

# **Installation Instructions**

# PANTHERA Leo Sound Generator ASC Universal



#### **Safety instructions**

The product described in this manual has been developed, manufactured and subjected to checks in compliance with the necessary safety requirements.

To ensure safe function and rule out danger for persons and objects, this product must be installed properly.

This manual is designed using the example of a vehicle model. Deviations from the individual models are possible.

It applies the German warranty law. For personal and material damage, caused by non-observance of these operating instructions, PANTHERA Automotive GmbH assumes no liability.



Important information



Information

For your own safety, our instruction must be strictly followed.

The applicable safety regulations for protective labor legislation in each country must be observed. The user is responsible for compliance with the current legislation itself.

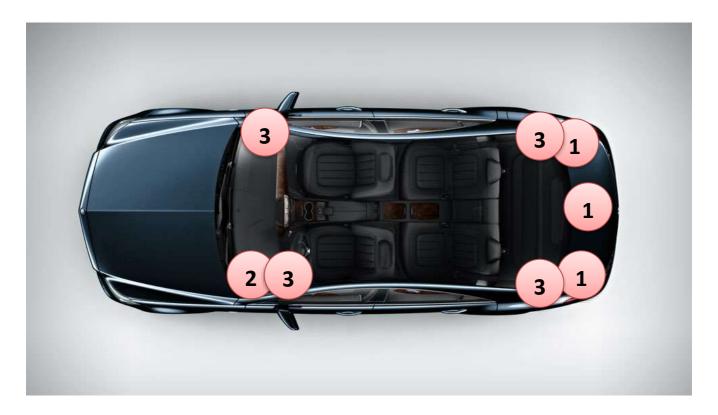


**Technical Hotline** 

If you have questions or suggestions for installation of our PANTHERA Sound Generator, you can reach us Monday to Saturday from 9:00am till 5:00pm.

Hotline number: +49 163 33 66 55 6

# Overview for harness, OBD Dongle and Sound Generator

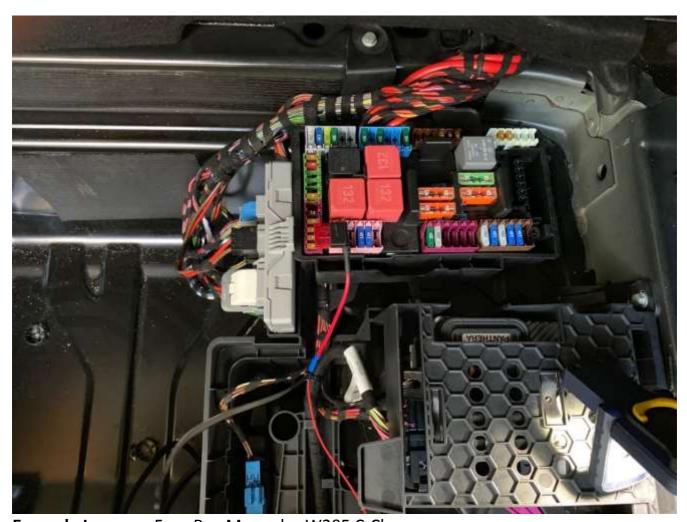


### 1. Possible place for installation:

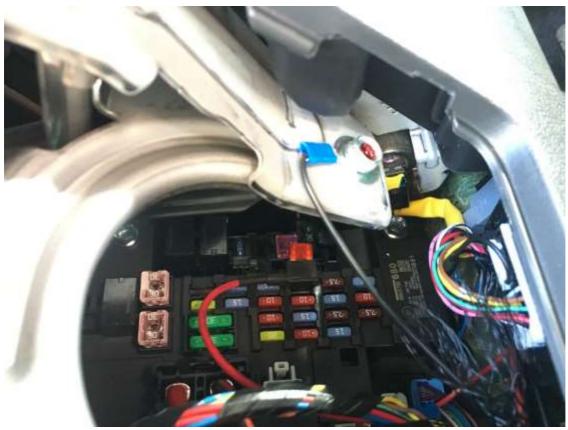
- Sound generator for motor noise generation (Optional second sound generator available)
- Control unit for engine noise generation
- Sound module to adjust volume and sound
- 2. Position of the OBD Dongle.
- 3. Position of the fuse carrier and ground point.

#### **Installation PANTHERA Harness**

- 1. Uncover the fuse box of the vehicle in accordance to manufacturer workshop information system.
- 2. Measure ignition 12 volt (example terminal 15) with a Voltmeter at the fuse box, then connect the red cable of the PANTHERA harness.
- **ATTENTION!** Connection must be made to ignition plus! When connected to other sources of power, parts of the Leo Sound System may be damaged. For damages due to incorrect connection or installation, there are no claims for compensation.
  - 3. Connect the black cable of the PANTHERA harness to a ground point of the vehicle.



**Example Image:** Fuse Box Mercedes W205 C-Class



**Example Image:** Fuse Box Mitsubishi Outlander



Example Image: Fuse Box Mercedes CLA

# **Installation PANTHERA OBD Dongle**

1. Plug the OBD dongle into the OBD port.



#### **Installation PANTHERA Sound Generator**

Generally, there are two ways of installation.

