their specialist training, knowledge, and experience, as well as knowledge of the applicable standards, can assess the tasks assigned to them and recognize possible dangers.



## CAUTION

- ▷ Ensure that the Wallbox is not damaged by inappropriate handling (casing cover, internal parts, etc.).
- ▷ Use only the charger cable connector (and not the cable itself) to pull the charger cable out of the plug connector.
- ▷ Ensure that the charger cable does not become mechanically damaged (kinked, trapped, or driven over) and that the contact area does not come into contact with sources of heat, dirt or water. ◀



## ATTENTION

- ▷ If it is raining or snowing, and the Wallbox is mounted outdoors, do not open the connector panel cover!
- ▷ Before opening the covers, a charging process which is underway must be ended, and the vehicle must be disconnected. ◀

## Intended use

The Wallbox is a charging station for indoor and outdoor use, by means of which electric or plug-in hybrid vehicles can be charged. Connecting other devices, e.g. electrical tools, is not permitted! The Wallbox is intended to be fitted to a wall or a mounting pillar. For installation and connection of the Wallbox, the applicable national regulations must be complied with.

In all cases, intended use of the device includes compliance with environmental requirements for which this device was developed.

The Wallbox was developed, manufactured, tested, and documented in compliance with the applicable safety standards. Therefore, if instructions provided for intended use and the safety instructions are complied with, under normal circumstances, no risks arise from the product in terms of material damage or the health of persons.

This device must be grounded. In the case of a fault, the ground connection reduces the risk of an electric shock. It is fitted with a connector plug with ground connection, or else optionally has a fixed connection and is connected to a ground conductor. The equipment connector plug must be inserted into the socket which is provided for the purpose and which was installed in compliance with local regulations.

In all cases, the instructions in this manual must be followed exactly. Otherwise, sources of danger could be created, or the safety devices could be made ineffective. Independently of the safety instructions provided in this manual, the safety and accident prevention regulations corresponding to the individual application case must be complied with.

Because of technical or legal restrictions, not all variants/options are available in all countries.

## About this manual

This manual and the functions described are valid for devices of the type:

- ▷ BMW Wallbox

The images and explanations in this manual are based on a typical model of the device. The execution of your device may be different from this.

This manual is intended for the following groups:

- ▷ End customers (users of the Wallbox)
- ▷ Commissioning technicians, service technicians

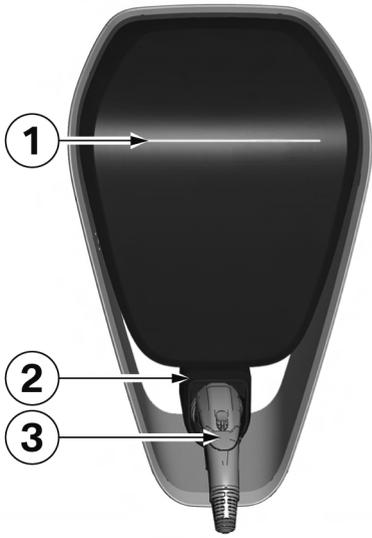
## Guarantee

BMW Service will provide information on the currently applicable guarantee terms. However, the cases listed below are excluded from the guarantee.

- ▷ Defects or damage caused by installations which were not carried out as per the requirements in the BMW Wallbox installation instructions.
- ▷ Defects or damage caused because the product was not used as per the requirements in the BMW Wallbox operating instructions.
- ▷ Costs and damage of repairs not performed by a specialized electrician authorized by a BMW sales outlet or authorized contracted service workshop.

# OPERATION

## Displays and controls



Functions:

▷ Charging of electric or plug-in hybrid vehicles

- 1 Status LED
- 2 Holder for charger cable connector
- 3 Charger cable connector

## Starting the charging process

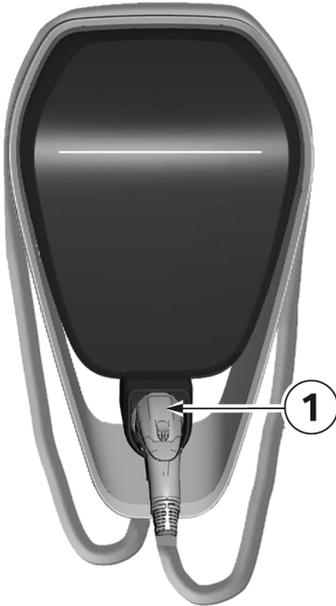
	In the rest state, the status LED displays continuous <b>blue</b> . Now connect the vehicle, if unconnected, to the Wallbox.
	While internal self-tests are carried out, the status LED displays <b>orange</b> for several seconds.
	After locking is complete, the status LED again displays <b>blue</b> ; the vehicle is correctly connected. From this point, the charging process can be started from the vehicle.
	While the charging process is active, the status LED flashes <b>blue</b> . The charging process is started by the vehicle, and depending on the setting in the vehicle, it can also start with a delay.

