

## Musway CSM206C + CSM206X + CSM206W – Speaker retrofit for the C-Class W206

# Premium Mercedes Speakers

► Musway is adding the CSM206 series of special speakers for the Mercedes C-Class W206 to its existing lineup of vehicle speakers.

**B**At Musway, Mercedes speakers have been available for a long time, including for the C and E class. But with the latest C class W206, Mercedes has introduced slightly different installation locations, so that, for example,

the well-known CSM4.2C no longer fit without additional work. Therefore, new speakers had to be made for the W206, because the purpose of a vehicle-specific speaker is that it can be installed plug&play

Musway has used this opportunity to give the speakers a thorough overhaul – of course, while you're at it. Strictly speaking, our CSM206 speakers have nothing at all to do with the CSM speakers, which are of course still available, because everything is more or less different. The current selection is the CSM206X, a coax for the rear doors and



Fits into the MB wiring harness: the 25 mm tweeter



which hides a high-pass capacitor and a level resistor under the shrink tube. The 10s run as before without a crossover. The baskets are made of fiber-reinforced plastic and now have a bayonet-type attachment, and of course

all speakers have the correct Mercedes plugs or sockets for plug&play. The highlight But now comes the woofers, which are in a league of their own.

the CSM206C (230 euros), a two-way component system for the front doors. Everything has basically stayed the same for the footwell woofers, with different 20 centimetre woofers on the left and right, which are available as a CSM206W set (480 euros). But of course Mercedes has changed the mounts here too, so that older woofer sets do not fit. The 10 centimetre systems for the 206 series now use very fine carbon mesh membranes, while a soft rubber dust cap provides some damping for the component. Instead of ferrite rings, neodymium disks now drive the 25 millimetre voice coils, again more of an upgrade compared to the older systems. The tweeter of the component system works with a 25 millimetre fabric dome, it is filtered by a small cable switch,

Instead of the familiar, asymmetrical plastic baskets Musway now uses ultra-stable baskets made of die-cast aluminum. The woofers come with very flat three-spoke baskets that are round but a little smaller than a 20 DIN chassis. This means that the same loudspeaker can be used on the right and left (and for both right-hand drive and left-hand drive vehicles), all that is needed is a plastic adapter. As a premium feature, Musway also provides massive protective grilles, which are also made of die-cast aluminum. The neodymium magnets on the 206 woofers are ventilated with pole core holes, and a 38 millimeter voice coil drives the membrane. This is something special, because it is almost flat in many parts, with only a small cone forming in the middle to connect to the voice coil carrier.

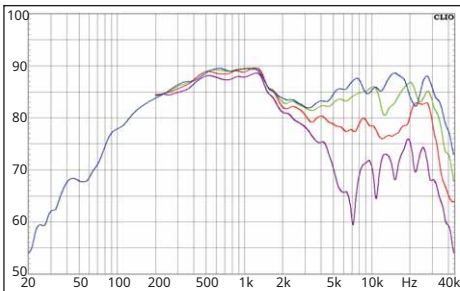


All chassis come with expensive neodymium drives. The woofer is only made vehicle-specific by the installation adapter (above)

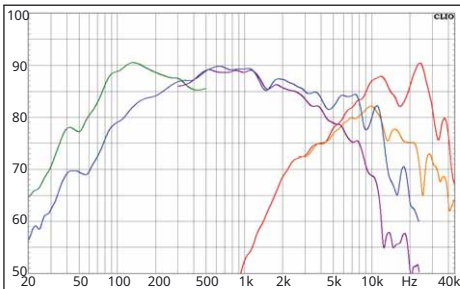
To ensure that this works well, the membrane has become rock hard. Musway uses a sandwich of hard foam with fiber mats on both sides, with carbon being used again at least on the front.

### Measurements and sound

The footwell woofers are identified as 2 ohm chassis during the lab run, which is a good choice for both factory amplifiers and retrofit solutions such as modern multi-channel power amplifiers. The ultra-strong drives that give the little 10-inch woofers extreme efficiency are striking, at least in the midrange, where they are supposed to work. On the other hand, you can't expect bass from them; we don't expect that to the same extent as from a universal 10-inch system. Their high efficiency then indirectly helps with the distortion measurements, because the CSM206 only needs very little amplifier power to reach the level. As a result, Musway gets top marks here. In terms of sound, the system doesn't let anything burn; it never sounds boring or unmotivated. The small coax produces a fairly balanced sound, and its small fabric dome doesn't skimp on details either. Bass is nonexistent, but that's fine for its intended use as a rear fill. The composite system provides the necessary resolution in the mid and high range, and here too the dynamics and details are just right for drum cymbals. The woofers hammer hard bass around your ears when needed, and with fast bass lines



The coax brings an incredible 90 dB in the midrange into the microphone, a lot for the small membrane



The 10-inch speaker drops off quite early in terms of sound pressure, and the tweeter takes over at around 5 kHz, showing destructive interference at just under 17 kHz and then continuing to just under 30 kHz.

