



**Emphaser EM-FTF2: Vehicle-specific speakers for Fiat Ducato**

# Sound-Upgrade for Ducato

► Motorhomes are all the rage so there is naturally also a need here to improve the sound. And so Emphaser has introduced the EM-FTF2, a new speaker set for the Fiat Ducato.



The plastic basket is provided with a flange that is specially customized for the Ducato door

### EM-FTF2

As before, the Fiat Ducato is the most common platform on the used motorhome market. Here there is a widespread desire to upgrade the sound, for who wants to go on vacation if that is poor? The quickest and simplest method to do this is to replace the speakers — particularly with the Emphaser EM-FTF2, as this is connected using plug and play. Simply unplug the original vehicle speakers and put the Emphasers in — done. Of course the vehicle kit must also be such that the speakers are a perfect fit. Due to the exposed fitting of the woofers on the door panel and the three-point mount, normal component systems cannot actually be readily fitted. That is why Emphaser has given the FTF2 an injection molded basket designed specifically for the Ducato. That works in all Ducato III from 2006 onwards, and also in the identically constructed Jumper and Boxer from France. In the case of the tweeter Emphaser has taken pains to



Both chassis are prepared with vehicle connectors to the plug and play connection

# EM·PHASER

## EMPHASER EM-FTF2 • TEST REPORT CAR&HIFI 2/2022



The low pass crossover is conveniently fitted directly to the woofer, a blocking circuit responding to the vehicle acoustics

make it as compact as possible so that it can be fitted effortlessly in the original position. To achieve this a small 19-mm woven fabric dome is used. Thanks to the resonance chamber, which gives it a helping hand at the lower end of the frequency response, it is more than equal to a 25-mm dome.

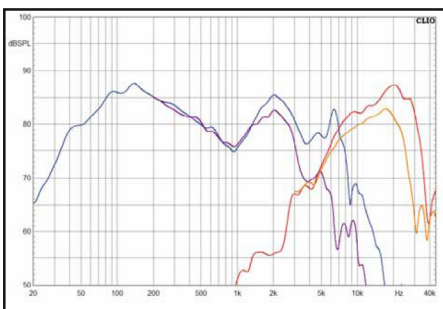
### Measurements and Sound

The crossover of the FTF2 is split for both drivers. The high frequency branch sits in the connection cable of the tweeter, while the low frequency branch is neatly fitted to the basket of the 16 cm speaker. Here we find a clever circuit with a 12 dB low pass filter, that nevertheless has a damped bypass for higher frequencies. In addition there is a blocking circuit that works like a passive equalizer and pulls down the frequency response of the mid/woofer around 1 kHz by approx. 6 dB. That seemed strange when we first saw that in our measurements, but there is a reason for it: the FTF2 is designed specifically for the Ducato

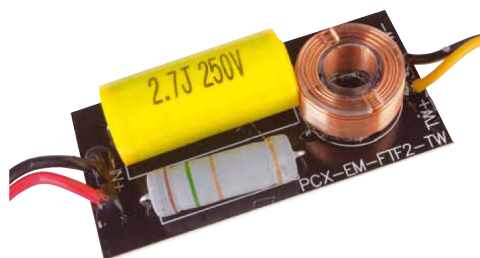
and is therefore able as it should to take account of the vehicle frequency response. The blocking circuit is used to compensate for a frequency hump of the Ducato acoustics so that the frequency response curve in the vehicle is flat. For our sound check in the listening room we bypassed this blocking circuit. The way the FTF2 plays is then lively and detail-rich. The aluminum 16 cm speaker delivers a punch in the lows, and also succeeds in the midrange with the necessary corners and edges. The new 19 mm tweeter is a stunner, delivering beautiful, silky details, though it can also let acoustic sparks fly when required. This is accompanied by a spatiality that is pleasing, so everything is as it should be.

### Summary

With the EM-FTF2 the Emphaser has come up with a highly rewarding speaker system for Ducato & Co. that really does the job with plug & play installation and a punchy sound.



The 19 mm tweeter is outstanding up to 30 kHz. A blocking circuit in the woofer provides a 6 dB attenuation around 1 kHz that corrects for conditions in the Ducato



A 12 dB high pass filter and level resistor form the tweeter crossover

**BEST PRODUCT**  
Fiat-loudspeaker  
**CAR & HiFi** 2/2022

## EM·PHASER

### Emphaser EM-FTF2

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

### Summary

▶ Sound quality	55 %	1,2	■ ■ ■ ■ ■
Bass	11 %	1,5	■ ■ ■ ■ ■
Neutrality	11 %	1,5	■ ■ ■ ■ ■
Transparency	11 %	1,0	■ ■ ■ ■ ■
Soundstaging	11 %	1,0	■ ■ ■ ■ ■
Dynamics	11 %	1,0	■ ■ ■ ■ ■
▶ Lab	30 %	1,5	■ ■ ■ ■ ■
Frequency response	10 %	1,5	■ ■ ■ ■ ■
max. volume	10 %	1,5	■ ■ ■ ■ ■
Distortion	10 %	1,5	■ ■ ■ ■ ■
▶ Practice	15 %	1,2	■ ■ ■ ■ ■
Installation	5 %	1,0	■ ■ ■ ■ ■
Crossover	5 %	1,5	■ ■ ■ ■ ■
Workmanship	5 %	1,0	■ ■ ■ ■ ■

### Technical Data

Diameter TT	165 mm
Mounting depth incl. ring	47 mm
Magnet diameter	86 mm
Tweeter dome diameter	19 mm
Tweeter housing diameter	33 mm
Slope	-12 dB
Tweeter protection	-
Tweeter volume adjustment	-
Fits in here *	Ducato III + related other
other	-
Nominal impedance	4 ohms
DC resistance Rdc	4,31 ohms
Coil inductivity Le	0,10 mH
Coil diameter	25 mm
Cone surface Sd	131 cm <sup>2</sup>
Resonance frequency Fs	55 Hz
Mechanical quality Qms	6,33
Electrical quality Qes	0,95
Total quality Qts	0,82
Equivalent volume Vas	14,3 l
Moving mass Mms	13,9 g
Rms	0,76 kg/s
Cms	0,60 mm/N
B*I	4,68 Tm
Pressure 2 V, 1 m	86 dB
Power handling	20 - 80 W

### Emphaser EM-FTF2

**Fiat-loudspeaker 1,3**

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Price/performance: very good

"First-class upgrade for the Ducato."