PLEASE BEFORE USE READ!

RACE CHIP

XLR 5

User Manual Controller

MB A-Class (W177) A 200

Download the new RaceChip+ app

Download on the App Store

bit.ly/RCplus-iOS

JETZT BEI Google Play

bit.ly/RCplus-android

Contents

1 Scope of delivery *4*

2 Technical overview *5*

3 Installation *6*

4 Operation *8*

5 Warnings *16*

6 Troubleshooting *17*

7 Contact *20*

Overview and explanation of symbols

⚠ **Warnings** and important information – please read!

i **General information** on installation and use

Tips to assist installation and use

1 Scope of delivery

The ***Controller***

For wireless operation of the XLR5.

The ***Base***

For mounting the controller with enclosed adhesive dot.

2 Technical overview

2.1. Control panels

Back
On/Off (Hold 3s)

As the only mechanical button, this button is used to switch the remote controller on and off. In addition, the button can be equated with a „back button“ when pressed briefly. This simplifies navigation through the menu.

LCD Touch Display

The display is the main interface for using the controller. By swiping to the left and right, the driving modes are selected and by tapping the control surfaces on the display, the menu items can be navigated.

2.2. Display

- 1.69“ LCD TFT Touch Display
- Resolution 240 x 280p

2.3. Battery

- Battery capacity **200mAh**
- Battery voltage **3.7V**
- Battery life in standby mode **approx. 150 hours**
- Battery life in continuous mode **approx. 24 hours**

Battery indicator:

100% - 75%
74% - 50%
49% - 25%
24% - 5%
Please load

2.3.1 Charging

Charging is possible with a standard USB-C cable and a 5V/1A charging source. A power source with a supply of 3A is necessary for full charging speed.

USB-C interface

Charging time: approx. 1h with a 5V/ 3A charging source.

3 Installation

3.1. Positioning of the controller

Remove the foil on one side of the adhesive dot and stick it to the round base. Position the controller so that it is clearly visible and easy for the driver to reach. For legal reasons, the passenger must not have access to the mounted controller while driving!

A Positioning on the dashboard to the left of the steering wheel.

Once you have selected a suitable location, peel off the second protective film from the adhesive dot and attach the controller to the dashboard.

Make sure that the surface is clean and free of grease.

⚠ • **The controller must not interfere with the operation of, or visibility to, any other controls on your car.**

3 Installation

3.2. Expand | Disconnect from the base

The controller can be removed from the vehicle for various reasons.

- Use of the anti-theft protection
- Charge the battery outside of the vehicle.

To loosen the base, turn the operating part counterclockwise by 90° and then pull it off.

To reattach the controller to the base, proceed as follows:

Place the controller, turned 90° to the left, on the base and then turn it clockwise 90° until it comes to a firm stop.

4 Operation

4.1. Connection | 4.1.1. Set up controller and app at the same time

The operation of the RaceChip XLR5 is also possible via the **RaceChip+** app with all popular smartphones and Iphones. For this, simply download the app:

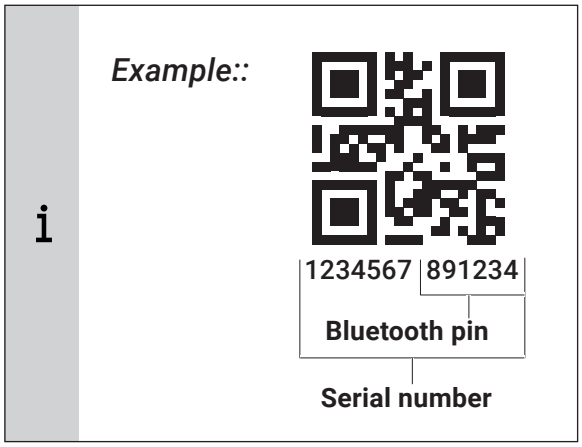
Download on the App Store

JETZT BEI Google Play

bit.ly/RCplus-iOS

bit.ly/RCplus-android

Follow the steps in the app and scan the QR code on the back of the Brainbox. The Bluetooth pin is displayed in the app. This consists of the last 6 digits of the serial number under the QR code.



After connection, the XLR5 must be taught to the individual accelerator pedal. Please follow the instructions in the app:

1. Switch on ignition (**do not start engine**)
2. Do not press the throttle pedal
3. Select minimum learning in the app
4. When the minimum has been successfully learned, fully depress the throttle pedal and, if available, also press and hold down kickdown
5. Select maximum learning in the app
6. Once the learning process is complete, release the throttle pedal.
7. The learning process is complete.

