

EASYGUARD ESW309C01N

EASYGUARD Smart Keyless Entry System ESW309C01N User Manual

Model: ESW309C01N | Brand: EASYGUARD

1. INTRODUCTION

This manual provides detailed instructions for the installation and operation of the EASYGUARD Smart Keyless Entry System, model ESW309C01N. This system is designed to upgrade your vehicle with passive keyless entry (PKE) functionality and additional remote control features.

Compatibility: This system is compatible with 2014+ Mercedes-Benz FBS4 vehicles equipped with a factory OEM push start button, **without** the Comfort Access feature. Specific compatible models include A class W176 (2014-2018), B class W246 (2014-2018), C class W205 (2014-2022), E class W213 (2014-2023), S class W222 (2014-2020), G class W166 W463 (2012-2024), GT class C190 X290 (2014-2023), GLA W246 X156 (2014-2018), GLB W246 (2014-2018), GLC X253 C253 (2014-2022), GLE W166 (2014-2018), and GLS GL X166 (2012-2018).

If your vehicle's original key fob differs from the one shown in this manual, or if your car has the Comfort Access function, please refer to other EASYGUARD ESW series models (e.g., ESW309C02-N, ESW31201N-PP, ESW309B-N) for appropriate compatibility.



Figure 1: Compatibility with Mercedes-Benz FBS4 vehicles with factory OEM push start button.

2. SAFETY INFORMATION

For optimal performance and to prevent damage to your vehicle's electrical system, professional installation by a trained alarm installer or locksmith is strongly recommended. Incorrect installation may lead to system malfunction or vehicle damage. Always disconnect the vehicle's battery before beginning any electrical work.

3. PACKAGE CONTENTS

The ESW309C01N Smart Keyless Entry System package includes the following components:

- Control Module
- Key Fobs (2 units)
- Wire Harness
- Alarm Antenna
- PKE Antenna (Front and Rear)

Item No.	Compatibility	With PKE function	Compatible with comfort access	Power wire plug play	Car key's PCB plug play	Car factory key fobs style	Available key fobs styles	Notes
ESW309C series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	No	No	No limit	All	N/A
ESW309C01-N series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	No	Yes	 Or 	BE/BE4/BE2/BE2W/BE24/BE3	FBS4 14-20
ESW309C01-N-PP series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	Yes	Yes	 Or 	BE/BE4/BE2/BE2W/BE24/BE3	FBS4 14-20
ESW309C02-N series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	No	Yes	 Or 	BE2/BE2W/BE24/BE3	Newer FBS4
ESW309C02-N-PP series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	Yes	Yes	 Or 	BE2/BE2W/BE24/BE3	Newer FBS4
ESW309C03-N series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	No	Yes	 Or 	BE2/BE2W/BE24/BE3	177/176 style key fobs
ESW309C04-N series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	No	Yes	 Or 	BE3	Fit for W223 w206



Figure 2: Components of the ESW309C01N Smart Keyless Entry System.

4. INSTALLATION GUIDE

The installation process involves integrating the new system with your vehicle's existing wiring. It is crucial to follow these steps carefully or seek professional assistance.

4.1. Preparing the Original Key Fob PCB

One working factory key fob's Printed Circuit Board (PCB) must be placed inside the control module. This process does not require soldering the factory key's PCB.

1. Carefully open your original Mercedes-Benz key fob.
2. Remove the PCB from the original key fob casing.

3. Install the original PCB into the designated slot within the new control module, ensuring it lies flat and is securely seated.

Your browser does not support the video tag.

Video 1: Demonstration of how to remove the BE key PCB for installation into the new system.

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Video 2: Guide on how to remove the FBS4 ignition lock, a necessary step for accessing the key components.

4.2. Wiring Connection

The ESW309C01N model requires connecting 4 wires. The ESW309C01-N-PP variant offers a plug-and-play installation. This manual focuses on the ESW309C01N wiring method.



Figure 3: Comparison of wiring methods for ESW309C01-N and ESW309C01-N-PP.

Refer to the detailed installation video for specific wiring instructions:

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Video 3: Comprehensive installation video for the ESW309C system.

4.3. PKE Antenna Installation

Proper placement of the PKE antennas is essential for the passive keyless entry function to work correctly.

1. Install the front PKE antenna along the edge strip to the driver's cab, typically near the windshield.
2. Install the rear PKE antenna in the rear section of the vehicle, routing the line to the driver's cab.
3. Ensure all wires are neatly routed and secured to avoid interference or damage.

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Video 4: Detailed instructions for PKE antenna installation.

4.4. Post-Installation Programming

After completing all wiring connections, new programming is required for the system to function correctly. Refer to the specific programming method provided with your product or consult a professional installer.

