



STEREO MUTE BOX



Operating Manual

STEREO MUTE BOX



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3 Introduction / Foreword

Congratulations on your purchase of the Stereo Mute Box!

Relax while listening or phoning in your car. The Stereo Mute Box is the perfect companion to your EGO hands-free car kit, providing sophisticated sound management. If your car radio does not have a line-in input, the Stereo Mute Box is the ideal solution for voice output and music playback through your car's speakers.

The product's main features:

- During voice output and music transmission (audio streaming), your car radio is muted.
- Telephone conversations are transmitted through the car's front speakers.
- Music playback is transmitted in stereo quality on the car's front speakers.
- The car's rear speakers are muted by the Stereo Mute Box during voice output and music transmission.

Installation of the Stereo Mute Box into the car requires specialized expertise and skills. If you are uncertain, please consult your dealer or a qualified workshop.

Prior to installing the Stereo Mute Box into your car, please ensure that your mobile phone works correctly with the EGO hands-free car kit. Our service team will also be happy to help you with any information you may require.

4 Safety notes

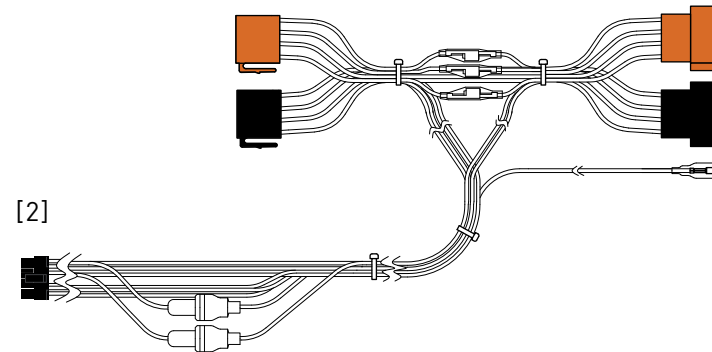
1. **Incorrect installation** – Incorrect installation may lead to damage to the units and/or your car! Specialized knowledge and skills are required for installing the system. We strongly recommend that the system be installed by a qualified professional.
2. **Risk of injury** – Unsuitable installation locations may become a source of injury in an accident situation, or may inhibit the correct functioning of essential safety equipment. Please carefully read the notes in the „Installation“ chapter carefully!
3. **Risk of injury/material damage** – the removal of vehicle lining with sharp or pointed objects may lead to injuries or material damage.
4. **Road safety risk** – Diverted attention can lead to dangerous situations in traffic. Even when using hands-free phone systems, your complete attention must be paid to the current traffic conditions. It is always advisable to avoid phone calls while driving in difficult traffic situations!
5. **Damage to airbags** – An incorrect installation location may cause damage to, or inhibit the correct function of, your airbags. Do not install the components within the deployment area of the airbags!
6. **Insulation damage** – Damaged insulation can lead to equipment and wiring damage. The cables and leads may not be under tension when installed. Install the cables and leads in such a way as to avoid pinching or abrasion.
7. **Polarity and shorting damage** – Cables connected with reversed polarity, or in such a way as to produce a short circuit, can lead to serious damage to your equipment. Before commencing installation, make sure that the car battery is disconnected.
8. **Damage to essential vehicle components** – Essential vehicle components or wiring can be damaged when drilling mounting holes or screwing in self-threading screws. Please make sure there is always sufficient space behind the screw holes and drilled holes!
9. **Interference with on-board electronics** – Despite the extreme protection against interference, incorrect installation can lead to interference with the vehicle electronic systems. Please read the vehicle manufacturer’s notes to this effect!
10. **Appropriate use** – The Stereo Mute Box is intended exclusively for use in vehicles with Bluetooth® mobile phones and A2DP devices.
11. **Damage caused by inappropriate replacement parts** – Inappropriate spare or replacement parts may lead to malfunctions. Please use only the approved parts listed in the section „Spares parts and accessories“!
12. **Road safety risk** – For your own safety, never initiate the coupling procedure while your vehicle is in motion!

5 Scope of delivery / Package contents

- [1] Stereo Mute Box
- [2] ISO cable for connecting the Stereo Mute Box to the car
- [3] Cable to connect the Stereo Mute Box with the EGO electronics box
- [4] Quick guide
- [5] Safety notes



[1]



[2]



[4]

[5]

[3]

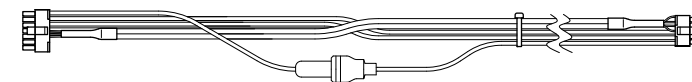


Fig. 01:
Scope of Delivery



PLEASE MAKE SURE THE CONTENT OF THE PACKAGE is complete. If any parts are missing, please don't hesitate to contact our service hotline team: +49 (0) 3377 - 316 233, Mon.–Thurs 7.00 a.m.–5.00 p.m., Fri. 7.00 a.m.–4.00 p.m.

6 Installation instructions

6.1 Required configuration

6.1.1 Vehicle

The Stereo Mute Box – like the EGO electronics box – may only be installed in vehicles with 12 V voltage, with the negative terminal connected to the chassis. If no car radio is installed, installation of both front car speakers is required for voice output and music playback. Specifications for the front car speakers, which are intended for music playback and voice output, should feature impedance of 4 Ω , min. 10 W or 8 Ω , min. 6 W.