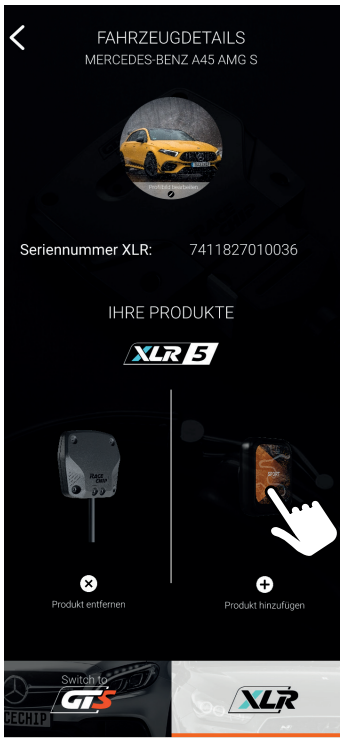
The controller is now automatically connected to the Brainbox.

4 Operation

4.1.2. Set up controller individually

If the controller was not registered and connected during the first app connection, it can be connected subsequently.

1. Switch on the ignition and wait for a connection between the app and the Brainbox
2. In the menu, open the vehicle profile and navigate to the XLR page (right image)
3. Add controller
4. Turn on the controller (long press on the button on the right edge)



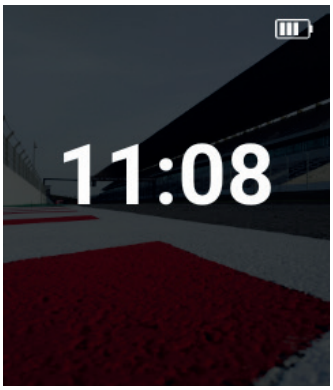
5. Scan the QR code on the back of the controller (picture on the right)
6. The controller will be connected automatically

i	The controller is only compatible with XLR5 modules. Previous modules are only controllable with the app and the wired controllers.

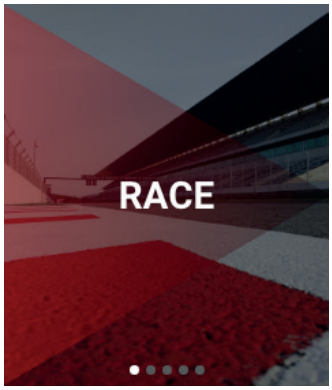
4 Operation

4.2. Drive Modes | Home Screen

If there is no connection to the XLR5, a clock is displayed. The type of clock can be selected in the menu between **analog** and **digital**.

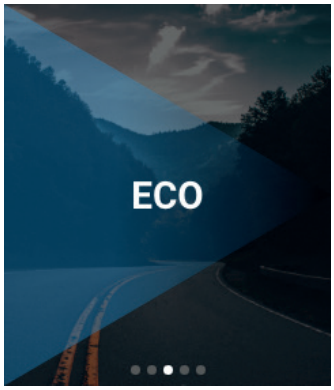


When a connection to the XLR5 is established, the controller displays the current driving mode. When the connection is first established, this is the **SPORT** mode.

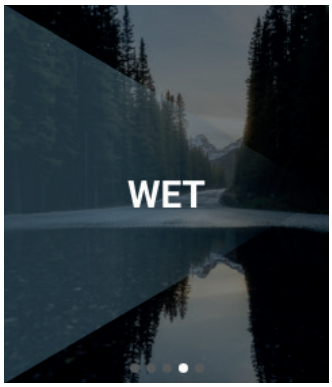


Perfect for dynamic driving

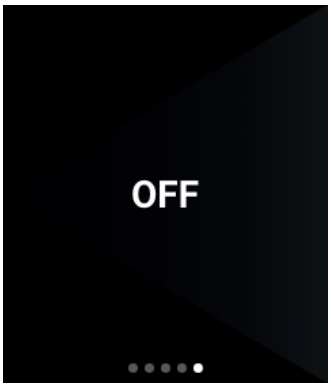
No more sluggishness in throttle response



