

# Flexible Fast Charger (Mode 2 Charging Cable)

Instruction for Use

UL



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# Information

## Safety Information

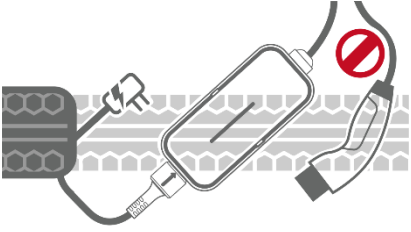
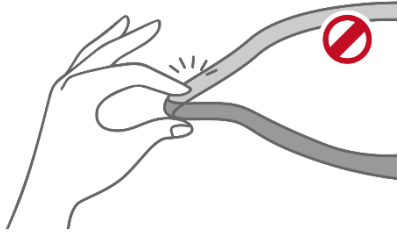
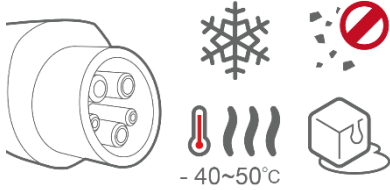
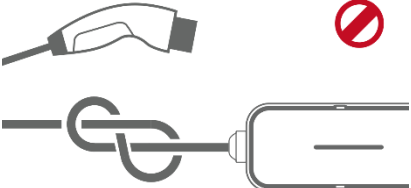
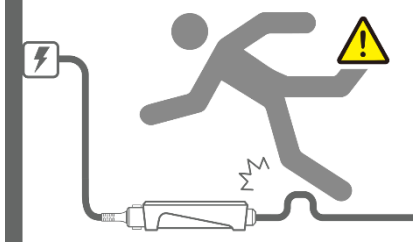
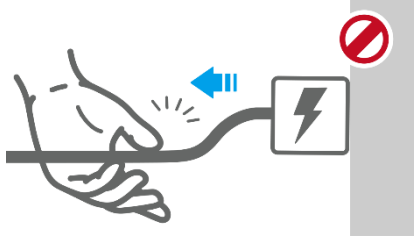
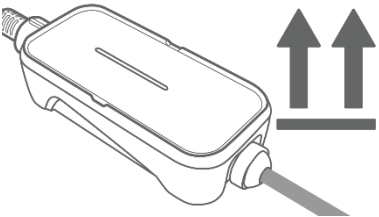
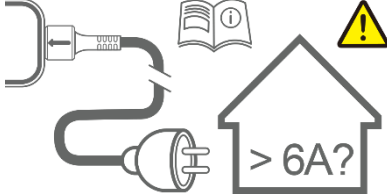
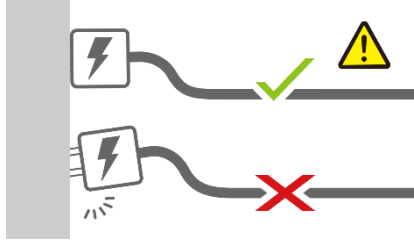


### RISK OF FIRE OR ELECTRIC SHOCK CAUTION:

Always ensure that the electrical power connection complies with the national statutory regulations. To reduce the risk of fire, use the device only with a sufficiently dimensioned circuit breaker. Increased ambient temperatures in the control cabinet must also be taken into consideration. In certain circumstances, it may require a reduction in the charging current to increase the system availability. To reduce the risk of fire, connect only to a circuit provided with 20 (For NEMA 5-15P or NEMA 6-20P), 50 (for NEMA 14-50P) amperes maximum branch circuit over current protection in accordance with the CSA C22.1–15 Canadian Electrical Code, Part 1 & ANSI/NFPA 70 National Electrical Code.