6.1.2 Mobile Telephone and EGO hands-free car kit

Operation of the Stereo Mute Box requires an EGO hands-free car kit and a Bluetooth®-compatible phone. You can find a list of supported Bluetooth® telephones online at www.fwd-online.de.

6.1.3 Muting (radio mute switch)

The muting function (Radio Muting) ensures that the audio sound is turned off during telephone calls. The system supports the muting function. Your car's audio documentation will show whether your car audio has a mute option. If your car radio does not have a mute connection, the Stereo Mute Box supports the switching of the front car speakers for voice output and music playback through the EGO hands-free car kit. During voice output and music playback, the car's rear speakers are switched to mute by the Stereo Mute Box through the EGO hands-free car kit.

6.1.4 Add-on speakers

Switching of the radio speaker to the unit is done through switching contacts in the Stereo Mute Box. These are designed for a maximum speaker output of 40 W (sinus).



NOTE: Switching speakers over 40 W leads to premature wear of the switching contacts. If the car radio has higher output, use two additional external speakers (4 Ohm, min. 10W).

6.2 Installation locations



RISK OF INJURY! Unsuitable installation locations may become a source of injury in an accident (or emergency braking) situation, or may inhibit the correct functioning of essential safety equipment.

6.2.1 Checking cable lengths

Before permanently connecting the Stereo Mute Box with the EGO hands-free car kit and its components, please ensure that the installation sites are selected so that the cable lengths are sufficient to link the Stereo Mute Box with the EGO hands-free car kit and its components.

6.2.2 Selection of site for installing the Stereo Mute Box

First select a site for installing the electronics box in accordance with the operating instructions for your EGO hands-free car kit. Place the Stereo Mute Box near the electronics box.



NOTE! Please bear in mind that the connection cable between the Stereo Mute Box and the EGO electronics box is 1.64 ft long. The site for installation of the Stereo Mute Box should provide sufficient air circulation.

Suitable sites for the Stereo Mute Box:

BPassenger side, next to the middle console under the paneling, model-specific installation console (dealer).

Our suggested installation locations are shown in the illustration on the right.

Unsuitable for the Stereo Mute Box:

Leg and knee height, potential head impact zone, airbag inflation space, engine compartment

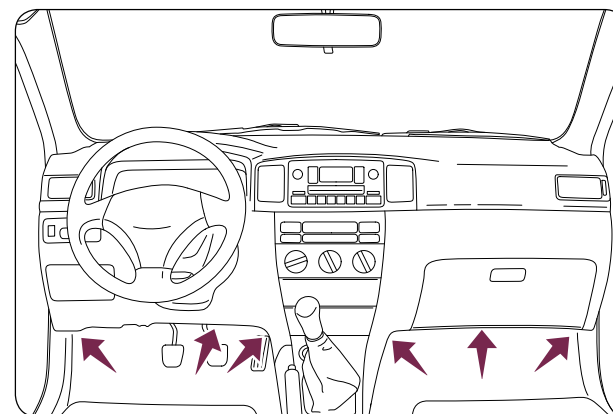


Fig. 02:
Mounting location
of the Stereo Mute Box

6.3 Installation



DAMAGE TO ESSENTIAL VEHICLE COMPONENTS! – Essential vehicle components or wiring can be damaged when drilling mounting holes or screwing in self-threading screws. Please make sure there is always sufficient space behind the screw holes and drilled holes!

6.3.1 Mounting the Stereo Mute Box

Installation consoles for a number of car models are available from your dealer. These are designed to contain all the system components, including the Stereo Mute Box. When it is not possible to use an installation console, please proceed as follows:

Define the mounting points

Making sure that there is at least 2.8 in space for the plug and socket connectors. Mark the positions for the fixing screws.

Mounting the Stereo Mute Box

For mounting the Stereo Mute Box, use four self-threading screws and appropriate washers. We recommend size "ST 2,9x25 DIN 7981" self-threading screws. These are ideal for the fixing of the Stereo Mute Box. Pre-drill the holes with a 0.08 in drill.

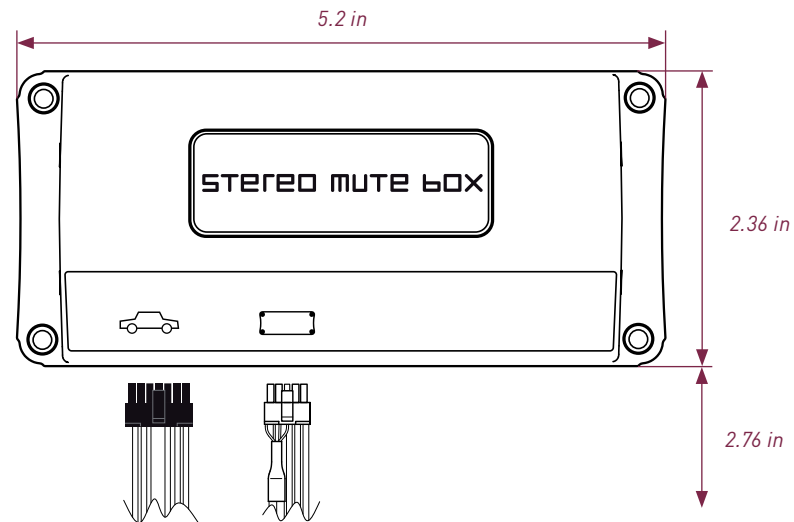


Fig. 03:
Mounting
dimensions of
the Stereo Mute Box

6.4 Connection scheme

Two cables must be installed in order to operate the Stereo Mute Box together with the EGO electronics box:

