



HELIX COMPOSE i7 Mid Range User Manual

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HELIX COMPOSE i7 Mid Range

**Dear Customer,**

Congratulations on your purchase of the HELIX COMPOSE, a high-quality product that highlights excellent manufacturing and state-of-the-art sound quality. With over 30 years of experience in research and development of audio products, HELIX COMPOSE sets new standards in the car audio speaker market. We hope you enjoy your new HELIX COMPOSE components for many hours.

General Instructions for Installing HELIX Loudspeakers

To prevent damage to the speakers and possible injury, please read this manual carefully and follow all installation instructions. This product has been checked for proper function prior to shipping and is guaranteed against manufacturing defects.

For proper performance and to ensure full warranty coverage, we strongly recommend getting this product installed by an authorized HELIX dealer. If you choose to perform your own installation, please read the following information and precautions carefully. Failure to follow the stated precautions may result in personal injury and/or damage to the audio system or vehicle.

1. Ensure that the speaker will fit into the intended mounting location and that there is adequate depth for the magnet system.
2. Check for adequate space between speaker and window, window crank, power window mechanism, seat, rear deck torsion bars, and other items that may interfere with the speaker's mounting. This is very important if any hole cutting is required. Detailed size information is indicated in the dimension section of this manual. Take care that the mounting surface is flat and free from all obstructions.
3. Ensure that the loudspeakers are correctly connected in polarity. Exchanging plus and minus may result in significant loss of sound quality. The positive leads of the loudspeakers are marked red.
4. Make sure that all speaker wiring is fully protected from cutting or wear at sharp edges, which can lead to short circuits that may damage your head unit, amplifier and/or speaker system.
5. Verify that all connection wires are long enough in order to avoid any mechanical stress on the wires or the connectors.
6. Make sure that all components are mounted properly.
7. Do not mount the components where water may splash on them.
8. The quality of the installation has a significant effect on the overall performance of the speaker system. Treat

each installation step with a high degree of attention.

9. Avoid low frequency cancellation caused by air leakage between the speaker basket and the mounting surface (e.g. mounted on a bended or uneven surface or mounted in an oversized hole).
10. Mounting panel reinforcement may be necessary in some cases in order to ensure a stable, torsion-free, and even surface. This can be achieved by mounting the speaker on a metal, plastic, or wooden sub-baffle behind the body or door panel. Consult an installation specialist for further advice.
11. In most cases, you can use the original speaker mounting locations in the doors, A-pillars, body panels, or the rear deck. If these are not available, you have to prepare your own secure installation place. Due to their structural integrity and accessibility, the precut mounting holes should be used whenever possible. Information on proper mounting can be found in the section Installation of this manual.

We hope this information is helpful in ensuring proper installation and use of your HELIX COMPOSE components. If you have any further questions or concerns, please contact an authorized HELIX dealer for assistance.

Congratulations!

Dear Customer,

Congratulations on your purchase of this high-quality product.

HELIX COMPOSE highlights best quality, excellent manufacturing and state-of-the-art sound quality.

Thanks to more than 30 years of experience in research and development of audio products HELIX COMPOSE sets new standards in the car audio speaker market.

We wish you many hours of enjoyment with your new HELIX COMPOSE components.

Yours AUDIOTECH FISCHER Team

General instructions

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7. Do not mount the components where water may splash on them.
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IMPORTANT: Never cut any metal that is an integral part of an automobile`s safety or structural car body. We strongly recommend that you operate the complete audio system at low volume before final installation. So you can check whether each speaker is working before securing the loudspeakers into their mounting locations.

Find your composition

Go to www.audiotec-fischer.com/compose to explore the whole HELIX COMPOSE platform