<p>Read the information carefully and look at the device to familiarize yourself with it before you attempt to install, operate or service it. Use only for charging your BMW, MINI or Rolls-Royce vehicles.</p>	<p>Do not remove any identifiers such as safety symbols, warning instructions, labels or cable markings.</p>	<p>Never use defective, worn or dirty mains adapter cable or vehicle connector. Do not use Flexible Fast Charger with damaged outlet, cable or housing.</p>
<p>Do not put your fingers into the connector.</p>	<p>Do not make any unauthorized changes or modifications to Flexible Fast Charger.</p>	<p>Do not disconnect the mains adapter cable while it is in charging session, neither from the function box nor from the power socket.</p>
<p>Do not use Flexible Fast Charger with an extension cord, cable drum, multiple sockets, travel adapters, timers and any adapter of vehicle connector.</p>		
<p>Do not expose contacts to water or snow.</p>	<p>Do not drop Flexible Fast Charger and adapter cable.</p>	<p>Do not put device under water.</p>

Flexible Fast Charger

		
<p>Do not drive over Flexible Fast Charger or Adapter.</p>	<p>Do not bend the cables.</p>	<p>Ensure that the contact area is not close to heat sources, dirt, water or snow.</p>
		
<p>Do not knot the cables.</p>	<p>Children should be supervised when in the vicinity of Flexible Fast Charger when it is connected.</p>	<p>Pull Flexible Fast Charger out of the domestic outlet by the adapter instead of cable.</p>
		
<p>Always place housing on the ground as shown in the picture.</p>	<p>Please ensure the electrical installation is capable of handling the voltage/ampere requirements ahead of usage and if needed, activate the power limitation in the charging settings of your BMW/MINI/RR vehicle. You can find the maximum charging voltage / current in the chapter <b>Mains Adapter Cables for International Available Plugs</b>.</p>	<p>Do not use Flexible Fast Charger if mains adapter is not plugged into domestic outlet completely.</p>

- Only use original mains adapter cable.
- Must disconnect the mains adapter from domestic outlet while assembling of mains adapter cable and function box.
- Repair work to Flexible Fast Charger must only be performed by the manufacturer.
- Clean the charging device only with a dry cloth. Make sure it is disconnected from the power grid and vehicle. Do not use any cleaning supplies or flammable solvents, such as alcohol or benzene.
- Do not use the device at potentially explosive atmosphere areas.
- Do not connect the adapter cable to any other electrical loads, electric tools, etc.
- Always seal the EV connector with the cap after use

## Intended Use

- The intended use of the device in every case includes compliance with the ambient conditions for which this device was developed.
- The instructions contained in manual must be followed to the letter. Otherwise sources of danger may be created or safety equipment may be rendered inoperable. In addition to the safety information, the safety and accident prevention regulations relating to the specific device must be followed.

## About This Manual

This manual and functions described are valid for Mode 2 charging cable of the following type:  
Flexible Fast Charger

The illustrations and explanations contained in this manual refer to a typical version of device. Your device version may differ from this. This manual is aimed at the target groups, e.g. End customers (users of Flexible Fast Charger).

## Warranty

Service can provide more information in terms of the warranty. However, the following cases are not covered:

- Defects or damage caused by installation work not as specified in the installation instructions and the product not being used as specified in the manual.
- Costs and damage caused by repair work not carried out by a specialist electrician authorized by sales outlet or authorized service workshop.

If necessary, please contact your customer service staff. For your responsible customer service, please refer to the manual of your vehicle.

Manufacturer: [https://www.deltaww.com/en-US/customerService\\_Products\\_08](https://www.deltaww.com/en-US/customerService_Products_08)

Importer: <https://www.bmwgroup.com/en/general/kontakt.html>

Manufacturer address: Delta Electronucs, Inc.

3F&5F No.16-1, No.16-1, 2F&3F&4F No.16, Tungyuan Road, Zhongli District, Taoyuan City, 320023, Taiwan

Importer address: BMW (UK) Ltd.