5. OPERATION INSTRUCTIONS

The EASYGUARD Smart Keyless Entry System provides enhanced convenience and security features.

5.1. Passive Keyless Entry (PKE)

With the PKE function enabled, the vehicle will automatically unlock when you approach it (within 1-2 meters) and lock when you walk away (within 2-3 meters) with the key fob in your possession. This feature can be enabled or disabled as per user preference.



Figure 4: Passive Keyless Entry (PKE) functionality.

5.2. Remote Control Functions

The new key fobs replicate the functions of your original factory key, including remote lock, unlock, and trunk release. Additional features like power window up/down may be available if your original factory key supports them.

Function of remote control

Remote to select your prefer key fobs styles when buying!

<p>BE</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>Lock</p> <p>Trunk release</p> <p>Unlock</p> </div> </div> <div style="margin-top: 10px;"> <p>PKE enable: Holding + for 5 seconds, then press button once to confirm.</p> <p>PKE disable: Holding + for 5 seconds, then press once to confirm.</p> <p>Key detection or Manual lock/unlock: Holding + for 5 seconds, then press once to confirm.</p> </div>	<p>BE4</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>Lock</p> <p>Trunk release</p> <p>Unlock</p> </div> </div> <div style="margin-top: 10px;"> <p>PKE enable: Holding + for 5 seconds, then press button once to confirm.</p> <p>PKE disable: Holding + for 5 seconds, then press once to confirm.</p> <p>Key detection or Manual lock/unlock: Holding + for 5 seconds, then press once to confirm.</p> </div>
<p>BE24</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>Lock</p> <p>Unlock</p> <p>Trunk release</p> </div> </div> <div style="margin-top: 10px;"> <p>PKE enable: Holding + for 5 seconds, then press button once to confirm.</p> <p>PKE disable: Holding + for 5 seconds, then press once to confirm.</p> <p>Key detection or Manual lock/unlock: Holding + for 5 seconds, then press once to confirm.</p> </div>	<p>BE2</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>Lock</p> <p>Unlock</p> <p>Trunk release</p> </div> </div> <div style="margin-top: 10px;"> <p>PKE enable: Holding + for 5 seconds, then press button once to confirm.</p> <p>PKE disable: Holding + for 5 seconds, then press once to confirm.</p> <p>Key detection or Manual lock/unlock: Holding + for 5 seconds, then press once to confirm.</p> </div>

Figure 5: Remote control functions and PKE settings for different key fob styles.



Figure 6: Remote functions such as trunk release and window control.

5.3. Starting the Vehicle

After installation, you will continue to use the factory OEM push start button to start the car, similar to the original method.



Figure 7: Using the factory OEM push start button.

6. MAINTENANCE

The EASYGUARD Smart Keyless Entry System is designed for durability and minimal maintenance. Keep the key fobs dry and avoid exposing them to extreme temperatures or physical impact. Regularly check the battery in your key fobs and replace them as needed to ensure reliable operation.

7. TROUBLESHOOTING

If you encounter issues with your system, consider the following common troubleshooting steps:

- **System Not Responding:** Check all wiring connections to ensure they are secure. Verify that the original key fob PCB is correctly installed in the control module.
- **PKE Not Working:** Ensure the PKE antennas are correctly positioned and not obstructed. Check if the PKE function is enabled via the key fob settings (refer to Figure 5).
- **Remote Control Issues:** Replace the battery in the key fob. Ensure you are within the effective range (approximately 20-30 meters).
- **Vehicle Not Starting:** Confirm that the system has been properly programmed after installation.

If problems persist, it is recommended to contact a professional installer or EASYGUARD customer support for further assistance.

8. SPECIFICATIONS

Feature	Detail
Brand	EASYGUARD
Model Number	ESW309C01N
Manufacturer Part Number	ESW309C01
Compatible Devices	Mercedes-Benz FBS4 vehicles (2014+) with factory OEM push start button (without Comfort Access). Models include A class W176, B class W246, C class W205, E class W213, S class W222, G class W166 W463, GT class C190 X290, GLA W246 X156, GLB W246, GLC X253 C253, GLE W166, GLS GL X166.
Maximum Range	40 Centimeters (PKE detection range)
Remote Control Included	Yes
Item Weight	1 Kilogram
Built-In Media	Control module, key fobs, wire harness

9. WARRANTY AND SUPPORT

Warranty: This product comes with a 1-year warranty from the date of purchase. The warranty covers manufacturing defects and malfunctions under normal use. Please retain your proof of purchase for warranty claims.

Customer Support: For technical assistance, troubleshooting, or warranty inquiries, please contact EASYGUARD customer service through the retailer where the product was purchased or visit the official EASYGUARD website.