- Cable to connect the Stereo Mute Box with the EGO electronics box
- ISO connection cable for the Stereo Mute Box



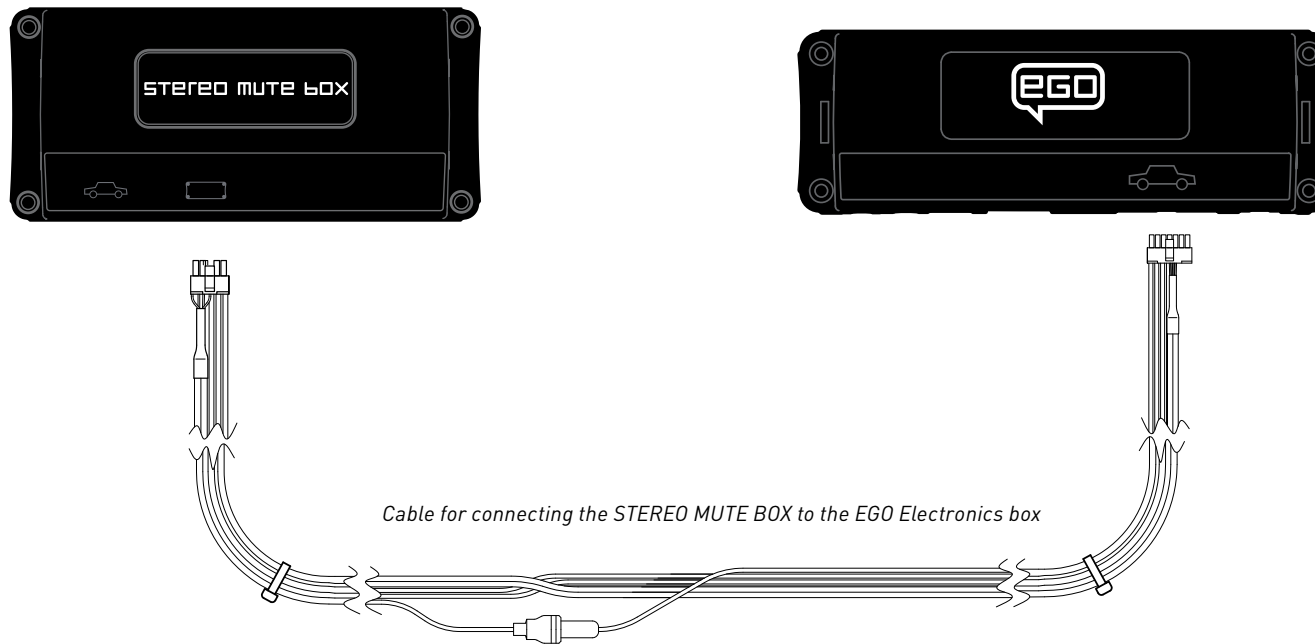
NOTE: Customers who already own an EGO hands-free car kit and are retrofitting the Stereo Mute Box should note that the ISO connection cable installed with the EGO hands-free car kit (with a 14-pole connector plug) must be replaced with the ISO connection cable for the Stereo Mute Box (with a 16-pole connector plug).

6.5 Installation of the Stereo Mute Box connection cable with the EGO electronics box

The procedure for installing the Stereo Mute Box connection cable with the EGO electronics box is shown in Illustration 04.

Connect the 10-pin plug of the cable to the Stereo Mute Box

Connect the 14-pin plug of the cable to the EGO electronics box (EGO TALK, FLASH, LOOK, DRIVE)

