



# **Installation Instructions**

Complete Set Active Sound incl. Soundbooster VW Arteon 3H

v1.2 (28.07.2021)



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#### 1 Liability Exclusion

Dear Customer,

Our cable sets are developed according to the connection- and circuit diagrams of the corresponding car manufacturers. Before the serial production, the cable sets will be adjusted and tested on an original vehicle. Therefore, the integration into the vehicle electronics follows the guidelines provided by the car manufacturer. Our installation instructions correspond to what is common in the vehicle electric/electronic regarding the required pre-understanding and the accuracy of the description in text and picture. They have proven its worth in practice hundreds of times.

If you should experience any difficulties while installing one of our products, we are available to provide support via phone or email. Additionally, we offer you to execute the installation in our workshop in Bad Segeberg.

Costs, arising from third parties assigned with the installation of our products, are not being covered by us. We will only compensate the proven costs of the assembly and the costs of the disassembly of the defective product, if it turns out that there is an issue with our product. We limit the reimbursement of costs up to 110 Euro gross and reserve the right to verify the claim in our workshop in Bad Segeberg. The costs for shipping will be refunded if the claim is justified.

We made the experience, that every professional workshop that is equipped with the necessary diagnostic devices, the diagnostic software and the manufacturer's circuit diagrams, is able to find any possible defects in one of our products in a short period of time. The assembly and disassembly including troubleshooting the issue should therefore only take up to 60 minutes.

We also made the experience, that many professional workshops are not able to cope with the manufacturer's circuit diagrams and can't read common wiring schemes, which results in the calculation of several hours for the simplest installations. You will understand the fact, that we can neither take the risk of finding a reliable workshop for you, nor can we finance the training of the employees of your trusted workshop.

Costs, arising from purchasing missing parts or replacements for defective parts from other suppliers, are covered by us up to the amount that the subsequent delivery would have caused (saved expenses). According to the legal warranty law, there would be no reimbursement right, if there was no deadline for the subsequent fulfilling set or the deadline for a subsequent fulfilling hasn't expired.

That being said, if you have any problems during the installation or operation of one of our products call us, write us an email, send us the product or come by our workshop in Bad Segeberg with your vehicle. We are certain, that we can find a solution for any kind of concern.

Kind regards, Your Kufatec GmbH & Co. KG Team



### 2 Copyright

Our installation and operation instructions, installation plans, software and other written and/or pictured documentations are protected by copyright.

The publication or distribution of these documentations is only permitted with a written approval of Kufatec GmbH & Co. KG.

#### 3 General notes

While developing this product, your personal safety combined with the best operating service, modern design and an up-to-date production technique was especially taken into account.

Unfortunately, despite the utmost care injuries and/or damages might occur due to improper installation and/or use.

Therefore, please read the following instruction manual fully and thoroughly and keep it!

All articles of our production line pass through a 100% check – for your safety and security.

We reserve the right to carry out technical changes which serve the improvement at any time.

Depending on each product and purpose, it might be necessary to check each country's legal regulations before installing and starting it.

In case of warranty claims, the product has to be sent back to the seller in the original packaging with the attached bill of purchase and detailed defect's description. Please, pay attention to the manufacturers return requirements (RMA). The legal warranty directions are valid.

The warranty claim as well as the operating permission becomes invalid due to:

- unauthorized changes to the device or accessories which have not been approved or carried out by the manufacturer or its partners
- opening the casing of the device
- repairing the device on one's own
- improper use/operation
- brute force to the device (drop, willful damage, accident etc.)

During the installation, please pay attention to all safety relevant and legal directions. The device should only be installed by trained personnel or similarly qualified people.

In case of installation problems or problems concerning the functionality of the device, limit the time to approx. 0,5 hours for mechanical or 1,0 hours for electrical troubleshooting.

To avoid unnecessary costs and time-loss, send in an immediate support-request, via the Kufatec-contact-form (http://www.kufatec.de/shop/de/infocenter/).

In case of, let us know the following:

- Car chassis number/vehicle identification number
- Five-digit part number of the device
- Exact description of the problem
- Steps you have taken to solve the problem



#### 4 Safety Instructions

The installation should only be performed by trained personnel. Only perform installations while in a voltage-free state. For example, disconnect the battery. Please pay attention to the instructions provided by the manufacturer.