- A) In the trunk
- B) Outside

Check both options and decide yourself which one you prefer.

**ATTENTION!** Welding work on the speaker may only be carried out on the underside (see picture below). For damages due to incorrect handling, there are no claims for compensation.





Topside Underside

#### A) Installation PANTHERA Sound Generator in the trunk

- 1. Remove the floor mat and trunk lining in accordance to manufacturer Workshop Information System.
- 2. Check if there is mounting space in the spare wheel recess, for the PANTHERA Sound Generator, and whether if there is an existing hole such as Water drains.

If there is a hole, then widen it with a suitable tool (e.g. 64-65mm hole saw), up to the diameter of the Sound Generator output.

If there is no hole existing, drill a new hole with a suitable tool (e.g. 64-65mm hole saw), up to the diameter of the Sound Generator output, in the floor of the vehicle.



**Example Image:** Spare wheel recess Mercedes-Benz C-Class W205

- 3. Lead the outlet pipe of the PANTERA Sound Generator through the hole to the outside.
- 4. Let the outlet pipe extend outwards for at least 2-4cm to the outside and seal the hole with suitable material (e.g. glass adhesive, silicone etc.).



**Example Image:** Mercedes-Benz S-Class W222

5. Attach the PANTHERA Sound Generator with suitable material at a suitable location in the vehicle.



At some models, a separate holder must be built by yourself, to aligned and attach the PANTHERA Sound Generator.

# 1 Speaker



**Example Image:** Mercedes-Benz C-Class W205 – without brackets

# 2 Speaker



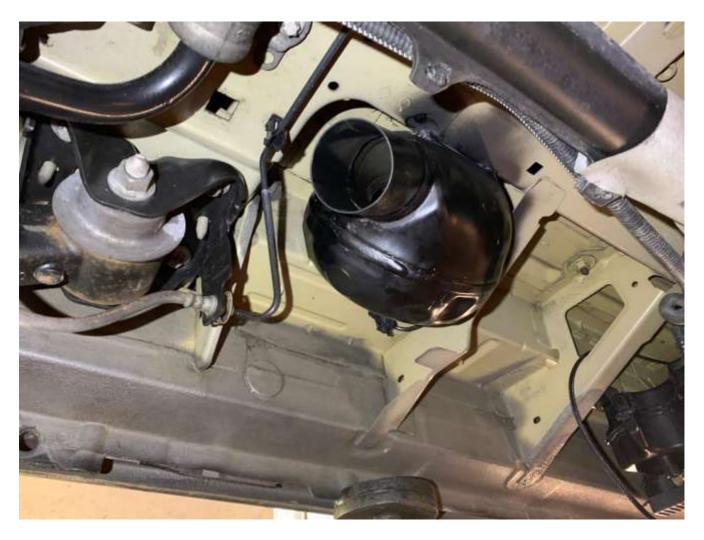
**Example Image:** Mercedes-Benz E-Class W212 – with brackets

#### **B) Installation PANTHERA Sound Generator outdoors**

- 1. Locate an appropriate installation option to attach the PANTHERA Sound Generator. For example, on the exhaust system, the rear silencer or behind the rear bumper.
- 2. Attach the PANTHERA Sound Generator with suitable material at a suitable location on the vehicle.



At some models, a separate holder must be built by yourself, to aligned and attach the PANTHERA Sound Generator.



3. Lay the speaker cables (SPK 1 and/or SPK2) of the PANTHERA CON harness, from the trunk to the outside, and connect it to the PANTHERA Sound Generator.

#### Installation PANTHERA ASC Sound Module

- 1. Connect the PANTHERA ASC Sound Module to the 12 PIN connector of the PTR-CONASC Harness.
- 2. Now run the installation check.

#### Installation check of PANTHERA ASC Sound Generator

- Start the engine of the vehicle, the green LED of the PANTHERA ASC Sound Module will pulsate. And the yellow and green LED of the OBD dongle starts to flash. Now press vigorously the accelerator during idle and listen to the PANTHERA Leo Sound Generator.
- 1. Start the engine of the vehicle.

#### **OBD Dongle LED description:**

Yellow is lighting = Bluetooth connection to the Leo module is active.

Green is flashing = Data will receive from the ECU (engine control unit).

Red is lighting = Error.

Off (no LED is on) = OBD Dongle is in standby mode.

**Leo ASC Sound module LED description:** 

Green is pulsating = OBD Dongle is connected and data will receive from the OBD Dongle / Engine control unit.

Blue is pulsating = Smartphone is connected to the ASC Sound Module.

Yellow is pulsating = only connection to the OBD dongle without receiving data from the ECU

White is interrupting flashing = Modification on the LEO ASC Sound Module (Smartphone or remote control).

Red is pulsating = Error.



Please note, that every first time, when the OBD dongle is plugged into the OBD Port, the pairing between OBD Dongle and ASC Sound Module needs up to 2 or 3 seconds. After this pairing, the boot time is only some milliseconds.

If you do not receive data from the OBD dongle / engine control unit, please disconnect the OBD dongle and connect it again!

The team of PANTHERA wishes you a lot of fun and at all time a good trip!