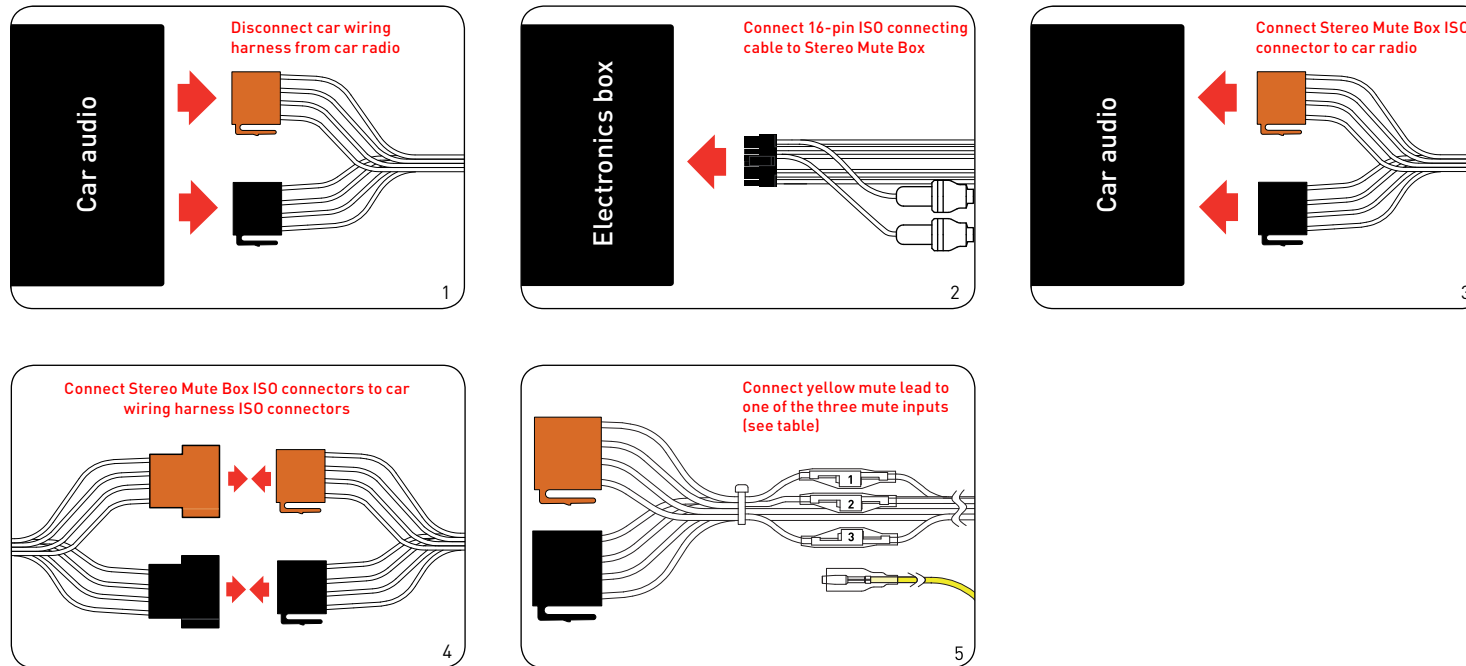


*Fig. 04:
Connection of
the Stereo Mute Box
with the EGO
electronics box*

6.6 Installation of the ISO connection cable

The battery must be disconnected before beginning to install the ISO connection cable. The procedure for installing the Stereo Mute Box connection cable is shown in the illustrations.

Fig. 05:
Installation
procedure



Following installation, the components of the EGO hands-free car kit should also be reconnected with the electronics box. When the installation is completed, reconnect the grounding cable to the negative pole of the battery.

6.6.1 Checking the mute inputs

The mute inputs 1-3 can be seen in Fig. 5 of Illustration 05. The yellow mute cable of the hands-free equipment is connected to one of these inputs. The table below shows which mute input is to be used:

Fig. 06:
Type-
dependent
pin allocation

Socket contact housing			
Radio model	Pin	Wire colour	Function
Audi, Volkswagen, Grundig	1		
	2		Mute
	3		
	4	blue	Ignition (15)
	7	red	Permanent positive (30)
	8	brown	Ground (31)

Socket contact housing			
Radio model	Pin	Wire colour	Function
Ford, Mercedes, Porsche, Becker	1		
	2		
	3		Mute
	4	red	Permanent positive (30)
	7	blue	Ignition (15)
	8	brown	Ground (31)

Socket contact housing			
Radio model	Pin	Wire colour	Function
Blaupunkt	1		
	2		Mute
	3		
	4	red	Permanent positive (30)
	7	blue	Ignition (15)
	8	brown	Ground (31)

Socket contact housing			
Radio model	Pin	Wire colour	Function
Philips	1		Mute
	2		
	3		
	4	red	Permanent positive (30)
	7	blue	Ignition (15)
	8	brown	Ground (31)