Comfort oriented throttle response



Reduces traction problems in the wet

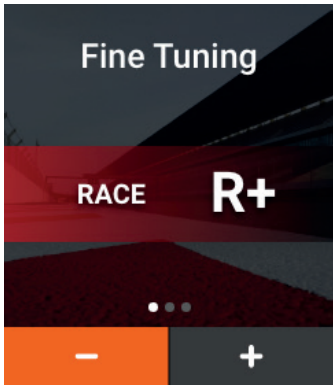


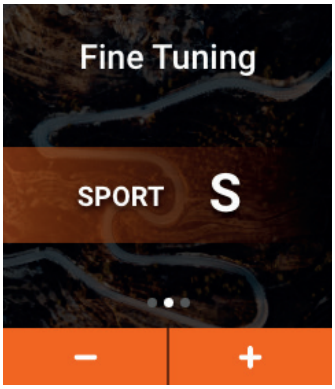
Throttle response as in stock condition

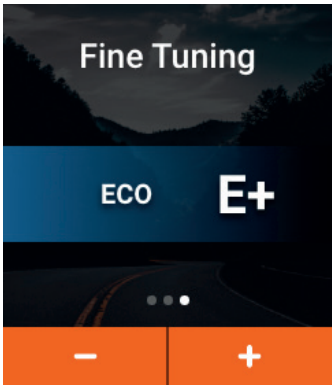
4 Operation

4.3. Fine tuning

Fine tuning settings are accessed via the menu or by swiping from top to bottom in **ECO**, **SPORT** or **RACE** mode.







Here you can select the mapping for the driving modes RACE, SPORT and ECO. You can choose between 4 driving levels for faster throttle response and 2 driving levels with reduced throttle response:

R+ — RACE Plus
Throttle response like a sports car

R — RACE
Perfect for dynamic driving

S+ — SPORT Plus
Significantly improved throttle response

S — SPORT
No more sluggishness in throttle response

E — ECO
Comfort oriented throttle response

E+ — ECO Plus
For consumption optimized driving

- **A different driving level is suitable for every driving situation and every driving style.**
- **Therefore, feel free to test each driving level.**

RaceChip recommendation:

Drive mode	Map
RACE	R
SPORT	S
ECO	E

Save setting:

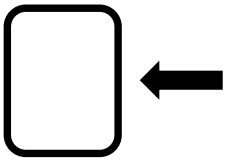
Swiping up from the bottom of the screen exits Fine tuning mode and saves the settings.

4 Operation

4.4. Menu

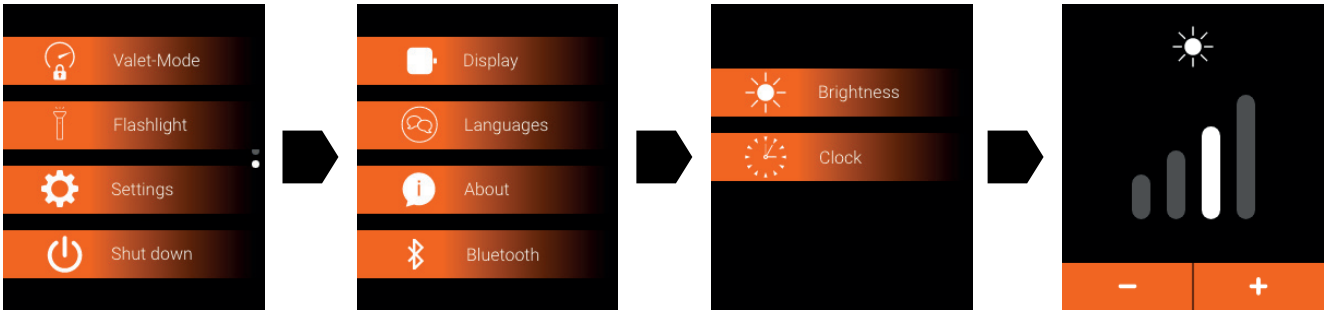
Navigation in and through the menu:

Swipe up from the bottom of the screen to open the menu.