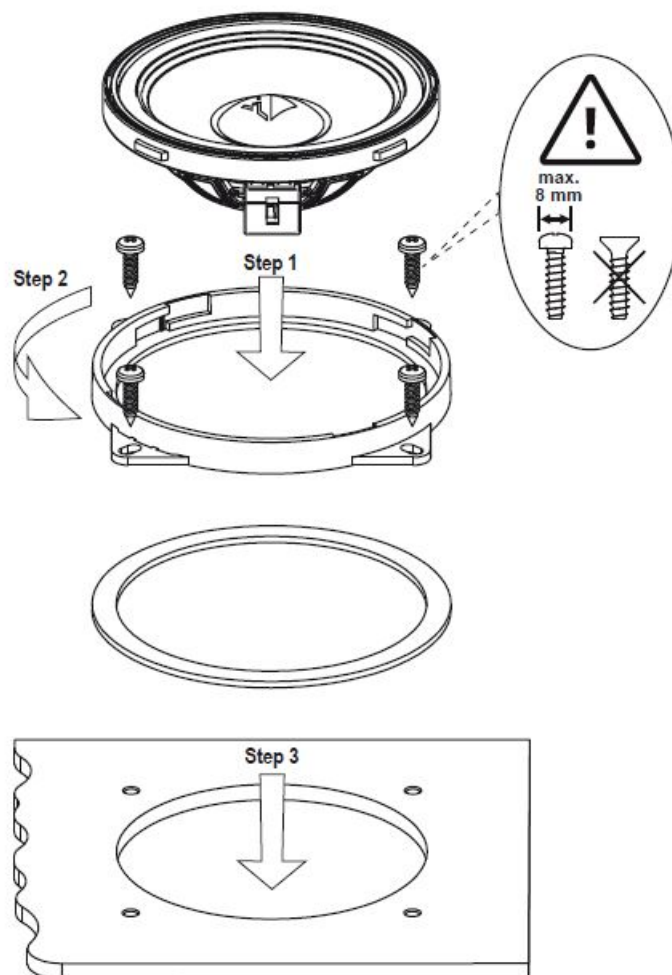
Installation

Mounting Ci7 M100FM-S3

Note: the adaptor rings can be mounted in two directions. Make sure to use the appropriate mounting option for your vehicle

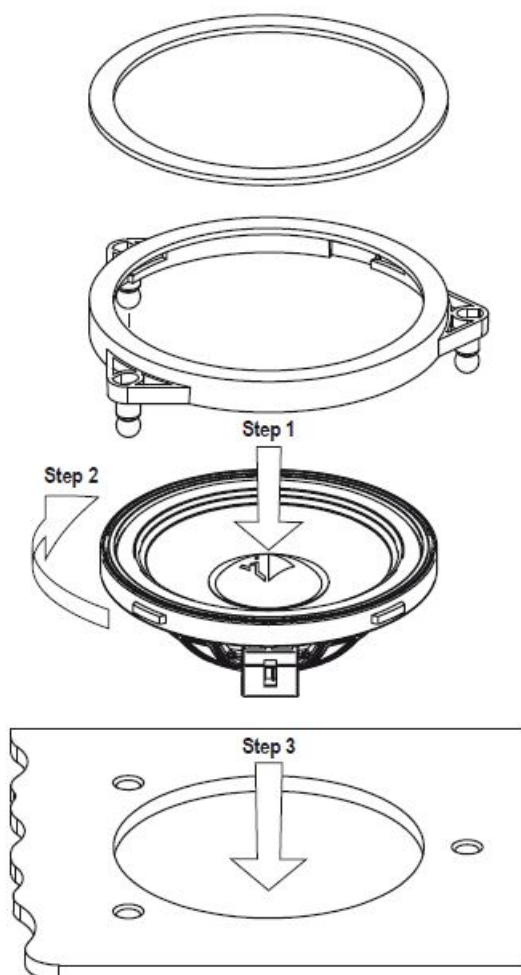
Option a:

Mounting with the enclosed universal adaptor rings



Option b:

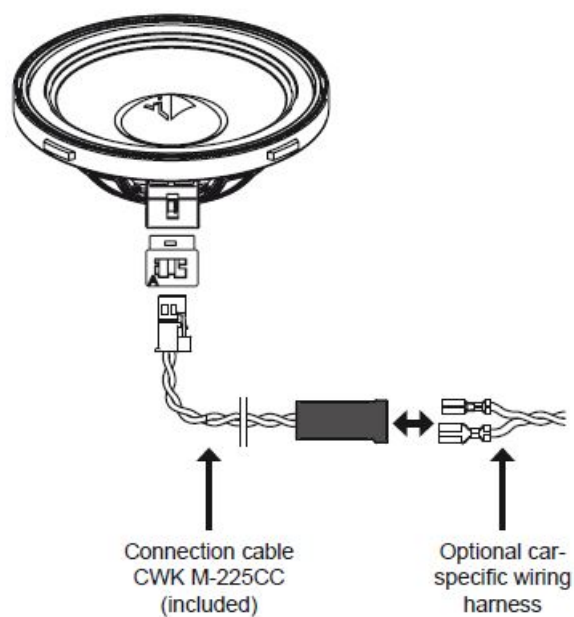
Professional integration with optionally available car-specific adaptor*



