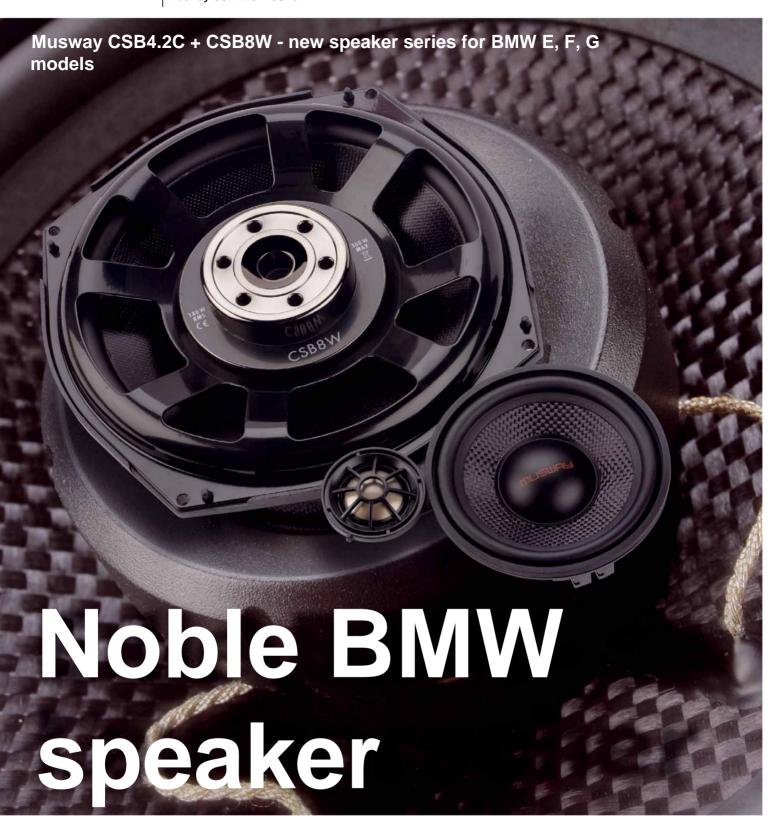
Musway CSB4.2C + CSB8W



BMW speakers have been on the market for a relatively long time. Musway is now preparing to offer a particularly elegantly made alternative.

it started with VW and BMW. Since For some time now we have been seeing a trend towards vehicle-specifi c speakers. Especially at BMW, the demand for is simply too in but are BMW special formats. Therefore fit nor

stalling speakers, and there are two reasons for this. The loudspeaker brackets do not correspond to the standard installation locations

Male loudspeaker systems do not work without adjustment. The second reason is that BMWs are often leased vehicles, so it's not just about installation, it also has to be removable. As a result, Musway now has a BMW range that covers almost all of the newer BMWs (and some Minis).

There are 10-centimeter speakers for that

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It doesn't get any flatter: you look directly at the from behind centering and the coil carrier

Doors at the front and rear, which are also suitable for installation locations further back or as centers. The CSB4.2C (220 euros) is a two-way front system with separate tweeters for the mirror triangles, while the CSB42X (140 euros) is a coax for rear installation locations without space for an extra tweeter. The 10 speaker chassis are always the same, adapter rings and foam sealing rings are included with each set to adapt to the installation locations. For bass support, there is the CSB8W (330 euros/pair), a suitable 20-centimeter woofer that is made for the BMW underseat housing. This results in a three-way system that is partially actively controlled by a retrofit amplifier with 4 channels. Two channels supply the door loudspeakers and two channels supply the two underseat woofe Of course, if you also want to control the rear speakers and C-pillar sets, you need more channels. Musway offers suitable amplifiers with up to 8 channels with and without DSP.

Our CSB are absolutely classy, the pretty chrome-plated drives already look very valuable. The baskets are made of fiber-reinforced plastic, which makes them freely formable, stable and low-resonance. A highlight are certainly the membranes made of glass fiber fabric, which not only

look good, but also work well. The tweeters are designed as titanium domes, the tweeter of

the composite system works with a 25 millimeter membrane that is guided by a rubber surround. the coax

The also available coax is for intended for the rear installation locations, but also fits in the front





The 10 cm mid-range driver works with a neodymium drive, the various adapters are screwed on

Musway CSB4.2C + CSB8W

All connections are made via BMW connectors The crossovers of the front system are integrated in the feed lines

is made similarly, here the membrane diameter is 19 millimeters just one size smaller.

The crossovers are integrated into the supply lines so that no separate housing needs to be installed. A capacitor is hidden in the cable of the tweeter, and the line to the 10-centimetre midrange driver contains a small coil. All loudspeakers and their wiring are of course equipped with BMW connectors so that the installation can be 100% plug & play. The 20 centimeter woofer has become a special highlight.