- Never use bolts or nuts form the car's safety devices for installation. If bolts or nuts form the steering wheel, brakes or other safety devices are used for installation of the device, it may cause an accident.
- Use the device with a DC 12V negative ground car. This device cannot be used in large trucks which use a DC 24V battery. If it is used with a DC 24V battery, it may cause a fire or accident.
- Avoid installing the device in places that would restrict you from driving safe or where it could damage the car's other fittings.
- This device should only be used in combination with the mentioned vehicles. Only connections described within this instructions guide are allowed or required to use for installation.
- For damages caused by faulty installation, unsuitable connections or inappropriate vehicles, Kufatec GmbH & Co. KG assumes no liability.
- We advise you that these devices process data from the MOST protocol of the vehicle. As the supplier of this device we don't know the overall system you are working with. If your device causes damage, due to other changes made to the vehicle, Kufatec GmbH & Co. KG assumes no liability.
- Kufatec GmbH & Co. KG supplier does not guarantee the use of the product for changes within a new vehicle series.
- If the car manufacturers don't agree with the installation of our device by reason of warranty, Kufatec GmbH & Co. KG assumes no liability. Please, check conditions and warranty before you begin the installation.
- Kufatec GmbH & Co. KG reserves the right to change the device specifications without notice.
- Subject to errors and changes.

### 5 Requirements for the intended use

Only use this device in its intended area.

In case of unprofessional installation, improper use or modification, the permission for the operation and the warranty claim will expire.



### 6 How to connect a cable to another

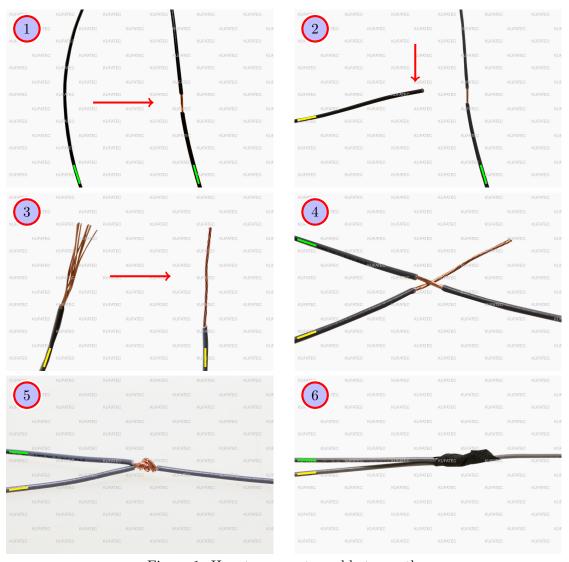


Figure 1: How to connect a cable to another

Table 1: How to connect a cable to another

No.	Work step	Note
1	Take the cable of the vehicle, to which you want to connect, (green marked here) and	
	strip the insulation at one point with a suitable tool (cable stripper/cutter knife).	
2	Now take the cable of the cable set, which you want to connect, (yellow marked	
	here) and strip the insulation at the end.	
3	Twirl the wires of the stripped cable together.	
4	Place the end of the cable you want to connect under the stripped point of the cable	
	of the vehicle	
5	and wrap the cable you want to connect around the cable of the vehicle.	
6	Lastly, stick insulating tape around the connection point. Make sure that the isola-	
	tion is put onto the connection professionally to prevent corrosion.	



### 7 Note Cable Inscription/Color



Figure 2: Cable Inscription

If the cable set consists of colored cables, connect the cables according to the color. If all cables of the cable set have the same color, connect the cables according to the cable inscription.



### 8 Assembly Instruction

The following illustration shows the cable routing as well as the position of the individual components:

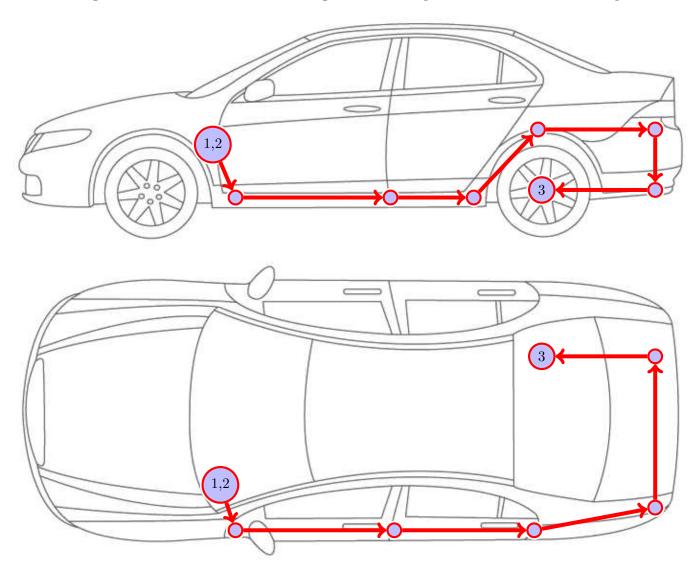


Figure 3: Vehicle overview

- 1 Control units for sound generator
- 2 Pushbutton
- 3 External sound generator

Please be aware, that this overview is only for **illustration purposes**. Always lay the cable set in the **most convenient and shortest way** possible. For a detailed description of the cable routing, please refer to the relevant sections of the following manual.



### 9 Safety Instructions for working on Airbags

Working on Airbag systems has to be executed exclusively by especially trained qualified personnel.

Notes for working on Airbag systems:

- Remove the ignition key and disconnect the battery.
- Wait at least 5 minutes. Only then you can work on the Airbag systems.
- Discharge yourself before you work on an Airbag unit by touching the latch of the door.
- Airbag units which have been removed are always put down face up.
- During the works on the Airbag system you have to be very careful.
- Additionally, the safety notes of the corresponding manufacturer are valid.

Kufatec GmbH & Co. KG does not assume liability in any case of damage!

#### Note for assembling the vehicle

• Before you start assembling the vehicle, the system must first be tested for proper function.



## 10 Disassembly trim parts driver's side front

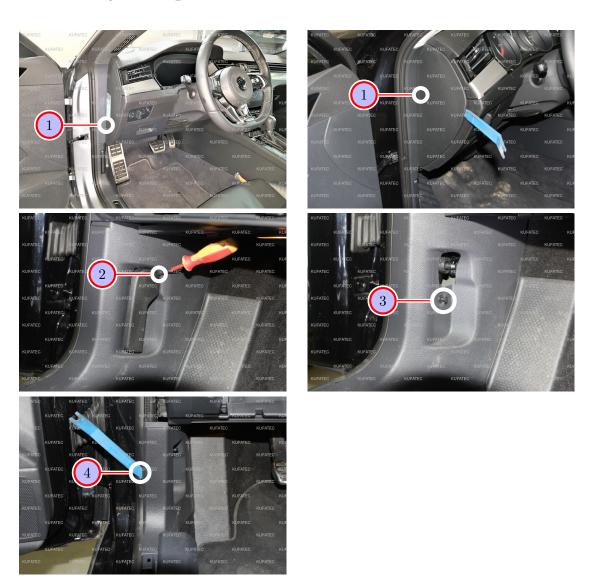


Figure 4: Disassembly trim parts driver's side front

Table 2: Instructions for the disassembly of trim parts on the driver's side front

No.	Work step	Note
1	Loosen and remove the lateral dashboard covering by using an assembly lever.	
2	Pull the bonnet release and remove with a slot screwdriver the bonnet release, which	
	is positioned on the back side of the lever. Afterwards you can pull the lever out in	
	the direction of the driver's footwell.	
3	Loosen the marked screw/clip with a slot screwdriver.	
4	Remove the upper covering of the A-pillar by using an assembly lever.	



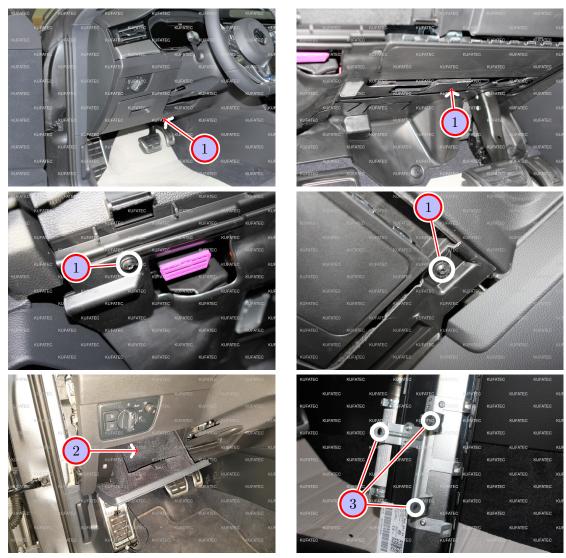


Figure 5: Disassembly trim parts driver's side front

Table 3: Instructions for the disassembly of trim parts on the driver's side front