The individual beats or tones can be clearly distinguished. Overall, the Musway CSM206 components play beautifully lively and crisply - there is always plenty of punch.

#### Conclusion

With CSM206C + CSM206X + CSM206W, Musway brings a team for the new C-Class that

### Musway CSM206X

Price	around 200 euros
distribution	Audio Design, Kronau
Hotline	07253 9465-0
Internet	musway.de

### Evaluation

sound	55%	1.2	----	-
Bass foundation	11%	1.5	----	-
neutrality	11%	1.5	----	-
transparency	11%	1.0	----	-
Spatiality	11%	1.0	----	-
dynamics	11%	1.0	----	-
laboratory	30%	1.5	----	-
Frequency response	10%	1.5	----	-
Maximum level	10%	2.0	----	-
Distortions	10%	1.0	----	-
Practice	15%	1.3	----	-
Installation	5%	1.0	----	-
Crossover	5%	2.0	----	-
processing	5%	1.0	----	-

### Technical data

Nominal diameter TT	100mm
Installation depth with ring	35mm
Magnet diameter	35mm
Membrane HT	19mm
Housing HT	-
Slope TT/HT	- /-6dB
Tweeter protection	-
Level adjustment HT	-
suitable for*	C-Class W206
Miscellaneous	-
Nominal impedance	4 ohms
DC resistance Rdc	3.68 ohms
Voice coil inductance Le	0.22mH
Voice coil diameter	25mm
Membrane area Sd	52cm <sup>2</sup>
Resonance frequency fs	112Hz
mechanical quality Qms	7.16
electrical quality Qes	0.34
Total quality Qts	0.32
Equivalent volume Vas	1.3l
Moving mass Mms	5.8g
Rms	0.57kg/s
CMS	0.35mm/N
B*I	6.67 Tm
Sound pressure 2 V, 1 m	87dB
Performance recommendation	20-80W

### Musway CSM206X

Mercedes speakers 1.3

**CAR & HiFi** 4/24

Price/performance: very good

"Clear recommendation for the W206."

are among the best car speakers on the market. Not necessarily cheap, but good too.

Elmar Michels

**BEST PRODUCT**

Mercedes speakers

**CAR & HiFi** 4/2024

### Musway CSM206C + CSM206W

Price	around 710 euros
distribution	Audio Design, Kronau
Hotline	07253 9465-0
Internet	musway.de

### Evaluation

sound	55%	1.0	----	-
Bass foundation	11%	0.5	----	-
neutrality	11%	1.5	----	-
transparency	11%	1.0	----	-
Spatiality	11%	1.0	----	-
dynamics	11%	1.0	----	-
laboratory	30%	1.2	----	-
Frequency response	10%	1.5	----	-
Maximum level	10%	1.0	----	-
Distortions	10%	1.0	----	-
Practice	15%	1.3	----	-
Installation	5%	1.0	----	-
Crossover	5%	2.0	----	-
processing	5%	1.0	----	-

### Technical data

Nominal diameter TT	200mm
Installation depth TT	35mm
Nominal diameter midrange	100mm
Installation depth midrange	32mm
Membrane HT	25mm
Housing HT	39mm
Slope TT/MT/HT	- /- /-6dB
Tweeter protection	-
Level adjustment HT	-
suitable for*	C-Class W206
Miscellaneous	-
Nominal impedance TT	3 ohms
DC resistance Rdc	2.05 ohms
Voice coil inductance Le	0.30mH
Voice coil diameter	38mm
Membrane area Sd	211cm <sup>2</sup>
Resonance frequency fs	83Hz
mechanical quality Qms	5.35
electrical quality Qes	1.01
Total quality Qts	0.85
Equivalent volume Vas	7.8l
Moving mass Mms	29.2g
Rms	2.85kg/s
CMS	0.13mm/N
B*I	5.58 Tm
Sound pressure 2V, 1m	90dB
Performance recommendation	80 - 200W

### Musway CSM206C + CSM206W

Mercedes speakers 1.1

**CAR & HiFi** 4/24

Price/performance: very good

"Clear recommendation for the W206."