It not only looks great, but is also a technical treat. With only 31 million

lime meter installation depth, it is one of the fl atest BMW woofers. This is because nothing can get under the GRP basket. The oscillating unit is open, the voice coil former is only closed with a cap. We find the technology on the front of the membrane, where the drive is located in a metal cage that also serves as a protective grille. The 50 millimeter voice coil includes a complex neodymium drive that works with two neodymium magnets instead of just one. According to the push-pull principle, one magnet is in a normal arrangement under the pole plate while the second sits above it, so that the pole plate is in the magnet sandwich. Because the second magnet is mounted with reversed polarity, i.e. repelling, the magnetic field in the air gap is strengthened and the drive has more power with the smallest possible design.

Measurements and sound The 20s woofer is of course made for use with small digital power amplifiers, so Musway has equipped it with a 2 ohm voice coil so that it can draw optimal power (if necessary from a factory amplifier). It achieves a very good characteristic sound pressure level of 92 dB (2 V/1 m). Even the small 10 is with 84 dB for such a small drum

really loud. The frequency responses are completely satisfactory, nothing disturbs here, apart from the unavoidable peak of the titanium dome, which, however, at 25 kHz is far away from the music happening. We were particularly impressed by the

distortion behavior of the chassis. The tweeter plays almost distortion-free up to 20 kHz, the 10 works like hell and achieves breathtaking levels without any significant distortion. The Musway convinces in terms of sound

awakened sound that really goes forward.

The woofer lets bass sound like it's unleashed and delivers precise bass that's fun.

The mid-high tone is also not a child of sadness,

here it sets clear, clearly accentuated voices that sound very lively.

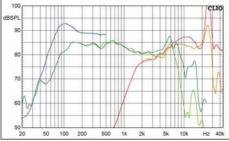
The treble is fresh and airy, but without being annoying. Egel, whether acoustic or electric music, the Musway copes well with both. From RnB to jazz - everything sounds dusted and freshly polished, certainly worlds better than the original system.

Conclusion With the BMW CSB series, Musway presents a loudspeaker series that is very elegantly made and technically and sonically convincing. An all-round happy package for BMW drivers

Elmar Michels



BMW openings is not a problem



The Musway components run balanced and without interference in the important frequency range. The metal tweeter peaks at a high 25 kHz. The woofer pleases with a lot of sound pressure

## **BEST PRODUCT** BMW speakers CAR.HIFI 4/2021

•	1////	CCDAOC	CCDOM
_	wuswav	<sup>,</sup> CSB4.2C -	+ CSBOW

Price	for EUR 550
sales	Audio Design, Kronau
hotline	07253 9465-0
Internet	www.esxaudio.de

## valuation

sound 55 %		1.2 1.0 1.5 1.5 1.5
Bass foundation	11 %	1.0 1.0 <mark>1.0</mark> 1.0 1.0
neutrality	11%	1.0 1.0 1.0 <u>ÿÿÿ</u> ÿ
transparency	11%	
spatiality	11%	
dvnamics	11 %	

D	laboratory	30%	1.2 1.0 1.5 1.5 1.0
	frequency response	10 %	1.0 1.0 1.2 _
	maximum level	10%	
	distortions	10 %	

Practice	15%	1.3 <b>s</b> 1.0 <b>s</b> 1.5 <b>s</b>
installation	5%	1.5 s 1.5 <mark>s</mark> _
Crossover 5 %		

5 %

## Technical specifications

Nominal diameter TT	200mm
Installation depth TT	31mm
Nominal diameter midrange	100mm
Installation depth midrange	43mm
Membrane HT	25mm
Housing HT	42mm
edge steepness TT/MT/HT	-/6/6dB
tweeter protection	
Level adjustment HT	
suitable for*	E, F and G models
Miscellaneous	

Miscellaneous	
Nominal	2 ohms
impedance TT DC	1.78ohm
resistance Rdc Voice coil	0.28mH
inductance Le Voice coil	50mm
diameter Cone area Sd	255cm2
Resonance frequency fs	65Hz
Mechanical quality Qms	5.30
Electrical quality Qes	0.66
Overall quality Qts	0.58
Equivalent volume Vas	15.4L
Moving mass Mms Rms	35.5g
Cms B*I Sound pressure 2	2.72kg/s
V, 1 m Recommended	0.17mm/N
performance Musway	6.25Tm
CSB4.2C + CSB8W	92dB
	600-250W

## **BMW speakers** 1.2

"Excellent alternative for BMW"