## Ending the charging process

The charging process is ended by unlocking the vehicle and disconnecting the charger cable. For details of this, please refer to the instructions of the vehicle manufacturer.

1. Disconnect the charger cable from the vehicle, and wind the charger cable around the Wallbox.

## Storage of the charger cable



1. Wind the charger cable around the Wallbox.
2. For safe storage, insert the charger cable connector into its holder **1**.

## Status LED information



### Status LED sections

The status LED provides information about the current operating state of the Wallbox. It consists of 4 sections, S1 to S4, which can illuminate in different colors, or flash individually or in combinations.

The status LED is visible only when the power supply has been activated.

Unless stated otherwise, all 4 sections illuminate together.

	<p><b>Temperature shut-off</b></p> <p>If the permitted temperature limit of the Wallbox is exceeded, then the charging process is temporarily interrupted, and sections <b>S3</b> and <b>S4</b> of the status LED flash <b>orange</b>. After a cooling phase, the charging process continues automatically.</p>
	<p><b>Commissioning mode</b></p> <p>When commissioning mode is active, sectors <b>S2</b> and <b>S3</b> of the status LED display <b>orange</b>; see installation instructions.</p>
	<p><b>Faults</b></p> <p>If faults have occurred, then these are indicated using the status LED and special color codes. For details, see section <a href="#">Troubleshooting</a>.</p>

# FAULTS



Note

Additional and updated information such as operating and installation instructions are available on the Service page at <https://charging.bmwgroup.com/web/wbdoc/>. ◀



Note

If the error code displayed here is not listed, then please contact BMW Service. ◀

## Troubleshooting

<b>PROBLEM</b>	<b>Possible cause</b>
<b>Status LED does not illuminate</b>	<ol style="list-style-type: none"><li>1. No power supply – check the fault current protection and line protection switches, and activate if required.</li><li>2. Fault with Wallbox - contact your service partner as required.</li></ol>
<b>Charging process does not start</b>	<ol style="list-style-type: none"><li>1. The charger cable connector is not correctly inserted – unplug charger cable connector and plug in again.</li><li>2. The charger cable connector may be dirty or damaged in the locking area – clean the charger cable connector or have it replaced.</li><li>3. The vehicle does not require energy or it has a fault – check the vehicle.</li><li>4. The vehicle is programmed for a later starting time for charging.</li></ol>
<b>Vehicle not fully charged/ extended charging duration</b>	<ol style="list-style-type: none"><li>1. Current reduction because of excessive temperature from vehicle or Wallbox – protect vehicle and Wallbox from direct solar radiation during the charging process (carport, garage). Visual inspection of the plug connector for dirt, wear, or damage. Contact your service partner as required.</li><li>2. No release or limited charging current through iV app.</li><li>3. Vehicle settings are incorrect, e.g. charging mode or departure time.</li></ol>

PROBLEM	Possible cause
<b>Charger cable connector cannot be unplugged</b>	<ol style="list-style-type: none"> <li>1. The charging process was not ended by the vehicle – end the charging process as per vehicle manufacturer's instructions.</li> <li>2. The charger cable connector may not be able to unlock under tensile load – push the charger cable connector in, and unlock again on the vehicle.</li> </ol>
<b>Status LED flashes red</b>	<ol style="list-style-type: none"> <li>1. Fault – first check the possible causes in the event of a fault, see section <a href="#">Possible causes of error in the event of a fault</a>. Switch off the supply voltage to the Wallbox using the appropriate power cut-off device. Disconnect the charger cable, and switch the supply voltage back on.</li> </ol>
<b>Status LED shows permanent red</b>	<ol style="list-style-type: none"> <li>1. The Wallbox cannot switch off the voltage at the charger cable – restart the Wallbox. If the problem continues, then disconnect the Wallbox from the mains and replace it.</li> <li>2. Ground conductor is not connected - connect the ground conductor correctly.</li> <li>3. Ground conductor has too high a resistance - connect the ground conductor correctly.</li> <li>4. The CCID test was not successful - if the problem continues, replace the Wallbox.</li> </ol>

## Resetting a fault

If an interruption occurs during the connection or charging process, then the Wallbox attempts to restart the process automatically (5 times max.).

If the charging process cannot be started, then this must be acknowledged by a normal ending of the charging process or possibly by restarting the Wallbox. If a fault repeatedly occurs for no good reason, contact your service partner.