Wiring Ci7 M100FM-S3

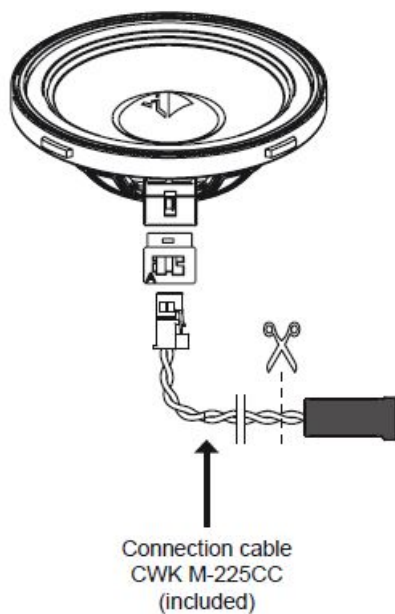
Option a: Universal connection via optional car-specific wiring harness, e.g. in active applications

Insert the enclosed inlay A and plug in the enclosed connection cable. Then connect it to the optional car-specific wiring harness

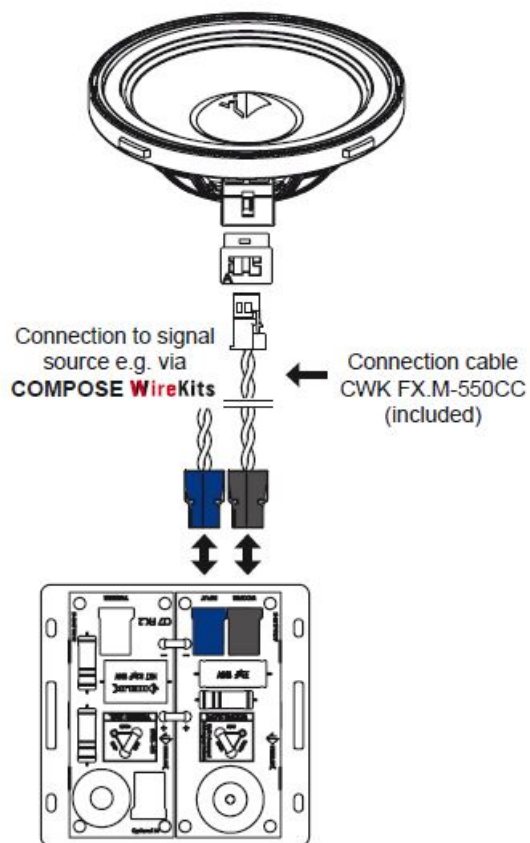


Option b: Universal connection, e.g. in active applications

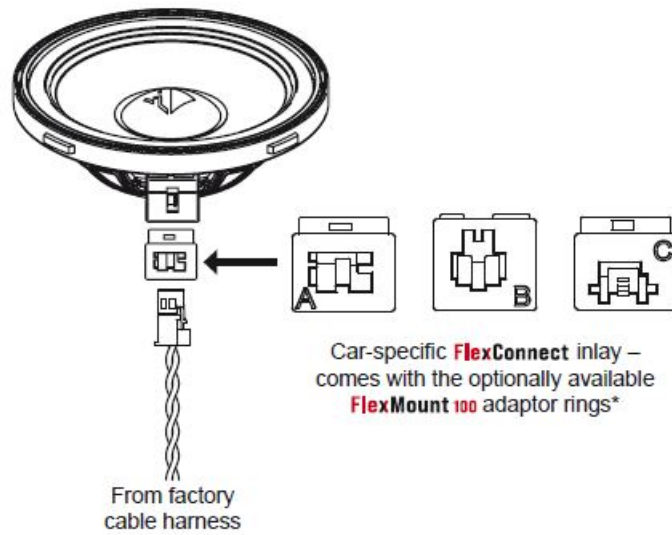
Insert the enclosed inlay A, cut off the plug of the enclosed connection cable and connect it to the amplifier.