Bayerische Motoren Werke Aktiengesellschaft Petuelring 130, 80788 Munchen

## Infrastructure Information

- Please ensure the electrical installation is capable of handling the voltage/amperage requirements ahead of usage and if needed, activate the power limitation in the charging settings of your BMW/MINI/RR vehicle. You can find the maximum charging voltage / current in the chapter Mains Adapter Cables for International Available Plugs.
- The device is designed for use with a selection of electrical outlets. These electrical outlets must comply with the relevant national regulations (connection and installation standards) whether they are already existing or installed separately.
- Ensure that the maximum permissible charging current suits the installed circuit breaker and the back-up fuse.
- Ensure that an already existing wall installation and outlet is designed for permanent electrical load. It is highly recommended that the device is connected to an electrical outlet with a separate residual-current-operated circuit breaker. No other circuits should be connected to this residual-current-operated circuit breaker.
- All electrical outlets must be installed, commissioned and serviced by appropriately trained, qualified and authorized electricians, with the knowledge of the relevant standards, who bear full responsibility for compliance with current standards and installation regulations.
- This device must have access to an earth connection. In the event of an error, the earth connection will reduce the danger of an electric shock. Please ensure that the electrical outlet can provide a sufficiently designed earth connection.

## Moving, Transporting and Storage Instruction

- This product is a Flexible Fast Charger that intended to charge electrical vehicle (EV). Don't move or transport the charger when it's charging. Please refer to Infrastructure Information for details.
- For storage, please refer to Environmental Specifications for details.

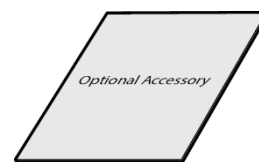
## Scope of Delivery



Function Box with Vehicle Connector + Mains Adapter Cable



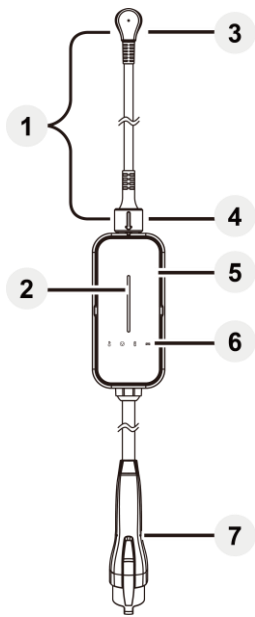
Safety Guide



Optional Accessory

# Operation

## Overview

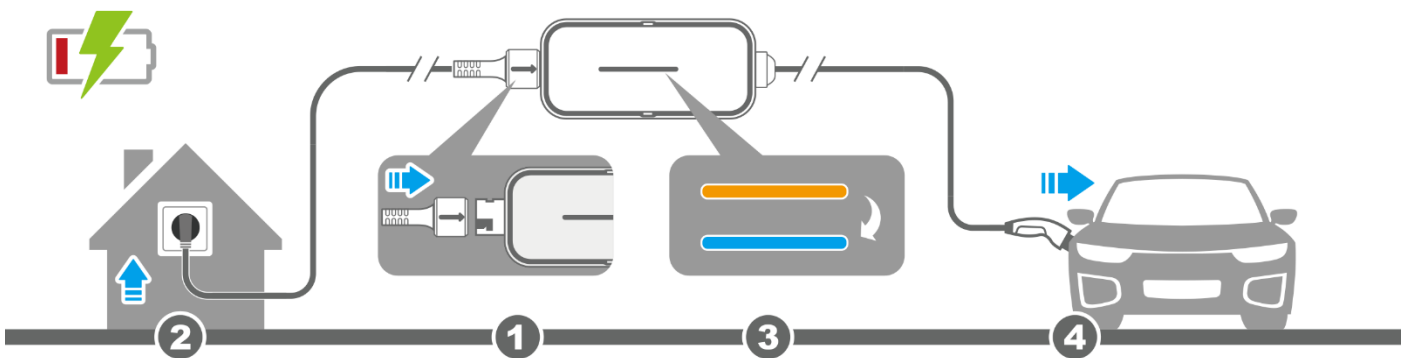


- 1 Mains Adapter Cable
- 2 Charging status LED Bar
- 3 Mains Adapter
- 4 Mains Interface with Adapter Cap
- 5 Function Box, ICCB (In-Cable-Control-Box)
- 6 LED Indicator\*
- 7 Vehicle Connector