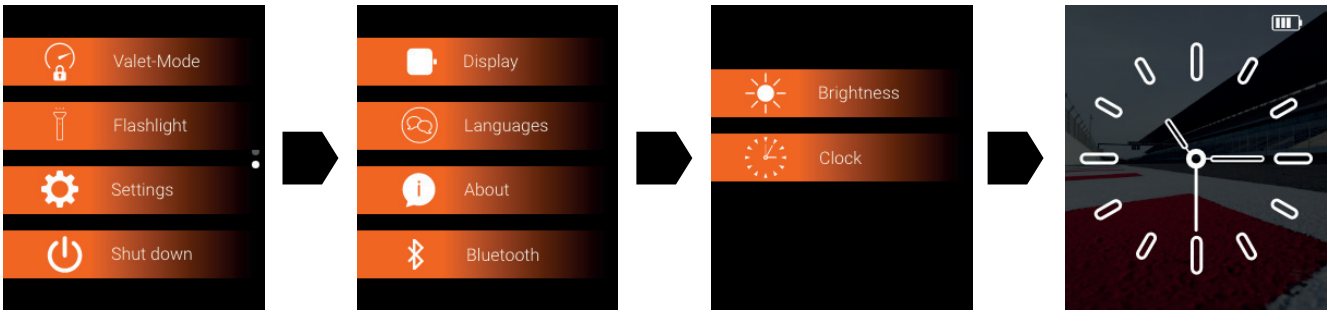


You can navigate back in the menu using the key on the side of the controller.

Setting options:



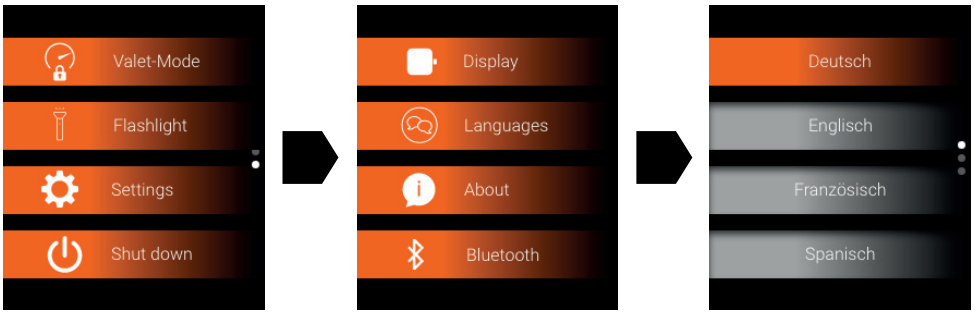
Settings **Display** **Brightness**



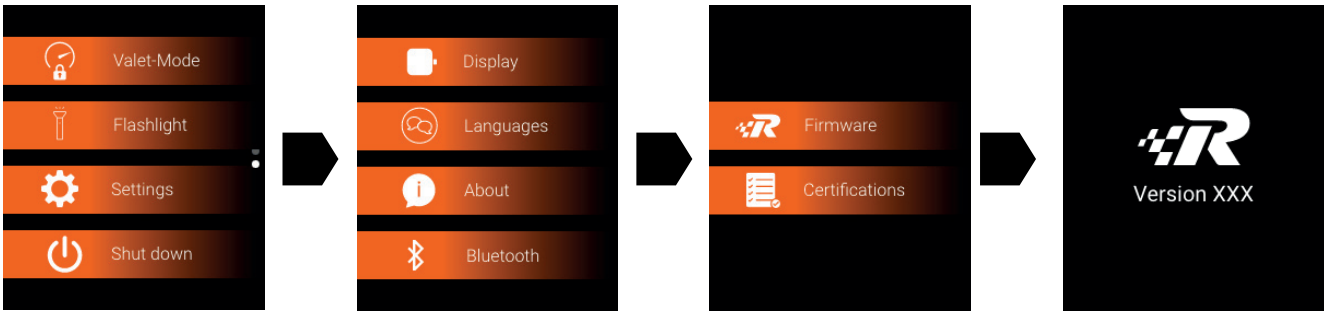
Settings **Display** **Clock**

4 Operation

Setting options:



Settings **Language**



Settings **About** **Firmware**

Updates are performed with the help of the RaceChip+ app. When an update is available, you will be notified in the app. Follow the instructions in the app to perform the update.

4 Operation

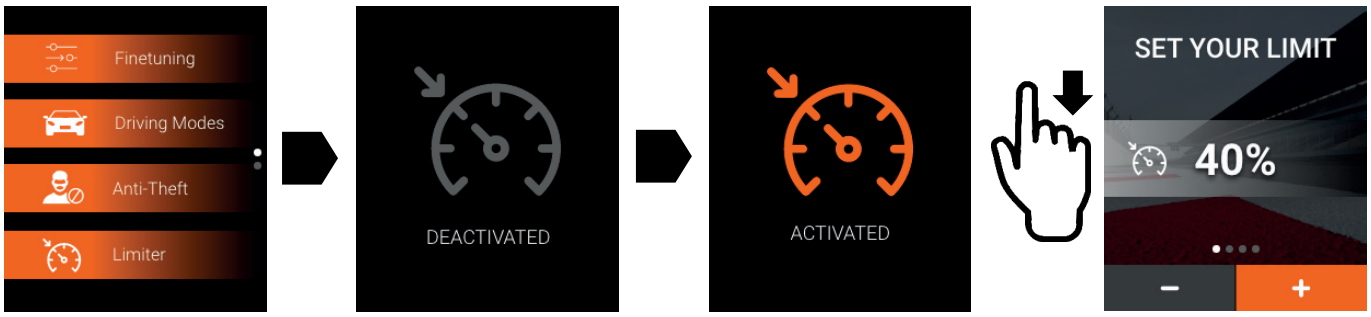
4.5 Other functions | 4.5.1 Anti-theft protection