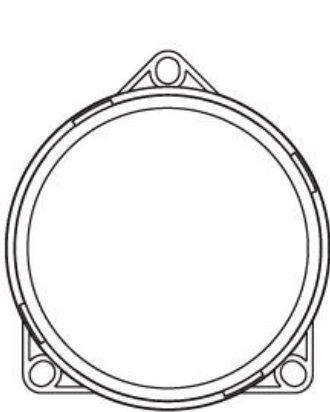
Option c: Connection to HELIX COMPOSE i7 Flex-Crossover (optionally available)



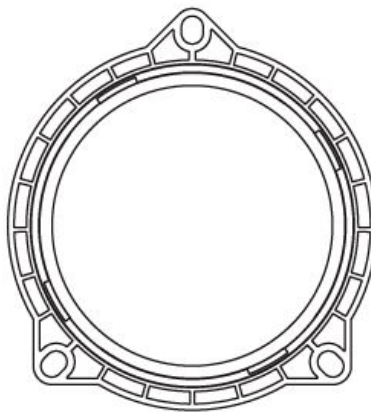
Option d: Direct connection to OEM connector with optionally available inlay



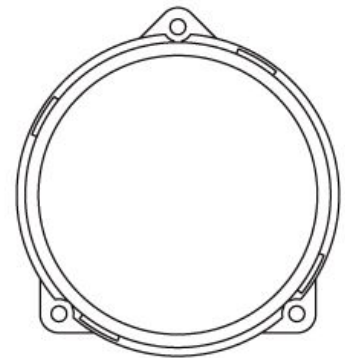
Contact your retailer or visit www.audiotec-fischer.com/compose for an up-to-date overview of available car-specific adaptors



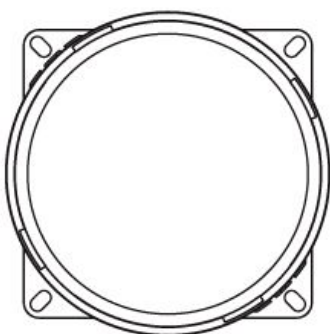
CFM100 BMW.1
BMW, Mini, Rolls Royce,
Tesla, Peugeot, Citroen, Seat,
Porsche, McLaren, Ferrari



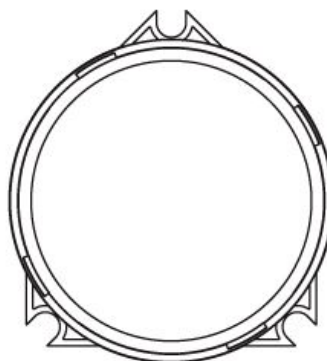
CFM100 BMW.2
BMW, Mini



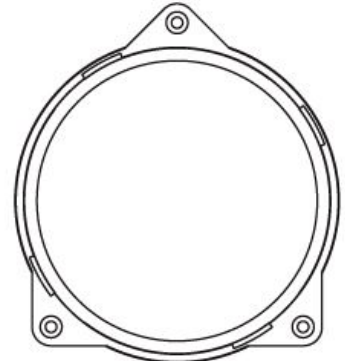
CFM100 JLR.1
Jaguar, Land Rover



CFM100 MULTI.1
Universal, Porsche, Audi



CFM100 VOL.1
Volvo, Universal**



CFM100 MB.1
Mercedes

Ensure that all components are correctly connected in polarity, i.e. plus to plus and minus to minus. The positive leads of the loudspeaker system are marked red.

FlexMount car-specific adaptors

The optionally available car-specific adaptor rings allow a tailored and acoustically optimized adaption of the HELIX COMPOSE Ci7 M100FM-S3 to the vehicles original mounting location. Contact your retailer or visit www.audiotec-fischer.com/compose for an up-to-date overview of available adaptors.