\*Error LED Indicator

	Temperature		Infrastructure
	Flexible Fast Charger		Vehicle

## Start Charging

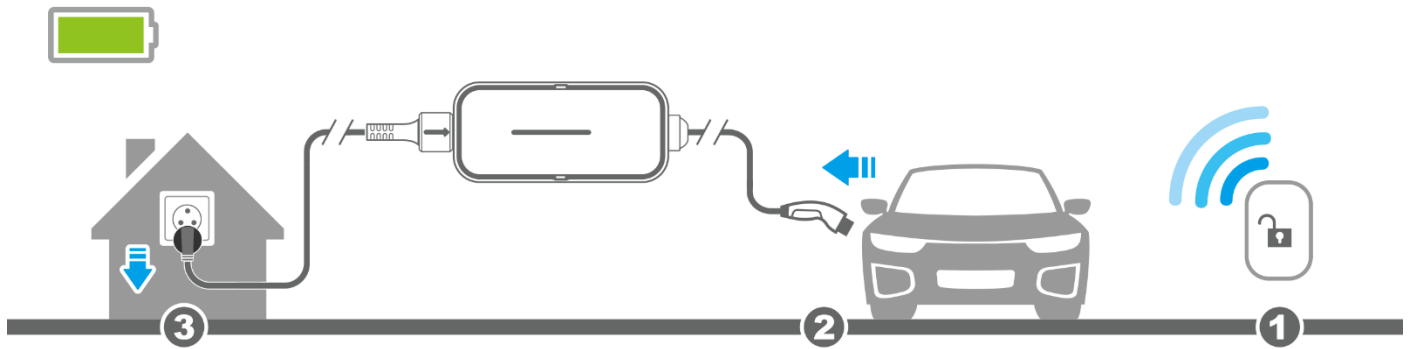


1. Connect the chosen mains adapter cable to Flexible Fast Charger.
2. Connect the mains adapter to a domestic outlet.
3. When the mains adapter is connected to domestic outlet, the LED bar indicator will flash orange and all four error LED will illuminate red. Then the LED bar indicator will illuminate blue and no error LED will illuminate, indicating Flexible Fast Charger is ready for charging.
4. Connect the vehicle connector to EV (Electric Vehicle) inlet, charging session will start automatically and charging status bar flashes blue.

Note:

- ▶ EV (Electric Vehicle) shall be parked close enough to the domestic outlet for connection.
- ▶ Ensure Flexible Fast Charger will not be stepped on to avoid damage.

## Stop Charging

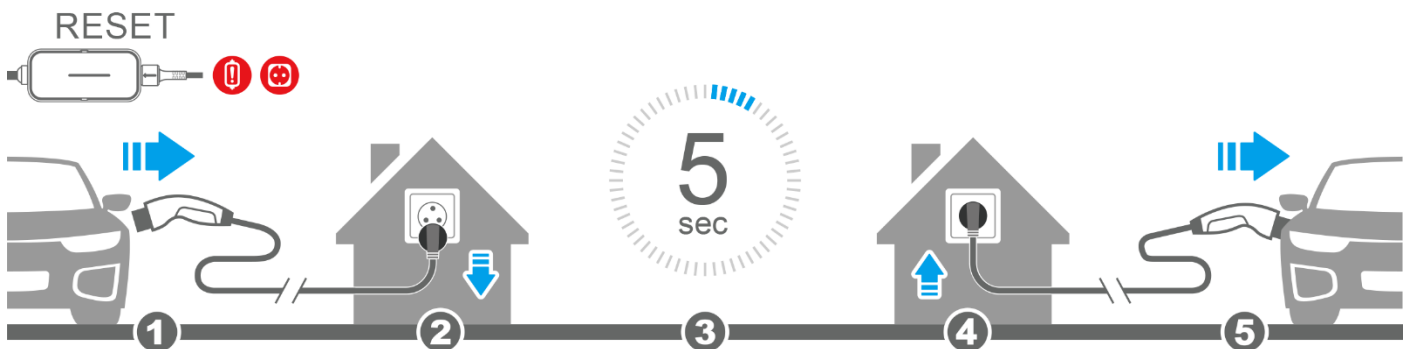


1. Stop charging session at the EV (Electric Vehicle). Typically, this is done by unlocking the vehicle via the car key. (For detailed instruction, please read the instruction manual of your EV.)
2. Disconnect the vehicle connector from the EV (Electric Vehicle) inlet.
3. Remove the mains adapter from the domestic outlet.

