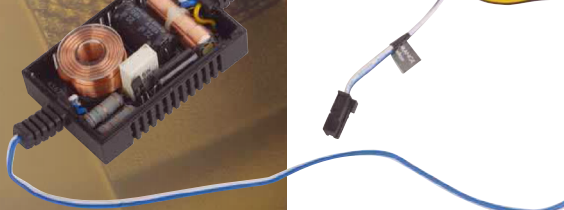



Eton UG MB 100 F + UG MB 100 RX: Mercedes Speaker Upgrades from Eton

► In all the later C and E classes (and in other models) Mercedes provides specific mounting positions as standard for speakers. Now Eton is offering complete speaker upgrade kits to improve the sound, which we are going to take a closer look at here.

In the latest C and E classes the speaker configuration consists of a 10-cm two-way system in the front doors, 10-cm coaxial systems in the rear doors and C-pillars, plus a center speaker system in the dashboard. For bass tones there is a special solution using the bulkhead woofers, one right and one left in the foot well. All the speakers are mounted using asymmetric three-point mountings so that universal speakers can only be accommodated with difficulty. Therefore Eton has developed a complete set of new injection molded baskets in order to promote the wealth of available in-house speaker technology in the Benz. Use is made of radial ribbed paper cones that already do service in diverse premium speakers. The Etons of the UG MB series are clearly aiming at premium customers, which is also indicated by the expensive neodymium drivers. The front system UB MB 100 F comes with a 25-mm domed tweeter having an extremely fine transparent cone. The coaxial systems use tiny 13-mm metal domes with an aluminum

The crossover is plug and play compatible with the vehicle wiring loom thanks to the Mercedes connectors



Sound in Mercedes

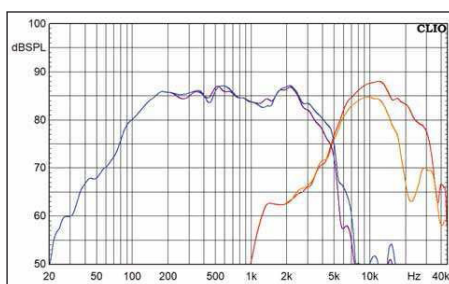
The center system has three ports: tweeter and woofer to crossover plus a socket for SOS emergency/eCall



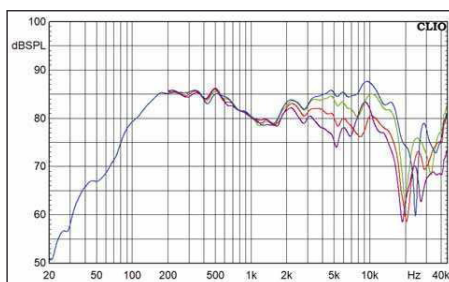
cone suspended in a soft rubber surround. The center speaker also conforms to this coaxial design. It features a dual voice coil, which is necessary to ensure the SOS emergency call /eCall function is independent of the music. For low-pitched tones Eton offers the foot well woofer UG 195. At just 20 centimeters this is a size bigger than the Mercedes original. The speaker lineup is complemented by a selection of accessories. There are plug and play cable sets for an amplifier and for a non-OEM second woofer. Furthermore there are additional crossovers for optimizing the 10-cm systems and to separate the woofers. These are helpful if a three-way system is to be operated on only two channels. The suggested working is clearly a partially active solution with two amp channels for each 10-cm system and for the woofers. In the ideal case a DSP power amp is used, for example the Eton Stealth 7.1 DSP.

Measurements and Sound

Both the front system UG MB 100 F and the coaxial system UG MB 100 RX work faultlessly, delivering a particularly level amplitude response. The coaxial system also has an external fully-featured 12/12-dB crossover. In the front system there is a level adjustment control onboard. The sound level capabilities of the two small woofers strongly impressed us. In the sound check the Etons were very well balanced and rich in detail. The front system 100 F got high marks for its silky highs and its superb reproduction of vocals, though the coaxial system for the rear doors also played music with a high quality sound. As with all Mercedes-10-cm speak-



The two-way system divides at relatively low frequencies, filtering of the 10-cm woofer being particularly effective.



The coaxial system shows an excellent crossover tuning without any noticeable transition between woofer and tweeter.

ers you should not expect too much bass without the foot well woofers. Nevertheless, in their application area the Etons achieve more than a decent volume, and with a clean sound.

Summary

With these new Mercedes upgrade speakers Eton positions itself at the top of the Mercedes sector. These are quality speakers without exception, elaborately finished and representing a big advance on the original sound.

SOUND-TIPP
Mercedes-speakers
CAR & HiFi 2/2021

Mercedes-speakers		Eton UG MB 100 F	Eton UG MB 100 RX
Distributor		Eton Neu-Ulm	Eton Neu-Ulm
Hotline		0731 70785-20	0731 70785-20
Internet www.		etongmbh.de	etongmbh.de
▶ Sound quality	55 %	1,2	1,3
Bass	11 %	1,5	1,5
Neutrality	11 %	1,0	1,0
Transparency	11 %	1,0	1,5
Soundstaging	11 %	1,0	1,0
Dynamics	11 %	1,5	1,5
▶ Lab	30 %	1,3	1,3
Frequency	10 %	1,5	1,5
Max. volume	10 %	1,0	1,0
Distortion	10 %	1,5	1,5
▶ Practice	15 %	1,2	1,2
Installation	5 %	1,0	1,0
Crossover	5 %	1,5	1,5
Workmanship	5 %	1,0	1,0

Technical data

Chassis diameter	100 mm	100 mm
Mounting depth	39 mm	39 mm
Magnet diameter	55 mm	55 mm
TW dome diameter	25 mm	13 mm
TW housing diameter	40 mm	-
Slope	12/12 dB	12/12 dB
Tweeter protection	-	-
Tweeter volume adjustment	0, -2 dB	-
Fits in here *	C-, E-, S-Klasse, GLC	C-, E-, S-Klasse, GLC
other	-	-
Nominal impedance	4 ohms	4 ohms
DC resistance Rdc	3,15 ohms	3,13 ohms
Coil inductivity Le	0,19 mH	0,22 mH
Coil diameter	25 mm	25 mm
Cone surface Sd	49 cm ²	49 cm ²
Resonance frequency Fs	118 Hz	128 Hz
Mechanical quality Qms	4,61	5,50
Electrical quality Qes	0,56	0,62
Total quality Qts	0,50	0,56
Equivalent volume Vas	1,3 l	1,4 l
Moving mass Mms	4,6 g	3,8 g
Rms	0,74 kg/s	0,55 kg/s
Cms	0,39 mm/N	0,41 mm/N
B*1	4,38 Tm	3,91 Tm
Pressure 2 V, 1 m	85 dB	84 dB
Power handling	20 - 80 W	20 - 80 W

Summary

Price		about 340 Euro	about 220 Euro
Sound quality	55 %	1,2	1,3
Lab	30 %	1,3	1,3
Practice	15 %	1,2	1,2
Price/performance		very good	very good

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Mark

Mercedes-speakers

1,2

Mercedes-speakers

1,3

„Noble Soundupgrade for Mercedes.“