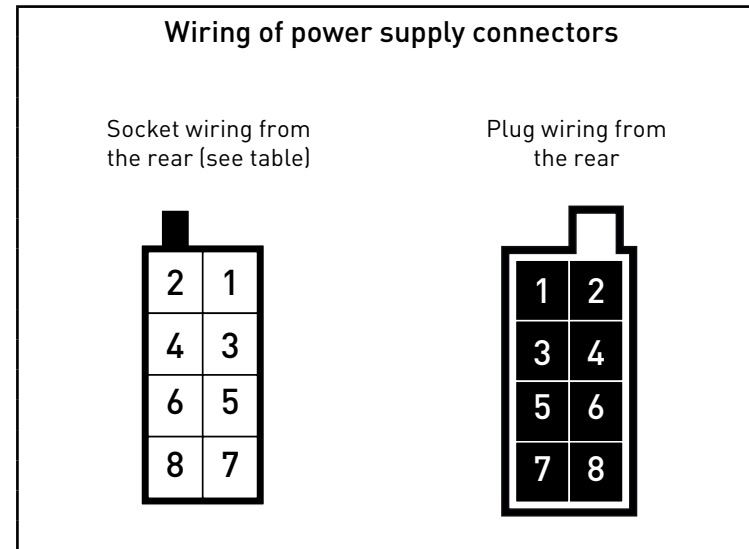


Fig. 07:
Plug wiring scheme

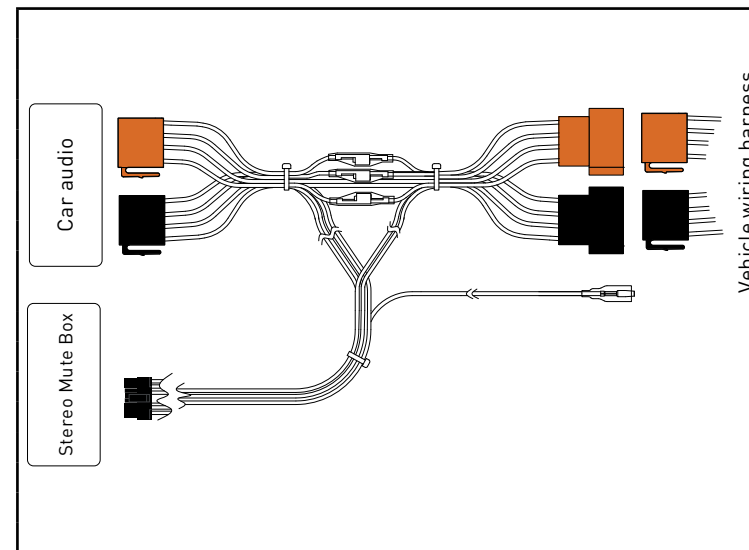


Fig. 08:
Connection system



Note: If your car radio does not have a mute input or if there is no car radio installed, the yellow mute cable remains blank. In this case, please ensure that the insulator cap is firmly situated over the contact for the mute line.

6.6.2 Checking the installation

If the ISO connection cable is correctly attached, an existing phone call continues uninterrupted if the ignition is switched off during the call. The unit switches off after the phone call has been ended. If the unit switches off immediately after the ignition is switched off, the ignition cable (blue) must be swapped with the power supply cable (red) (see Illustration 09b).

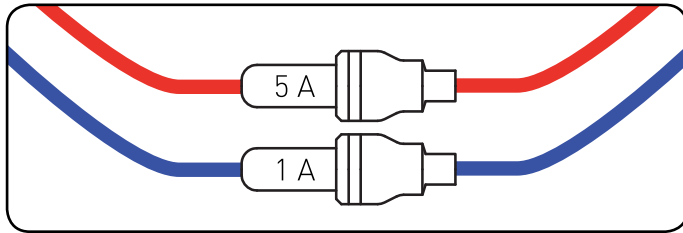


Fig. 09a:
View of original
connection

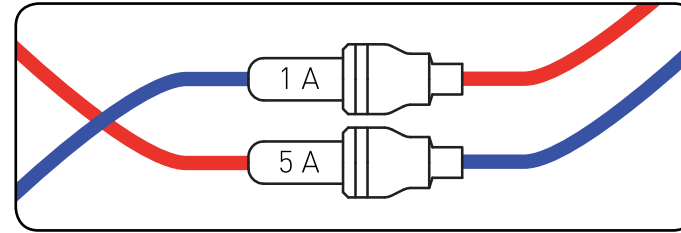


Fig. 09b:
View after
changing cables



PLEASE NOTE: the fuses should remain in place when opening the fuse compartment, make sure that they are not inadvertently exchanged!

6.6.3 Additional external speakers

In the following cases, two additional external speakers (4 Ω , min. 10 W) must be used instead of the front car speakers:

- When the speakers for the car radio should not be used
- When the output of the speaker channel exceeds 40 W (sinus)
- When the car radio operates with active speakers

Feedback distorts audibility. Mount both additional speakers at least 2.62 ft away from the microphone. Please observe the manufacturer's instructions for attaching both external speakers.

The left speaker is connected to the yellow / green wire (Pin 3) and yellow / black wire (Pin 4) of the ISO cable.

The right speaker is connected to the purple wire (Pin 5) and green wire (Pin 6) of the ISO cable. Prior to this, the yellow / green, yellow / black, purple, and green wires should be disconnected from the ISO connection cable (see Fig. 10).