No.	Work step	Note
1	Loosen and remove the marked screws of the lower dashboard covering and take it	2xT20
	out. Disconnect the connector of the footwell lighting.	
2	Loosen the lateral compartment by pressing the two latches on top and moving the	
	compartment downwards.	
3	Loosen the screws of the knee airbag and take it out carefully.	3xM6



## 11 Assembly sound generator

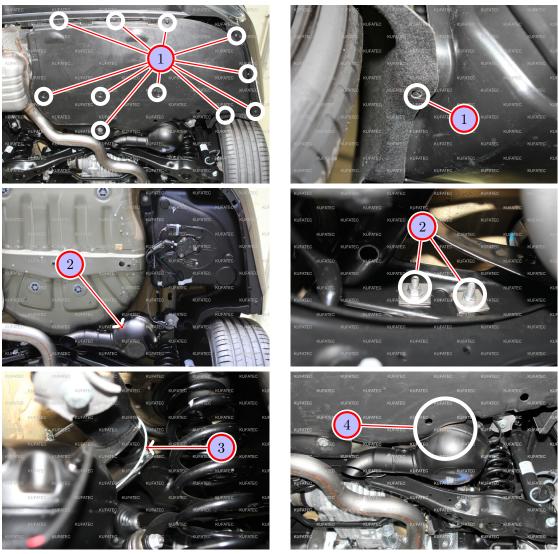


Figure 6: Assembly sound generator

Table 4: Instructions for the assembly of the sound generator

No.	Work step	Note
1	Loosen and remove the marked screws and the plastic clip of the underbody protec-	10xT25
	tion and remove it.	
2	Screw the sound generator on the marked position at the underbody of the vehicle.	2xM8
!!	Important note: For the assembly, a washer in the dimensions 40 x 40mm	
	/ 10.5 bore is required for each screw. These are not included and must	
	be purchased separately.	
3	Protect the sound generator additionally with the provided steel cable.	
4	Before re-mounting the underbody protection, this one has to be adjusted at the	
	marked position with appropriate workshop material.	



## 12 Cable connection

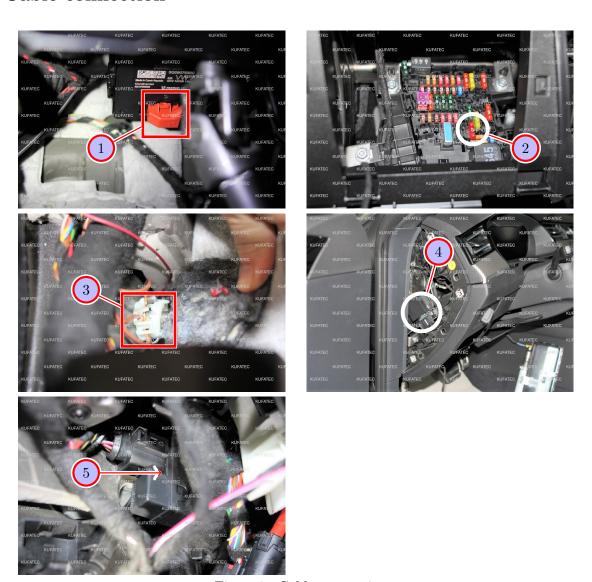


Figure 7: Cable connection

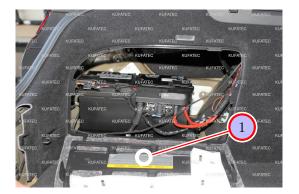
Table 5: Instructions for the cable connection

No.	Work step	Note
1	Loosen the marked red gateway connector, which is situated behind the just before	
	removed knee airbag. Connect the lines for Can high + low as follows:	
	Can high (black/white) to pin 16 (black)	
	Can low (black/yellow) to pin 6 (orange/brown)	
2	Connect the line for ignition plus (red/white) with the fuse socket SP48 and protect	
	this place with a 10 ampere fuse.	
3	Connect the ground cable (brown) with the marked ground pin, which is situated	
	nearby the footwell under the door sill.	
4	Please install the soundbooster control unit at the marked position in the dashboard	
	on driver's side.	
5	Install the Audi control module at the marked position behind the removed covering	
	of the A-pillar.	
	Mount the pushbutton for the sound generator at a suitable position in the vehicle.	