Contact your retailer or visit

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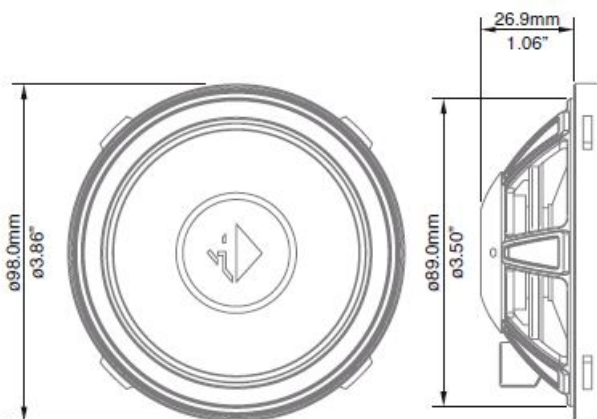


Approximate fit for various car models with 3-point speaker mounting. To ensure the best possible installation conditions it is strongly recommended to use the dedicated adapter for your car

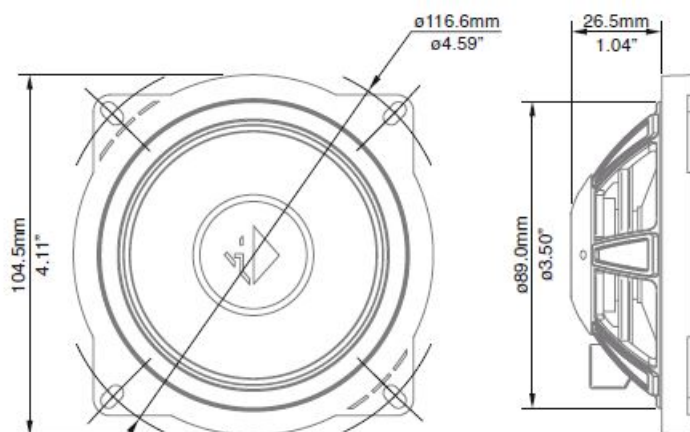
Dimensions

Ci7 M100FM-S3

Speaker without Flexmount 100



Speaker with assembled universal Flexmount 100



Technical data

		Ci7 M100FM-S3
Power RMS / Max.	<i>P</i>	100 / 150 Watts
Impedance	<i>Z</i>	3 Ω
DC resistance	<i>Re</i>	3.0 Ω
Frequency response		110 – 7,000 Hz
Resonance frequency	<i>Fs</i>	85 Hz
Mechanical Q factor	<i>Qms</i>	4.58
Electrical Q factor	<i>Qes</i>	0.52
Total Q factor	<i>Qts</i>	0.47
Compliance	<i>Cms</i>	590 $\mu\text{m/N}$
Equivalent air volume	<i>Vas</i>	2.5 L
Force factor	<i>B*I</i>	4.3 Tm
Sensitivity	<i>SPL</i>	91.0 dB @ 2.83V / 1m 87.0 dB @ 1W / 1m
Cone area	<i>Sd</i>	55 cm ²
Moving mass	<i>Mms</i>	5.9 g
Cone material		Ultra high damping (UHD) crafted paper cone
Mechanical resistance	<i>Rms</i>	0.69 kg/s
Voice coil diameter	\varnothing	25 mm
Voice coil winding height		5.5 mm
Max. linear excursion	<i>Xmax</i>	+/- 1.3 mm
Features		terminal, powerful push-pull neodymium magnet system and

Correct disposal of this product

(Applicable in the European Union and other countries with separate collection systems) If you want to dispose of this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling. Contact your local government office for details in locating a recycling facility close to you. Proper recycling and waste disposal will help conserve resources and prevent detrimental effects on our health and the environment.


Warranty Disclaimer

The warranty service is based on statutory regulations. Defects and damage caused by overload or improper handling are excluded from the warranty service. Any return can only take place following prior consultation, in the original packaging together with a detailed description of the error and a valid proof of purchase. Technical modifications, misprints and errors excepted! For damages on the vehicle and the device, caused by handling errors of the device, we can't assume liability. All HELIX speakers are tagged with a CE-Certification mark.

Thereby these devices are certified for use in vehicles within the European Community (EC).

AUDIOTEC FISCHER GmbH Hünegräben 26 57392 Schmallenberg Germany

Documents / Resources

	<p>HELIX COMPOSE i7 Mid Range [pdf] User Manual COMPOSE i7 Mid Range, COMPOSE i7, Mid Range, Range</p>
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References

- [A HELIX COMPOSE Speaker | Car-Hifi Components](#)