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› EASYGUARD ESW309C01-N Smart Key PKE Keyless Entry System for Mercedes-Benz FBS4 (2014+)

EASYGUARD ESW309C01N

EASYGUARD ESW309C01-N Smart Key PKE Keyless Entry System Instruction Manual

Model: ESW309C01N | Brand: EASYGUARD

1. PRODUCT OVERVIEW

The EASYGUARD ESW309C01-N is a Smart Key Passive Keyless Entry (PKE) system designed to upgrade your vehicle's security and convenience. This system adds PKE functionality, allowing automatic locking/unlocking as you approach or walk away from your vehicle, and includes additional remote functions such as trunk release and power window control (if supported by the factory key). It is specifically designed for select Mercedes-Benz FBS4 models.

2. VEHICLE COMPATIBILITY

This system is compatible with **2014+ Mercedes-Benz FBS4 vehicles** equipped with a factory OEM push start button, **without Comfort Access feature**. Compatible models include:

- A-Class (W176)
- B-Class (W246)
- C-Class (W205)
- E-Class (W213)
- G-Class (W166)
- S-Class (W222)
- GLA (X156)
- GLC (X253)
- GLE (W166)
- GLS (X166)
- GL (X166)
- ML (W166)
- SLC (R172)
- CLA (C117)

- CLS (W218, C218)

Important: If your original car key's appearance differs from the examples shown, or if your car has the Comfort Access function, or uses a standard turn key start, please refer to other EASYGUARD series (e.g., ESW309C02-N, ESW31201N-PP, ESW309B-N) for appropriate compatibility.

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	Connector type		
ESW312 series	Fit for Benz FBS4 with OEM push start & comfort access	Yes	Yes	Yes	No	No limit	All	N/A	312 A/B/C connector		
ESW31201-N-PP series					Yes		BE/BE4/BE2/BE2W/BE24/BE3	FBS4 14-20	312 A connector		
ESW31202-N-PP series					Yes		BE2/BE2W/BE24/BE3	Newer FBS4	312 A connector		
ESW31203-N-PP series					Yes		BE2/BE2W/BE24/BE3	177/176 style key fobs	312 B connector		
ESW31204-N-PP series					Yes		BE3	Fit for W223 w206	312 C connector		
ESW309C series	Fit for Benz FBS4 with factory push start (without comfort access)	Yes	No	No	No	No limit	All	N/A	309C universal		
ESW309C01-N series					Yes		BE/BE4/BE2/BE2W/BE24/BE3	FBS4 14-20	309C universal		
ESW309C01-N-PP series				Yes		BE2/BE2W/BE24/BE3			Newer FBS4	309C A connector	
ESW309C02-N series				No		BE2/BE2W/BE24/BE3	177/176 style key fobs	309C universal			
ESW309C02-N-PP series				Yes		BE3	Fit for W223 w206	309C universal			
ESW309C03-N series				No	Yes		BE2/BE2W/BE24/BE3	177/176 style key fobs	309C universal		
ESW309C04-N series							BE3	Fit for W223 w206	309C universal		
ESW309B series						No	No		BE/BE4	N/A	309B Universal
ESW309B-N series				Fit for Benz FBS4 with turn key start	No	Yes	Yes		BE/BE4	N/A	309B-N A or B connector
ESW309B-N-PP series								Yes	Possible		BE/BE4/BE2/BE2W/BE24/BE3



Figure 2.1: Examples of compatible original Mercedes-Benz key fobs.

3. WHAT'S IN THE BOX

The ESW309C01-N package includes the following components:

- Control module
- Two new key fobs
- Wire harness
- Alarm antenna
- PKE antenna (front and rear)



Figure 3.1: Contents of the ESW309C01-N kit.

4. KEY FOB TYPES AND FUNCTIONS

The system comes with new key fobs that replicate the functions of your original factory key, including remote lock/unlock and trunk release. The PKE function allows for automatic locking and unlocking based on proximity.

4.1. Remote Control Functions

- **Lock:** Press the lock button to secure the vehicle.
- **Unlock:** Press the unlock button to open the vehicle.
- **Trunk Release:** Press and hold the trunk release button to open the trunk.
- **PKE Enable:** Hold Lock + Unlock buttons for 5 seconds, then press Lock button once to confirm.
- **PKE Disable:** Hold Lock + Trunk Release buttons for 5 seconds, then press Lock button once to confirm.
- **Key Detection or Manual Lock/Unlock:** Hold Lock + Trunk Release buttons for 5 seconds, then press Lock button once to confirm.



