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EM-VWFX155 • TEST REPORT CAR&HIFI 6/2024

Emphaser EM-VWFX155: Versatile speaker upgrade for VW, Seat and Skoda



The plastic basket of the 15 cm speaker is nice and airy and naturally has a VW socket.

Emphaser remains faithful to the proven concept that speakers fit into the original places without conversion work and can be connected using plug and play cables supplied. The crossover is split into tweeter and woofer branches and integrated into the connecting cable so that no bulky boxes have to be installed. In the case of the tweeter there is a capacitor and two resistors to adjust the level. For the woofer a good air-core coil is shrunk into the cable. In the case of the tweeter, Emphaser relies on a 25 mm woven fabric dome — a popular solution that has proved itself and works perfectly well. The woofer with plastic basket is also great to look at from the rear: the basket is well ventilated, the driver well dimensioned and made with cleanly machined pole plates. The front leaves out the frills. Here a paper cone is used, albeit a tuned one. It is not „just“ paper, but has a coating of quartz crystals that optimize the material properties.

Sound booster for VW & Co.

► If you drive a VW, Seat or Skoda, then you will find what you need at Emphaser when a precisely fitting aftermarket speaker is important. Here we have the 15 cm system EM-VWFX155 on test in our editorial department.

In the last few years Emphaser has gone full throttle to meet the rising demand for vehicle-specific speakers. Beside BMW and Mercedes, they have primarily served vehicles of the VAG Group. There are special solutions for the Bus or Camper T5 and T6 with the sets EM-VWF3 and EM-VWF4. In addition, there are two systems available to cover most current and older vehicles. As is well known, VW bid farewell early on from the good old DIN installation slots, which would have taken the normal 165 or 200 mm woofers. Instead there are now 155 and 180 mm speakers with an integrated mounting ring for the unit carrier. We already tested the VWFX180 in the spring. Before us now is the VWFX155, which fits into many VW, Seat and Skoda vehicles, from the Golf IV through VIII to Octavias, T-Roc, T-Cross, and Tiguan up to the IDs.



Two resistors and a capacitor provide filtering and level adjustment for the tweeter

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For larger installation slots there is an adapter ring for the woven fabric dome

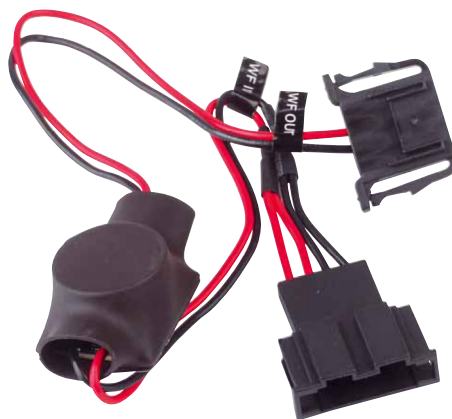
Measurements and Sound

In front of the measurement microphone the Emphaser chassis show that they have been well designed without serious disturbances. The tweeter behaves well up to just under 25 kHz. Its resonant frequency at 1.8 kHz is good to see as the voice coil is not bathed in damping ferrofluid. Although this means that there is no cooling fluid in the air gap such tweeters are said to sound particularly airy. The 155 mm woofer runs up to 5 kHz, and it does not need to do more. A cone resonance can be seen at 9.5 kHz, but it is located far enough outside the frequency range. Things look even better in the area of distortion. With a woven fabric tweeter we already expect almost the best results in the absence of distortion, but the Emphaser woofer is also able to impress. Up to moderate levels there is nothing at all to see in the way of distortion, and there is no sign of disturbing resonances. And for a relatively delicate 15 cm speaker it is also quite loud. It's just that the VWFX155 here has to compete with larger VW speakers, which naturally have an advantage. The sound from the system cannot be faulted, in fact it also makes excellent music. The tweeter impresses with airy details, so omission of the ferrofluid has done no harm. The spatial reproduction is a perfect match so that a coherent overall impression is created. There is nothing to fault with the mid-range or tone colors. Once again the adjective 'coherent' applies. Then there is the bass: though this does not reach right down to the bottom of the frequency basement, it does impress in

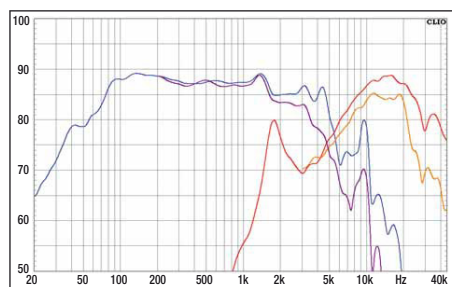
that its frequency reproduction is very clean and consistently powerful. Altogether a very high level performance. The little EM-VWFX155 has become a very mature system.

Summary

It fits in a wide range of VW, Seat and Skoda vehicles. It is well made, is still affordable, and brings a huge improvement in the sound – what more could you want?



The woofer may optionally be operated with a cable crossover containing an air core coil



The woofer has no disturbances in the frequency range. The tweeter plays in a fairly wide band up to over 20 kHz

BEST PRODUCT
VW-loudspeaker
CAR&HiFi 6/2024

Emphaser EM-VWFX155

Price about 250 Euro
Distributor ACR, CH-5330 Zurzach
Hotline info@acr.eu
Internet www.emphaser.com

Summary

Sound quality	55 %	1,2	■■■■■
Bass	11 %	1,0	■■■■■
Neutrality	11 %	1,5	■■■■■
Transparency	11 %	1,0	■■■■■
Soundstaging	11 %	1,0	■■■■■
Dynamics	11 %	1,5	■■■■■

Lab	30 %	1,3	■■■■■
Frequency response	10 %	1,0	■■■■■
max. volume	10 %	2,0	■■■■■
Distortion	10 %	1,0	■■■■■

Practice	15 %	1,2	■■■■■
Installation	5 %	1,0	■■■■■
Crossover	5 %	1,5	■■■■■
Workmanship	5 %	1,0	■■■■■

Technical Data

Nominal diameter W	155 mm
Mounting depth with ring W	35 mm
Manget diameter W	85 mm
Tweeter dome diameter	25 mm
Tweeter housing diameter	40 mm
Slope W/T	6/6 dB
Tweeter protection	–
Tweeter volume adjustment	0, -3 dB
Fits in here *	VW, Seat, Skoda with 155 mm other

Nominal impedance	2 ohms
DC resistance Rdc	1,81 ohms
Coil inductivity Le	0,20 mH
Coil diameter	25 mm
Cone surface Sd	119 cm ²
Resonance frequency Fs	66 Hz
Mechanical quality Qms	5,73
Electrical quality Qes	0,60
Total quality Qts	0,55
Equivalent volume Vas	8,8 l
Moving mass Mms	13,1 g
Rms	0,95 kg/s
Cms	0,45 mm/N
B*1	4,04 Tm
Pressure 2 V, 1 m	88 dB
Power handling	30 – 100 W

Emphaser EM-VWFX155

VW-loudspeaker 1,2

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Price/performance: very good

"Top sound for many VW, Seat and Skoda."