Pin	Color	Function
1	brown	Battery -
2	yellow	Mute
3	yellow / green	Front left speaker +
4	yellow / black	Front left speaker -
5	purple	Front right speaker +
6	green	Front right speaker -
7	blue / white	Back left speaker +
8	gray / blue	Back right speaker +
9	red	Steady plus fuse protection (Class 30)
10	blue	Ignition (Class 15)
11	orange	Car radio speaker output + (front left)
12	orange / black	Car radio speaker output - (front left)
13	white	Car radio speaker output + (front right)
14	black	Car radio speaker output - (front right)
15	green / black	Car radio speaker output + (rear left)
16	gray	Car radio speaker output + (rear right)

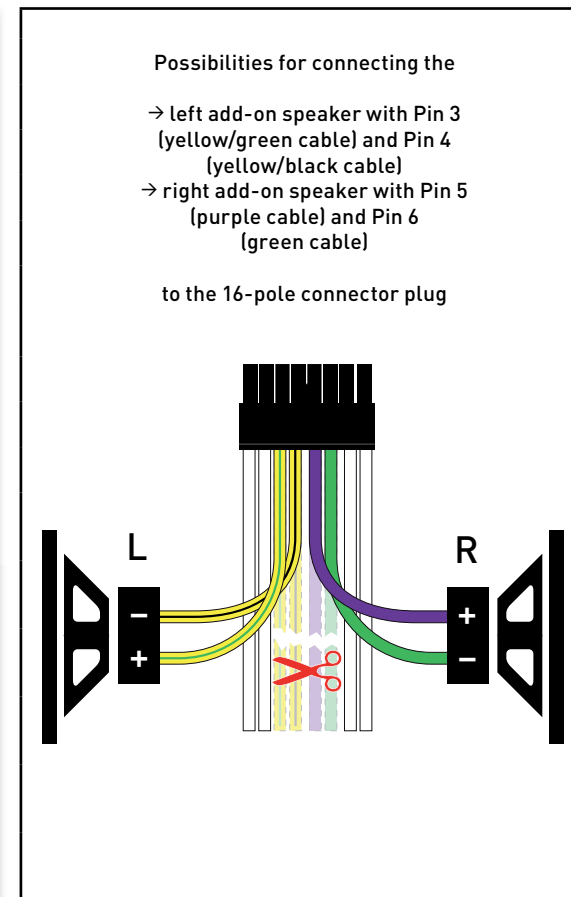
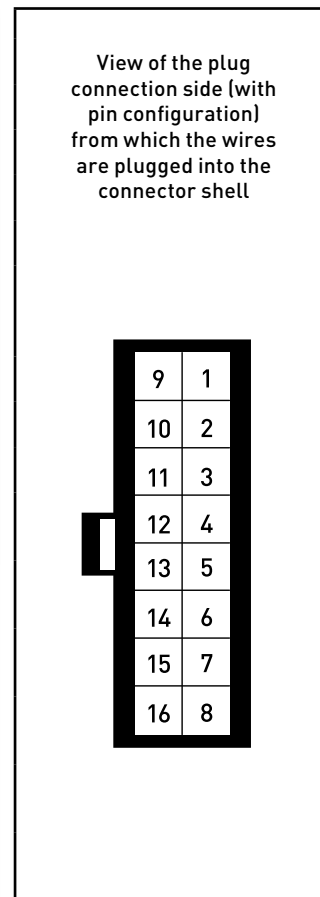


Fig. 10: Connection for additional external speakers

6.7 Connections of the Stereo Mute Box

- [1] The 16-pole plug of the ISO connection cable must be connected to the Stereo Mute Box.
- [2] The 10-pole plug of the Stereo Mute Box connection cable for connecting with the EGO electronics box must be connected to the Stereo Mute Box. The 14-pole plug on this cable must be connected to the EGO electronics box.