Note:

- ▶ Disconnection abnormally or disconnection under load (during charging) with domestic outlet, Flexible Fast Charger could be damaged or the situation could be dangerous to people.

## Manual Restart










1. Disconnect the Flexible Fast Charger from the vehicle by unplugging the vehicle connector
2. Disconnect the Flexible Fast Charger from the mains supply by unplugging the device from the socket outlet
3. Wait for at least 5 seconds
4. Reconnect the Flexible Fast Charger to the mains supply and wait for the completion of the charger self-test
5. Reconnect the Flexible Fast Charger to the vehicle and check if the charging process is starting

Note:

- ▶ Please ensure the electrical installation is capable of handling the voltage/amperage requirements ahead of usage and if needed, activate the power limitation in the charging settings of your BMW/MINI/RR vehicle. You can find the maximum charging voltage / current in the chapter **Mains Adapter Cables for International Available Plugs**.


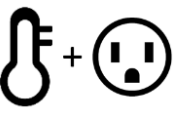




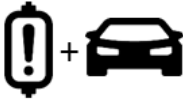
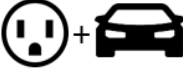


**LED Indicator Table**

SYMBOL	LED INDICATOR	STATUS	DESCRIPTION
	Charging status bar	Orange pulsing	Booting of charger
	Charging status bar	Blue permanent	Ready to charge
	Charging status bar	Blue pulsing	Charging
	Temperature	Red permanent	Over temperature error
	Infrastructure	Red permanent	Infrastructure error
	Flexible Fast Charger	Red permanent	Flexible Fast Charger error
	Vehicle	Red permanent	Vehicle error
Manual restart	<ol style="list-style-type: none"> <li>1. Unplug the vehicle connector</li> <li>2. Unplug the device from the socket outlet</li> <li>3. Wait for at least 5 seconds</li> <li>4. Replug to the socket outlet</li> <li>5. Replug the vehicle connector</li> </ol>		

## Troubleshooting




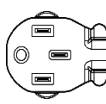
Contact local dealer or customer support if the product appears to be functioning abnormally or LED indicators display a fault status. **DO NOT** open the product or remove circuit protective devices or any other component.