PKE enable: Holding + for 5 seconds, then press button once to confirm.

PKE disable: Holding + for 5 seconds, then press once to confirm.

Key detection or Manual lock/unlock: Holding + for 5 seconds, then press once to confirm.

Figure 4.1: Key fob button functions.





Figure 4.2: Various key fob styles and their PKE control instructions.

4.2. Passive Keyless Entry (PKE) Function

The PKE function automatically unlocks or locks the car when you approach or walk away with the key fobs within 2-3 meters. This feature can be enabled or disabled as per user preference.

— • Difference between ESW309C01-N & ESW309C01-N-PP



⋮ **ESW309C01-N**
need to connect 4 wires



⋮ **ESW309C01-N-PP**
Plug play installation

Figure 4.3: PKE automatic lock/unlock range.

Fit for BENZ FBS4 with factory OEM push start button(from 2014 to present)



Upgrade with PKE-passive keyless entry function

Automatically unlock or lock the car when approach or walk away from the car with key fobs in 2-3 meters.

Note:PKE can be enable & disable

Figure 4.4: Remote trunk release and power window control (optional, if factory key supports).

5. INSTALLATION GUIDE

Installation of the EASYGUARD ESW309C01-N system requires careful attention to detail. It is highly recommended that this item be installed by a trained alarm installer or locksmith to ensure proper functionality and avoid damage to the vehicle. The ESW309C01-N model requires connecting 4 wires, while the ESW309C01-N-PP model offers plug-and-play installation. This manual focuses on the ESW309C01-N (with BE2) which requires wire connections.



Products accessories



Key fobs



Control module



Alarm antenna



PKE antenna



plug play power wire or Power wire

Figure 5.1: Wiring difference between ESW309C01-N and ESW309C01-N-PP.

5.1. Preparing the Original Key Fob PCB

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

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Video 5.1: Demonstrates how to remove the BE2 key components to access the PCB.

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Video 5.2: Demonstrates how to remove the BE key components to access the PCB.

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Video 5.3: Demonstrates how to remove the FBS4 ignition lock.

5.2. Main Unit and Antenna Installation

The main control unit and antennas need to be strategically placed within the vehicle for optimal performance.

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Video 5.4: Comprehensive installation video for the ESW309C system.

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Video 5.5: Demonstrates the installation of the PKE antenna.

After completing the wiring connections, a new programming sequence is required. Refer to the programming method provided with the product for detailed instructions.

6. OPERATION

Once installed and programmed, the system operates seamlessly with your vehicle. The new key fobs will function similarly to your original key, providing remote lock, unlock, and trunk release capabilities. The PKE function will automatically engage, locking the car when you move away and unlocking it upon approach, enhancing convenience.

7. TROUBLESHOOTING

If you encounter any issues after installation, please consider the following:

- **System Not Responding:** Check all wiring connections to ensure they are secure and correctly installed. Verify that the original key fob PCB is properly seated in the control module.
- **PKE Function Inconsistent:** Ensure the PKE antennas are correctly positioned and not obstructed. The effective range for PKE is typically 2-3 meters.
- **Remote Functions Not Working:** Confirm that the new key fobs are properly programmed to the system.
- **General Malfunctions:** It is crucial to ensure that the installation was performed by a qualified professional. Incorrect installation can lead to various issues.

For persistent problems, please contact a professional installer or the manufacturer's support for assistance.

8. SPECIFICATIONS

Item Weight	2.2 pounds
Product Dimensions	6.89 x 5.71 x 2.17 inches
Item Model Number	ESW309C01N
Wireless Remote	Yes
Maximum Range	40 Centimeters (Remote Control)
Remote Control Included?	Yes
Manufacturer	ieasyguard.com

9. WARRANTY AND SUPPORT

The EASYGUARD ESW309C01-N Smart Key PKE Keyless Entry System comes with a **1-year warranty** from the date of purchase.

For technical support, troubleshooting assistance, or warranty claims, please contact the manufacturer, ieasyguard.com, or your authorized dealer.