## 13 Removal trunk trim





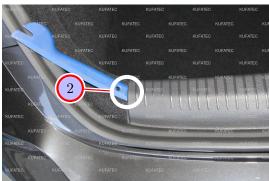


Figure 8: Removal trunk trim

Table 6: Instructions for the removal of the trunk trim

	Table 0. Histractions for the removal of the trunk trini	
No.	Work step	Note
1	Loosen the lateral covering of the trunk on driver's side, by using an assembly lever.	
2	Loosen the load sill guard of the trunk by using an assembly lever.	



## 14 Cable routing to the sound generator

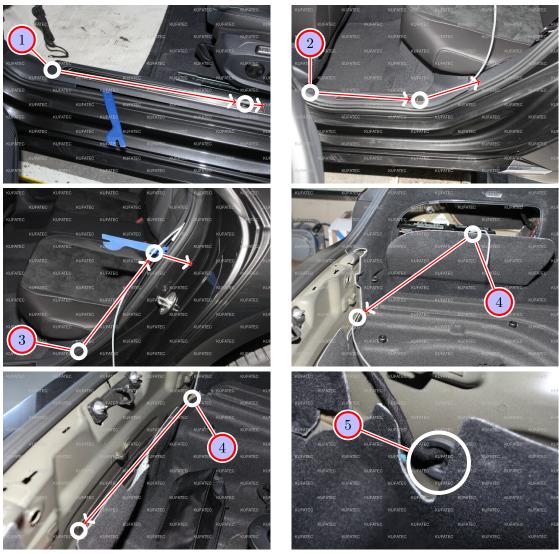


Figure 9: Cable routing to the sound generator

Table 7: Instructions for the cable routing to the sound generator

No.	Work step	Note
1	Loosen the front door sill on driver's side by using an assembly lever. Route the line	
	for the sound generator under the door sill and further through the covering of the	
	B-pillar, by using a push-through-aid.	
2	Loosen the rear door sill and move the cable through underneath it.	
3	Loosen the covering at the seat by using an assembly lever and route the cable along	
	the markings. Pull the cable behind the trunk trim into the direction of the battery	
	compartment.	
4	Route the cable forward under the load sill of the trunk and then to the marked	
	rubber grommet, by using a push-through-aid.	
5	Use a push-through-aid again in order to pull the cable through the rubber grommet	
	to the underbody.	







Figure 10: Cable routing to the sound generator

Table 8: Instructions for the cable routing to the sound generator

No.	Work step	Note
1	Route the cable at the underbody along the markings to the sound generator. Fasten	
	the cable with appropriate workshop material.	
2	Connect the cable with the sound generator.	



#### 15 Important Information Sound Booster

Please use suitable screws that can withstand high loads of impact to attach the sound generator. In order to avoid losening of the screws due to the vibration, please secure the screws with appropriate factory material e.g threadlock. Please additionally check the stability of the Sound Booster regularly and if necessary retighten the screws. In case of non-compliance we do not assume liability for possible damages.

After a successful installation we recommend to cover the sound generator with a zinc spray. Make sure that you cover the opening of the sound generator so that the zinc spray can't get inside the sound generator.

As additional safety the delivered steel cable and the retaining clips have to be attached to the Sound Booster as well as at a suitable position to the car. This safety cable is an additional security should the tightening screws be released due to the vibration.



### 16 Software



Figure 11: Software

Table 9: Notes for the software

No.	Work step	Note
1	If the system does not work after the installation, please check if the system	
	was installed correctly by having a look on the following link: https://www.	
	sound-booster.com/en/debugging.html. Our Sound Booster Software for PC /	
	Mac should be used for the commissioning or further debugging:	
	Step 1: Download the appropriate software via the following link: https://www.	
	sound-booster.com.	
	Step 2: Turn the ignition of the vehicle on and only then connect the PC / Mac	
	with a USB-cable to our module. It is important to check beforehand if plus and	
	minus are connected correctly. If this is not the case, it could result in a damage to	
	the computer or to the control unit.	
	Step 3: Start the downloaded software and click on search first and then on connect.	
	You will be automatically forwarded to the diagnosis site, on which you can see the	
	following things at a glance:	
	Software: Software version / creation date	
	Active profile: The actually activated profile is indicated here.	
	Vehicle: The automatically identified vehicle is indicated here.	
	System status: Here you can tell, if the connections are correct.	