## Possible causes of error in the event of a fault

### General fault (indicated by colors red/white)

 <p>"white/white/white/red"</p>	<p><b>Fault 1 [0001]</b></p> <p>The charger cable connector was unplugged during the charging process: The charger cable connector was not locked correctly – unplug the charger cable connector and plug it in correctly, ensuring that the locking is correct.</p>
 <p>"white/white/orange/orange"</p>	<p><b>Fault 3 [0011]</b></p> <p>Temperature shut-off: The permitted temperature in the Wallbox has been exceeded. After a brief display of the fault code, the status LED sections S3 and S4 flash orange, until the Wallbox has cooled down.</p>
 <p>"white/red/white/red"</p>	<p><b>Fault 5 [0101]</b></p> <p>The Wallbox has recognized an impermissible load instead of an electric or plug-in hybrid vehicle: Only standard-compliant electrically operated vehicles may be charged. Remove the impermissible load and restart the charging process.</p>

## Power unit fault (indicated by colors red/blue)

 <p>"blue/blue/blue/red"</p>	<p><b>Fault 8001 [0001]</b></p> <p>Not possible to switch the charging voltage on; internal process fault or defective hardware: Reconnect vehicle or restart Wallbox. If this occurs repeatedly, contact Service.</p>
 <p>"blue/red/blue/red"</p>	<p><b>Fault 8005 [0101]</b></p> <p>Fault current monitoring: A fault was recorded during the self-test, or else the monitoring has been triggered because of an excessive fault current. Check your charging cable for damage or check for water accumulation in the plug. A lightning strike in the vicinity may also cause a triggering.</p>
 <p>"permanent red strip"</p>	<p><b>Fault 8007 [0111]</b></p> <p>Safety monitoring: A problem relating to the internal safety circuits has been recognized. It may no longer be possible to open the contacts of the charging protection. In this condition, the Wallbox is unable to carry out any automatic reconnection attempts. The Wallbox must be restarted from the mains side.</p>

# MAINTENANCE

## Cleaning



### ATTENTION

Risk of damage!  
Avoid potential damage from:

- ▷ Aggressive solvents and cleaning agents
- ▷ Scouring materials
- ▷ Cleaning with a water jet, e.g. high pressure cleaner
- ▷ Excessive pressure

Follow the instructions for the cleaning agent. ◀

If necessary, clean the casing of the Wallbox using a damp cloth. Persistent dirt can be removed using a mild, solvent-free, non-scouring cleaning agent.



### Note

We recommend using tested cleaning and care agents from BMW:

Matt Paint Special Cleanser for casings; item number 83 12 2 285 244.  
Glass cleaner, for high gloss surfaces; item number 83 12 2 288 901. ◀

## Maintenance and repair



In the event of questions or problems, please contact the electrical installation company that installed your system. Repairs may be carried out only by specialist personnel. Before you contact your service partner:

1. Check the troubleshooting measures in this manual and in the manual for your vehicle.
2. Note the model variant and the serial number. The type plate **1** is located on the side of the Wallbox.

# DISPOSAL



After correctly decommissioning the device, please have the device disposed of by Service or else in compliance with all currently applicable disposal regulations.



## **Disposal information**

The symbol of the "crossed-out" waste bin means that electrical and electronic devices, including accessories, must be disposed of separately from general household garbage. Instructions are to be found on the product, in the instructions for use, or on the packaging.

The materials can be recycled according to their designation. Through re-use, material recycling, or other forms of recycling old equipment, you will be making an important contribution to the protection of our environment.

# SOFTWARE UPDATE

The software for the Wallbox can be updated via the USB connection inside the device. For access to the USB connection, the casing cover and the connector panel cover must be removed.

Follow the details in the instructions for updating the software.



The latest **software** and the corresponding instructions can be downloaded from the Internet at <https://charging.bmwgroup.com/web/wbdoc/>. A new software version may, for example, take into account modified standards, or improve the compatibility with new electric or plug-in hybrid vehicles.

# PRODUCT INFORMATION PAGE



This product is UL-certified.

It complies with the applicable UL, CSA, and ANCE standards for North America, Canada, and Mexico. For further information, see <https://charging.bmwgroup.com/web/wbdoc/>.

## FCC INFORMATION

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### ATTENTION:

Changes or modifications which were not expressly approved by the responsible authority may impede the right to use the device.

### NOTE:

This device was tested, and it complies with the limits for a digital device of class B as per part 15 of the FCC regulations. This limit is intended to provide appropriate protection against harmful interference in a residential situation. This device generates and uses high frequency energy, and if it is not installed in compliance with the instructions, it can result in interference to radio communication. However, there is no guarantee that there will be no interference in a specific installation. If this device causes interference to radio or television reception (this can be determined by switching the device off and on), then the user should attempt to prevent the interference through one or more of the following measures:

- Align the reception antenna differently.
- Increase the distance between device and receiver.
- Connect the devices to a different power circuit than the one to which the receiver is connected.
- Request assistance from the dealer or from an experienced radio/television technician.

## CANADA

This class B digital apparatus complies with Canadian ICES-003.



This product is NOM-certified.

**MEXICO**

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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