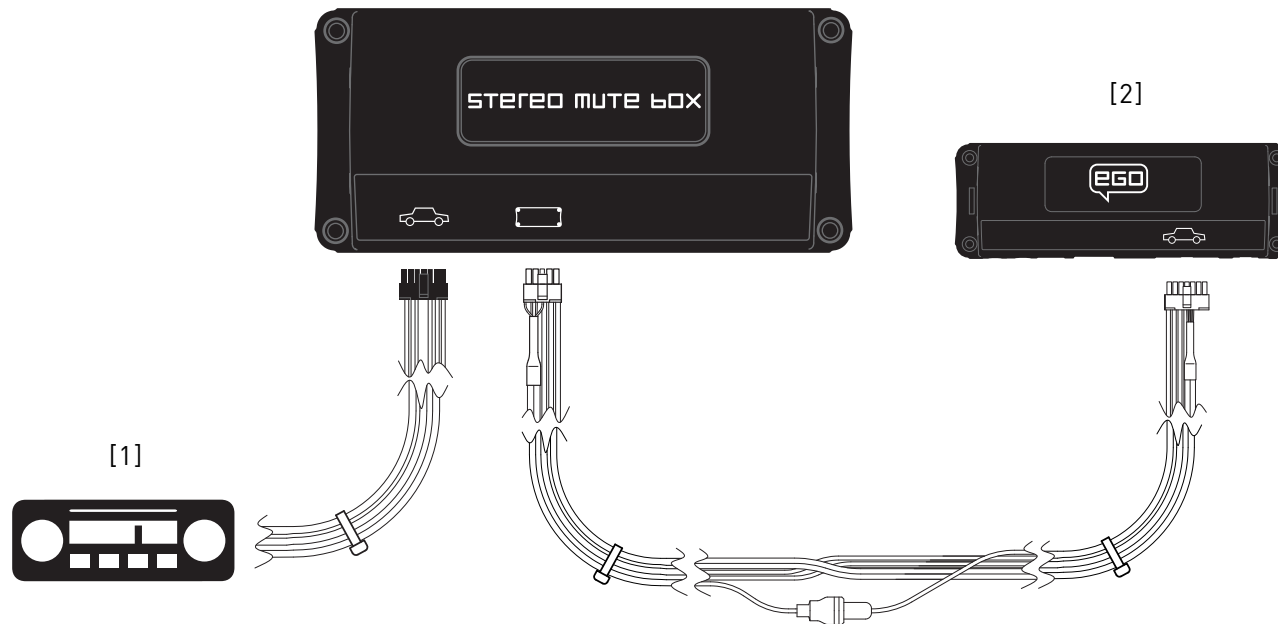


Fig. 11:
Connection for
the Stereo Mute Box

6.8 Operational test

The operational test may only be performed after connecting the EGO hands-free car kit with a compatible Bluetooth® device. The procedure for this can be found in the “Getting started” or “Music player” sections of the operating instructions for your EGO hands-free car kit.

Following correct installation, voice output and music playback is handled by the car’s front loudspeakers. The rear car speakers are meanwhile muted.

7 Operating instructions



ROAD SAFETY RISK! Failure to pay attention can lead to dangerous situations in traffic. You must always direct your complete attention to current traffic conditions, even when speaking with a hands-free device. It is advisable to avoid phone calls while driving in difficult traffic situations!

7.1 Features

The Stereo Mute Box is controlled through the EGO hands-free car kit. During voice output and music transmission (audio streaming), your car radio is muted. Voice output is transmitted through the car's front loudspeakers. Music playback is transmitted in stereo quality on the car's front loudspeakers.

The car's rear loudspeakers are muted by the Stereo Mute Box during voice and music transmission. Volume settings for the Stereo Mute Box can be adjusted with the control unit of your EGO hands-free car kit. Aside from voice output and Bluetooth® Audio Streaming (A2DP), with the EGO FLASH, LOOK, and DRIVE, playback is also possible from an MP3 player connected to the line-in input of the EGO electronics box.

7.2 Getting started

The Stereo Mute Box is activated through the EGO hands-free car kit and remains operational during delay time as well.



NOTE: Please observe the instructions for getting started with your EGO hands-free car kit.

8 Service

FAQ – List of frequently asked questions:

1. Are EGO units suitable for all types of vehicles?

Yes, EGO units are suitable for all types of vehicles. See installation instructions!

2. Does the Stereo Mute Box work with all EGO hands-free car kits?

Yes, the Stereo Mute Box works with all EGO hands-free car kits.

3. Where can EGO be purchased?

From authorized specialty dealers. You can find a specialty dealer in your area through our website under the link Dealers → Dealer search.

4. When retrofitting the Stereo Mute Box, can I continue to use the existing ISO connection cable for the EGO hands-free car kit with a 14-pole connector plug?

No, to install the Stereo Mute Box, the Stereo Mute Box's ISO connecting cable with a 16-pole connector plug must be used.

5. Can the line-out of the EGO electronics box be connected to the line-in input of the car radio, even when the Stereo Mute Box is connected?

No, because the Stereo Mute Box switches between the car radio speaker outputs and the Stereo Mute Box's amplifier outputs to the speakers. During voice output and music playback through the Stereo Mute Box, the car speaker outputs are disconnected from the car speakers. Thus, voice output and music playback from the EGO hands-free car kit overrides the Stereo Mute Box. The use of the Stereo Mute Box is especially useful when the car radio does not feature line-in input.

Troubleshooting:

Problem	Cause	Solution
The EGO hands-free car kit won't switch on	No supply voltage	Check the Stereo Mute Box's ISO connection cable and the connection cable as well as connections between the Stereo Mute Box and the EGO electronics box, and replace the following fuses, if required: - 5 A fuse for steady plus (+12 V) and 1 A fuse for ignition detection (ignition) in the ISO connection cable - 2 A fuse for steady plus supply of the EGO electronics box in the cable connecting the Stereo Mute Box with the EGO electronics box
	Ignition not switched on	Switch on ignition
	Ignition line interrupted	Check ISO connection cable with 1 A fuse for ignition detection ("ignition")
The EGO hands-free car kit immediately cuts off when the ignition is switched off during a phone call.	Ignition detection ("ignition") is linked to the supply voltage connection of the EGO hands-free car kit.	Swap the supply lines for steady plus (" +12 V") and ignition detection ("ignition") on the ISO connection cable to the Stereo Mute Box in accordance with Section 6.6.2 Checking the installation.
The EGO hands-free car kit is in operation, but there's no voice output or music playback out of the front car speakers.	The car speakers are not connected to the Stereo Mute Box	Check that the car speakers are correctly connected with the ISO plug of the car's cable harness and that this is correctly connected with the ISO connection cable of the Stereo Mute Box.
	There may be a short circuit in the speaker lines.	Check whether a short circuit in the speaker lines has occurred. Switch off your EGO hands-free car kit. After clearing the short circuit, switch your EGO hands-free car kit back on.
	The Stereo Mute Box's speaker outputs may have overloaded.	Check that specifications for the front speakers feature impedance of 4 Ω or 8 Ω. Also check that no parallel connection exists in the front speakers. Impedance on the Stereo Mute Box's front speaker outputs must be at least 4 Ω.
The EGO hands-free car kit is operational, but there's no radio playback from the car speakers.	The EGO electronics box line-in input (for the EGO FLASH, LOOK or Drive) is permanently activated.	Allow the line-in input of the EGO electronics box to activate only during playback from the MP3 player. Deactivate the line-in input for the EGO hands-free car kit when there is no playback from the MP3 player.