Anti-Theft **Deactivated** **Activated**

The anti-theft system uses the controller as an additional key to release the throttle pedal. When it is activated, nothing initially changes on the vehicle. As soon as the vehicle goes into idle mode (usually about 5 minutes after it is locked), the anti-theft protection becomes active and suppresses the throttle pedal signal. Until the controller reconnects to the Brainbox, or the anti-theft is deactivated via the RaceChip+ app, pressing the throttle pedal will not cause the engine to respond.

For full anti-theft protection, turn off the controller and simply take the controller with you when you leave the vehicle.

4.5.2. Limiter



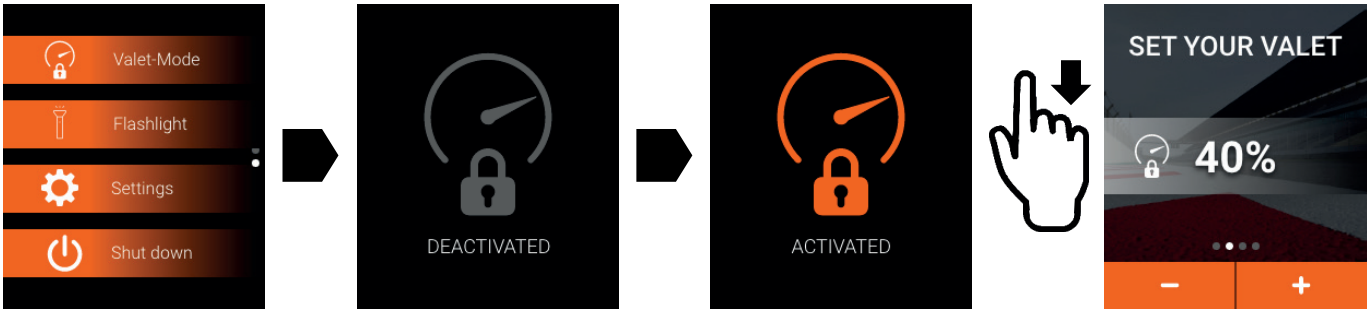
Limiter **Deactivated** **Activated**

The limiter can limit the throttle pedal. Via the limiter fine tuning setup, you can choose how much the throttle pedal should be limited. It is adjustable in the range between 40% and 80%.

> ⚠ **For legal reasons, the throttle may not be fully limited and must return to the standard value at full throttle. This feels like activating a kickdown in this mode.**

4 Operation

4.5.3. Valet

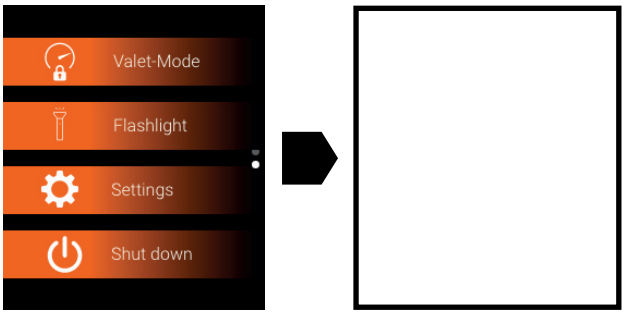


Valet-Mode **Deactivated** **Activated**

Valet-Mode is only enabled for use on private roads and parking lots. In this mode, the throttle pedal can be limited between 30% and 50%. Even at full throttle, the limited accelerator pedal characteristic is maintained.

This mode is designed for a valet service, so the driver can only move the vehicle at a leisurely pace. After activating the mode, we recommend removing the control unit from the vehicle before handing it over to the valet. Since this mode can only be deactivated with the controller or the RaceChip+ app, the throttle pedal will remain in valet mode until you receive the vehicle back and deactivate the mode with the controller.