### 17 Software

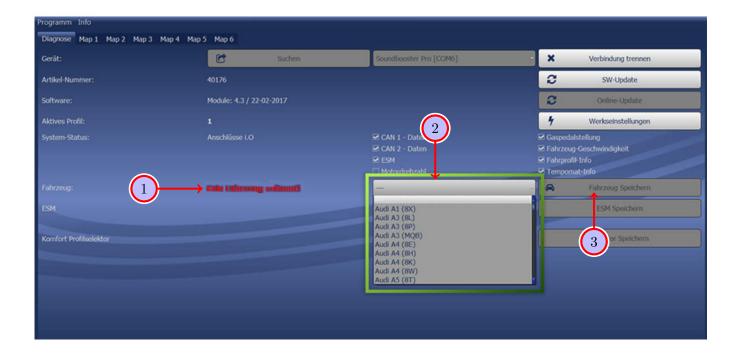


Figure 12: Software

Table 10: Notes for the software

No.	Work step	Note
1	If no current vehicle is identified, you have to select the vehicle via the manual	
	selection as follows:	
2	Open the dropdown-menu, search for your vehicle and select it.	
3	Click on Save Car to permanently save the vehicle to the module.	
	If you don't find your vehicle in the list, it might be necessary that the software	
	has to be adapted to your vehicle. In that case, please contact us via e-mail:	
	info@kufatec.de or by phone: $+49$ (0) $4551$ / $80$ $810$ $888$ . We will make an ap-	
	pointment with you, where we will adapt the software to your vehicle per Team	
	Viewer (remote maintenance).	



### 18 Software

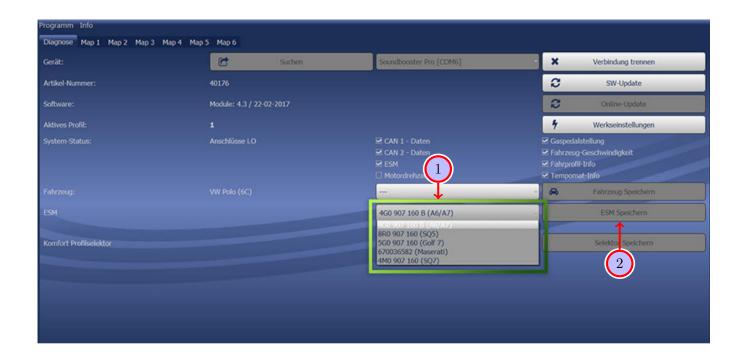


Figure 13: Software

Table 11: Notes for the software

No.	Work step	Note
1	You also need to check if the right ESM is selected in our software:	
	Open the dropdown-menu, search for the correct ESM and select it.	
2	Click on Save ESM to permanently save the ESM to the module.	
3	For example, if you ordered a complete set with a Audi control unit you need to select the ESM <b>4G0 907 160 B</b> (A6/A7. If you installed the Maserati control unit instead of the Audi control unit you need to select the ESM <b>670036582</b> (Maserati).	
	If the system does not work after all please get in contact with us via e-mail: info@kufatec.de or by phone: $+49$ (0) $4551$ / $80$ $810$ $888$ . We will check the issue as soon as possible.	



### 19 Connection / Troubleshooting cable set

#### **Sound Booster**

#### From Sound Booster control module 18-pole MQS to:

- Can gateway
  - Pin 17 to pin 6 (Can low)
  - Pin 18 to pin 16 (Can high)
- Ground / Ignition plus
  - Pin 9 to ground
  - Pin 1 to clamp 15 ignition plus (SP48)
- Audi control module 8-pole MiT
  - Pin 15 to pin 1 (Can low)
  - Pin 16 to pin 3 (Can high)
- Pushbutton 2-pole MiT
  - Pin 4, 13 to pushbutton

#### From plug connection Audi control module 8-poleMiT to:

- Sound Booster control module 18-pole MQS
  - Pin 1 to pin 15 (Can low)
  - Pin 3 to pin 16 (Can high)
- Ground / Ignition plus
  - Pin 2 to ground
  - Pin 4 to clamp 15 ignition plus (SP48)
- Sound Booster 2-pole MiT
  - Pin 7 to pin 2
  - Pin 8 to pin 1



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