

# ESX VXP3M - 3 inch midrange driver for ambitious three-way systems



# Top midrange

▶ A brand new small box from ESX meets the editorial office  
a. Content is a pair of midrange speakers that look very interesting.



The VXP3M is a newly made die-cast chassis offered as a pair of two and a car audio system from 2 to 3 ways. Of course, ESX has the matching VXP6.2C two-way system, but the VXP3M can of course also be combined with other woofers and tweeters. The small speaker is manufactured to a very high standard across the board, we have a real die-cast aluminum body.

In the middle of the embossed paper membrane sits the Aluminum dust cap directly on the bobbin carrier

a luxury in this size class. The neodymium drive, on the other hand, is almost mandatory, because nowadays it often happens that you have to fight for every millimeter during installation. The membrane is made of coated paper and there is an aluminum dust cap in the middle. This has a sound-radiating function here, because it is directly connected to the voice coil. This is a very popular trick to optimize the radiation of the drive. The drive is very generous for the chassis size, we find a 25 millimeter voice coil, which comes in the best ventilated version



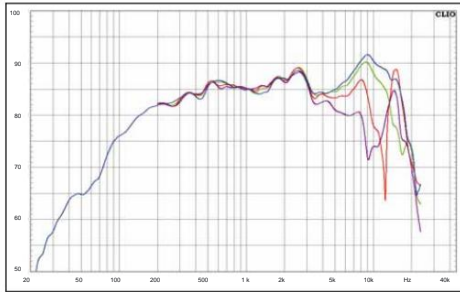
The VXP3M is with aluminum basket and Neodymium drive made noble

stops working. The very careful, "crisis-proof" wire routing is also very nice here, although a midrange driver does not have to be a long-throw chassis.

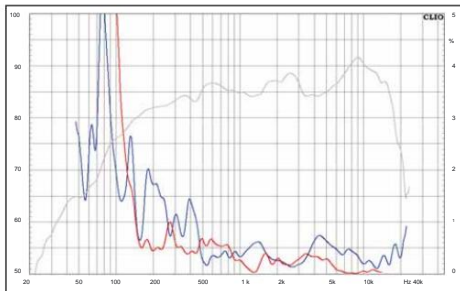
### Measurements

With a membrane diameter of 64 millimeters and a generous basket diameter of 89 millimeters, the VXP3M belongs to the three-inch class, a nice compromise between sufficient membrane area for good sound pressure and low moving mass for good midrange capabilities. As befits a high-class midrange driver, the VXP3M works with a nice broadband. From 200 Hz to 15 kHz it delivers usable sound pressure and from 300 Hz it can be used without hesitation.

It achieves a whopping 85 dB at 2 V/1 m,



The VXP3M runs from 300 Hz and also shows broadband ambitions with an upper limit frequency of 15 kHz. Since the resonance peak at 15 kHz also remains at an angle, it feels most comfortable as a midrange driver up to 4 kHz



Here at 93 dB/1 m the VXP3M shows only minimal distortion. The more comfortable K2 (blue) is very low. The more unpleasant K3 (red) is just under 0.5% and only rises steeply below 200 Hz

which is an excellent value for such a small chassis. The VXP3M also sets standards in terms of maximum level.

As always, we take measurements at a 3 dB interval (this corresponds to a doubling of performance) and the VXP3M first caused astonishment and then dismay, because it managed 96 dB/1 m cleanly and even at 99 dB it didn't completely drop out - that's it some 16s don't. It is logical that the distortions are at a super low level in normal operation, making the VXP3M one of the best of its kind.

**Conclusion** The VXP3M is a real hit. A wonderfully made three-incher that works excellently in all respects.

Elmar Michels



### ESX VXP3M

price/pair	a 250 Euro
distribution	Audio Design, Kronau
Hotline	07253 9465-0
Internet	www.esxaudio.de

### Technical specifications

outer diameter	89 mm
installation diameter	74 mm
installation depth	43 mm
magnet diameter	55 mm
Membranmaterial	Paper
voice coil	copper
voice coil former	Aluminium
Magnet	neodymium
highest crossover frequency	-
lowest crossover frequency	300 Hz
Weight	300
Miscellaneous	grid

nominal impedance	3 Ohm
DC resistance Rdc	2,97 Ohm
Voice coil inductance Le	0,12 mH
voice coil diameter	25 mm
Membrane area Sd	32 cm <sup>2</sup>
Resonance frequency fs	146 Hz
mechanical quality Qms	6,21
electrical quality Qes	0,42
Total Quality Qts	0,39
Equivalent Volume Vas	0,52 l
Moving Mass Mms	3,3 g
Rms	0,49 kg/s
Cms	0,36 mm/N
B <sup>1</sup>	4,65 Tm
Sound pressure 2V, 1m	85 dB

**CAR & HiFi** 2/23

### ESX VXP3M

"Midrange driver with excellent performance."