4.5.4. Flashlight



Flashlight

The flashlight switches the screen to white. This allows the controller to be used as a makeshift flashlight to better locate the throttle pedal sensor when installing the XLR5, for example.

5 Warnings

The controller is equipped with a lithium-ion battery. Therefore, the following safety instructions apply:

⚠

- **Do not disassemble the controller.**
- **Only use suitable charging cables (see chapter: Charging).**
- **Do not use damaged USB-C cables.**
- **Do not use it if it is damaged. There is a risk of fire!**
- **Do not expose to direct sunlight or heat sources for long periods of time.**
- **There is a risk of overheating and fire!**

6 Troubleshooting

If the function of the controller is not as desired, you will find initial help for troubleshooting here.

Description of problem	What to do
No connection, but display shows Bluetooth symbol	• In rare cases, smartphones automatically connect to the controller. This then blocks the connection to the RaceChip XLR5. • Check whether a smartphone is connected to „Remote“ in the vicinity and delete the connection
Controller stays on only briefly and goes off again.	• This is a sign of an empty battery. • Please connect the controller to a suitable charging cable.
Controller does not load	• Not every USB-C cable is suitable for charging. • Please prefer to charge the controller with a USB to USB-C charging cable.
Calibration not successful	• An error occurred during calibration. Restart the calibration and follow the instructions in the app exactly: • Turn on the ignition (do not turn on the engine. If the vehicle does not have an ignition switch, make sure P gear is engaged and the parking brake is applied). • Do not press the throttle pedal. • Select Minimum calibrate in the app. • When minimum is successfully calibrated, fully depress throttle pedal, if available also depress and hold kickdown. • Select maximum calibration in the app. • After calibration is complete, release the throttle pedal.

6 Troubleshooting

Description of problem	What to do
Limiter, valet and anti-theft are not available	These functions are only available if the learning process has been completed successfully. Navigate to „Settings“ ➡„XLR5 Settings“ in the RaceChip+ App and restart the throttle pedal calibration. Follow all instructions in the APP to do this: • Turn on ignition (do not turn on engine. If the vehicle does not have an ignition switch, make sure P gear is engaged and the parking brake is applied). • Do not press the throttle pedal. • Select Minimum learning in the app. • When minimum is successfully learned, fully depress throttle pedal, if available also depress and hold kickdown. • Select maximum learning in the app. • After calibration is complete, release the throttle pedal.
No function of the throttle pedal	• Check if the anti-theft protection is deactivated and the Controller is connected to the Brainbox. • If the problem occurs with the anti-theft protection deactivated, Please uninstall the brainbox of the RaceChip XLR5. Restore the stock condition of your car by reconnecting the standard connectors of the throttle pedal.

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.
FCC warning:
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

6 Troubleshooting

Description of problem	What to do
The response behavior is as in stock (a sudden loss of the Bluetooth connection can be an indication of this error).	• The security mechanism of the RaceChip XLR5 has been activated because RaceChip XLR5 has detected a faulty signal transmission. • This deactivates the Bluetooth connection and, as long as the security mechanism is activated, no settings can be made for the drive levels via the RaceChip+ app. • Your car is thus in standard condition. Due to this mechanism, it is possible to continue driving. However, we do not recommend this for a longer period of time. • Please contact our customer service. • If the problem does not occur immediately after installation, it may be due to a malfunction of the throttle pedal or another related assembly (i.e. not caused by RaceChip XLR5). In such a case, please visit a specialist workshop.

IC warning
- English:
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.
- French:
L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :
1) L’appareil ne doit pas produire de brouillage;
2) L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.
L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. L'appareil peut être utilisé sans restriction dans des conditions d'exposition portables.

7 Contact

Our Customer Service is ready to help!

Find out how to contact us at:
www.racechip.com/service-support

Please have your customer details close by when you contact us.

Follow us on:

/racechipchiptuning

@racechipchiptuning

Legal notice

RaceChip Chiptuning GmbH & Co. KG
Karl-Frasch-Str. 14
73037 Göppingen
Germany

Sales tax identification number: DE 260672432
Registered at District Court of Ulm: HRA 721734
Tax number: 63079/11153

Personally liable partner:
RaceChip Chiptuning Verwaltungs GmbH
Chief executives: Dirk Bongardt, Kai Döhler
Head office: Karl-Frasch-Str. 14, 73037 Göppingen, Germany
Registered at HRB District Court of Ulm: HRB 724254