Situation		Action
LED bar and error LED do not light		<ol style="list-style-type: none"> <li>1. Make sure the mains adapter is connected fully to function box and the power input is within operating range of the unit.</li> <li>2. Replug and power Flexible Fast Charger again or try another domestic outlet.</li> <li>3. If problem persists, please contact your dealer or customer support.</li> </ol>
Error LED temperature indicator and infrastructure indicator illuminate red.		<ol style="list-style-type: none"> <li>1. Error due to overheat at mains plug/socket detected.</li> <li>2. Wait for 10 minutes to let the plug cool down.</li> <li>3. Unplug the adapter from domestic outlet (Be aware mains plug can still be hot)</li> <li>4. Please check mains installation by an electrician.</li> </ol>
Error LED temperature indicator and Flexible Fast Charger indicator illuminate red.		<ol style="list-style-type: none"> <li>1. Error due to overheat at Flexible Fast Charger function box</li> <li>2. Check if Flexible Fast Charger is exposed to direct sunlight and high ambient temperature. If so, avoid sunlight or provide shadow</li> <li>3. If the situation persists, please contact your dealer or customer support.</li> </ol>
Error LED infrastructure indicator illuminates red.		<ol style="list-style-type: none"> <li>1. Unplug the vehicle connector.</li> <li>2. Unplug the adapter from domestic outlet.</li> <li>3. Wait for Flexible Fast Charger to recover from temporary error.</li> <li>4. Plug in the adapter again at the domestic outlet.</li> <li>5. Plug in the vehicle connector again.</li> <li>6. If the situation persists, please check mains installation by an electrician.</li> <li>7. If the electrician confirms that the mains installation is correct and the situation persists, please contact your dealer or customer support.</li> </ol>
Error LED Flexible Fast Charger indicator illuminates red.		<ol style="list-style-type: none"> <li>1. Unplug the vehicle connector.</li> <li>2. Unplug the adapter from domestic outlet.</li> <li>3. Wait for 5 seconds.</li> <li>4. Plug in the adapter again at the domestic outlet.</li> <li>5. Plug in the vehicle connector again</li> <li>6. If the situation persists, please contact your dealer or customer support.</li> </ol>
Error LED vehicle indicator illuminates red.		<ol style="list-style-type: none"> <li>1. Unplug the vehicle connector.</li> <li>2. Wait for Flexible Fast Charger to recover from temporary error.</li> <li>3. Plug in the vehicle connector again</li> <li>4. If the situation persists, please contact your dealer or customer support.</li> </ol>
Error LED Flexible Fast Charger indicator and vehicle indicator illuminate red.		<ol style="list-style-type: none"> <li>1. Unplug the vehicle connector.</li> <li>2. Wait for Flexible Fast Charger to recover from temporary error.</li> <li>3. Plug in the vehicle connector again</li> </ol> <p>If the situation persists, please contact your dealer or customer support.</p>
Error LED infrastructure indicator and vehicle indicator illuminate red.		<ol style="list-style-type: none"> <li>1. Unplug the vehicle connector.</li> <li>2. Unplug the adapter from domestic outlet.</li> <li>3. Wait for Flexible Fast Charger to recover from temporary error.</li> <li>4. Plug in the adapter again at the domestic outlet.</li> <li>5. Plug in the vehicle connector again.</li> <li>6. If the situation persists, please check mains installation by an electrician.</li> </ol> <p>If the electrician confirms that the mains installation is correct and the situation persists, please contact your dealer or customer support.</p>

## Mains Adapter Cables for International Available Plugs

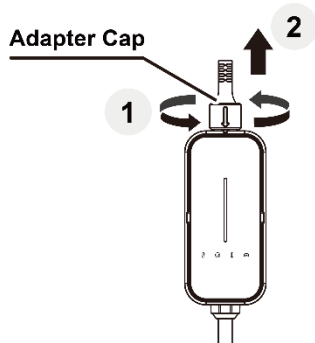
Flexible Fast Charger can be used with various kinds of below mains adapters with different voltage and power specification according to its plug type to charge wherever you are and as fast as possible. Please check the additional adapters list available as optional accessory for further information.

### UL Charger

Plug Type	Type NEMA 5-15P	Type NEMA 5-15P	Type NEMA 6-20P	Type NEMA 14-50P
Power Supply Cord Model	EVLBN510KVBSB EVLBNB10KVBSB	EVLBN512KVBSB	EVLBN616KVBSB	EVLBN440KVBSB
				
Max current Max voltage Max power	10A 120V 1.2kW	12A 120V 1.44kW	16A 240V 4kW	40A 240V 9.6kW
TT/TN system	X	X	X	X
Applicable countries	EVLBNB10KVBSB: Colombia EVLBN510KVBSB: Bermuda/Canada /Costa Rica/Ecuador/Mexico/ Panama/Taiwan/ United States of America /Bahamas/Guatemala/ Jamaica/Dominican Republic/Puerto Rico/Haiti/Honduras/El Salvador/Guam/Cayman Islands	Puerto Rico/ United States of America	Canada/Colombia/ United States of America/Dominican Republic/Puerto Rico/Haiti/Honduras/ El Salvador/Bahamas/ Cayman Islands/Costa Rica/Ecuador/Jamaica/ Panama	Canada/Colombia/Mexico /United States of America/Guatemala/Domi nican Republic/Puerto Rico/Haiti/Honduras/El Salvador/Bahamas/Caym an Islands/Costa Rica/Ecuador/Jamaica/Pa nama

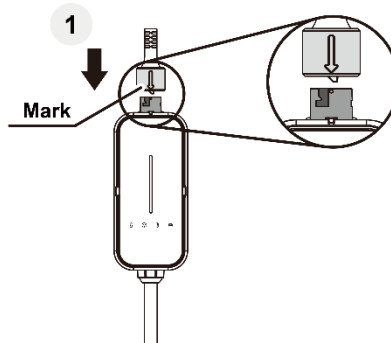
### Change Mains Adapter Cable

Mains adapter cable can be changed to adapt to the specific electrical environment.