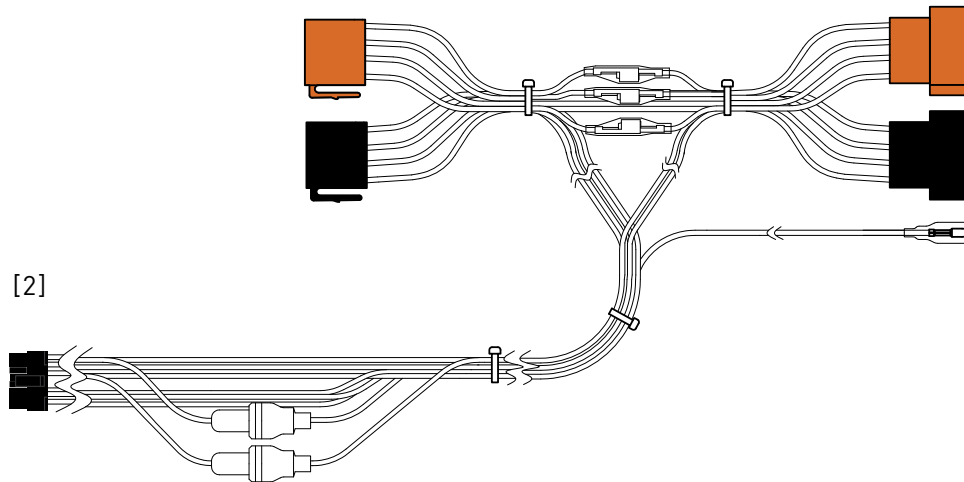
NOTE: Please see the operating instructions for your EGO hands-free car kit for more troubleshooting tips.

9 Spare parts

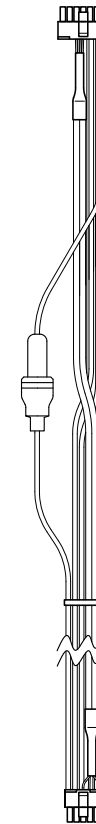
- [1] Stereo Mute Box
- [2] ISO connecting cable for the EGO Stereo Mute Box
- [3] Cable to connect the Stereo Mute Box with the EGO electronics box



[1]



[2]



[3]

10 Technical specifications

Outer dimensions of the Stereo Mute Box	5.2 in x 2.36 in x 0.87 in
Operating voltage	11 V to 15 V
Quiescent current consumption (ignition off)	max. 0.1 mA*
Strength of operating current	max. 2500 mA*
Steady plus fuse protection	5 A
Ignition fuse protection	1 A
Temperature range	-10°C to +55°C
Max. power output	2 x 8 W (4 Ohm) 2 x 4.4 W (8 Ohm)

* Excluding the current consumption of the connected EGO hands-free car kit

11 Certification



In accordance with DIN EN 60950 "Safety of Information Technology Equipment," and DIN EN 60065 "Audio, Video and Similar Electronic Apparatus – Safety Requirements"



03 5051

Model certification according to EU Directive 72/245/EWG (2006/28/EC) "Electromagnetic compatibility in motor vehicles"

12 Conformity statement

We,

Funkwerk Dabendorf GmbH
Märkische Straße
15806 Dabendorf, Germany

hereby declare that the
product listed below

Car stereo amplifier “Stereo Mute Box”

conforms with the essential requirements and other relevant standards of
DIN EN 60950 “Safety of Information Technology Equipment”, and DIN EN 60065
“Audio, Video and Similar Electronic Apparatus - Safety Requirements”..



13 Hotline

Any questions, comments, or suggestions? Would you like some more detailed information? Do you need an adviser or service in your area? Just give us a call!

Our service hotline is there to help you during the following times:

Monday–Thursday	from 7.00 a.m. to 5.00 p.m.
Friday	from 7.00 a.m. to 4.00 p.m.

Before you call us with your problem, please check first with the following steps:

- Check whether you can solve the problem using the tips provided in the “Troubleshooting” section above.
- Make sure you have your hands-free system and holder set type available.
- Try to explain your problem as precisely as possible.

You can contact our service hotline by dialing:

From Germany:	Phone:	0800 - 0 393 393
From outside Germany:	Phone:	+49 (0) 3377 - 316 233 +49 (0) 3377 - 316 234
	Fax:	+49 (0) 3377 - 316 244

Funkwerk Dabendorf GmbH

Märkische Straße
15806 Dabendorf
Germany

Phone +49 (0) 3377 316 - 0
Fax +49 (0) 3377 316 - 300
Email info@fwd-online.de
Internet www.fwd-online.de



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