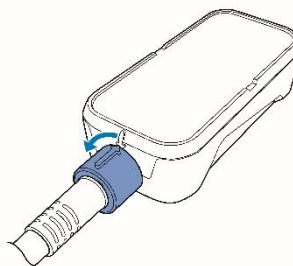
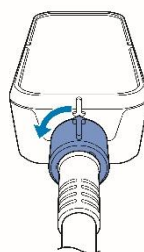
Disassemble the mains adapter cable:

1. Turn the cap of the mains adapter cable anticlockwise to release the plug.
2. Pull the mains adapter cable out of the box until you feel a slight resistance.
3. Allow the cap of the mains adapter cable to twist back and remove the adapter.



Assemble the mains adapter cable




1. Align the two arrows and insert the plug— (the cap of the mains adapter cable rotates automatically.)
2. When both arrows are aligned again the plug is fully connected.






## Optional Accessory

### Available Adapters/ Wall Kit

Please contact your dealer or the BMW Online-Shop for optional accessory.

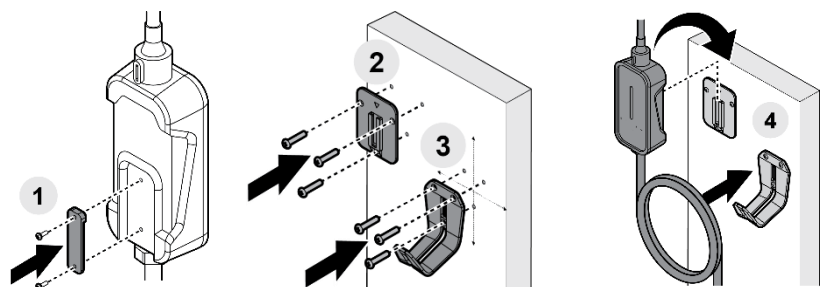
<u>Wall Kit</u>		
		
Cable holder	Bracket	Wall kit

Flexible Fast Charger can be used with various kinds of below mains adapters to charge wherever you are and as fast as possible. Please check the additional adapters list available as optional accessory for further information.

<u>Available Adapters for UL Model</u>		
		
Type NEMA 5-15P, 10A, 0.3m	Type NEMA 6-20P, 16A, 0.3m	Type NEMA 14-50P, 40A, 0.3m

### Wall Mounting Installation of Wall Kit

1. Mount the bracket on Flexible Fast Charger with Hex screw
2. Mount the wall kit on the wall\*.
3. Mount the cable holder to the wall\*.
4. Secure Flexible Fast Charger and the cable on the wall



\*Note:

1.) Please use fixation method, dependent from the surface/material where you want to place the wall kit and ensure that the fixation can support the weight of the charger and cable.

2.) This device shall be mounted at a sufficient height from grade such that the height of the storage means for the coupling device is located between 600 mm (24 inches) and 1.2 m (4 feet) from grade

## Environmental Specifications

Rating	1Phase: Voltage line to neutral 120V~ 240V~ Current maximum 40A Power maximum 9.6 kW Note: Rating is adjusted based on actual usage in combination with different adapters.
Frequency	50Hz – 60Hz
Humidity	2% to 95% relative humidity, non-condensing
Altitude	Max. 3000m
Operating temperature	-40 °C to + 50 °C
Storage temperature	-40 °C to + 70 °C
IP Protection class	Type 6 enclosure.  The Flexible Fast Charger is able to operate in case of water accumulation due to rain at the "display" (top side of the ICCB).  Harmlessness on contact with Flexible Fast Charger during charging/standby, when covered with water/snow/ice.

## Disposal

Flexible Fast Charger is an electronic device and must be disposed of separately from normal house wastes. Please have it disposed in compliance with the waste disposal and recycle local regulation.

