

ESX DBX208BPA + DBX208BPQ – bandpass  
subwoofer with a twist

# Bass für Limousines and convertibles



► The new DBX bandpass woofers  
ESX has thought very practically. We  
test the active/passive duo and  
explain the twist.

ESX mostly offers practical subwoofer boxes. Apart from the powerful top series QXB, you can often find space-saving bass enclosures for spare wheel or under-seat installation and the "normal" DBX line is typically equipped with small woofer chassis, so that the enclosures in the trunk are inconspicuously small. Even the top models are "only" equipped with two eight-inch woofers and are still nice and compact. Now, with our DBX208BP enclosures, two models are added that are no longer quite as compact, but are all the more

more practical. Inside, there are two eight-inch speakers, but not the same ones as in the well-known enclosures. Our enclosures come with woofers specially developed for them, which are tailored to the application. Now with double ferrite drive, they have plenty of power for their 50 millimeter voice coils. The air-dried paper membranes and the metal baskets are as before. The enclosures are top-quality and made of sturdy MDF in 16 millimeter thickness. The high-quality felt cover stands out pleasantly from that of cheap boxes, and



The BPA shines with its very good power amplifier, here with bandpassport for ski bag opening



The cases are not small and weigh over 20 kilos

The metal applications are also pleasing. Unlike the other ESX woofers, we are not dealing with bass reflex woofers, but the DBX208BP works according to the bandpass principle. The two drivers are hidden in the housing, but without acrylic panels and lighting for show purposes; instead, our bandpasses rely on an unobtrusive, dignified appearance. The construction of the housing is designed in such a way that each woofer plays into a closed chamber on the outside, while both eight-inch speakers share the ventilated volume in the middle. The ventilation port is also located in the middle, which at 155 square centimeters corresponds to a tube with a diameter of 14 centimeters - enough for two 20s. And it is this port that enables the twist, the real highlight of the DBX bandpasses, which is likely to be the deciding factor for many people when making a purchase. Owners of convertibles or sedans with a tightly closed trunk know the problem that the bass does not "find its way out" of the trunk properly. You either have to oversize the subwoofer or build a special solution for the ski bag opening. And it is precisely for such vehicles with a ski bag opening that the DBX bandpasses offer a tailor-made solution:



The aluminum plate with the ESX logo is used to cover the unused bandpass opening locked

The ventilation port can be moved from the front to the slanted rear wall so that the woofer blows directly through the ski bag opening. To do this, ESX has installed two wooden tunnels in the middle chamber to guide the sound, one out the front, the other above it out the back. To convert, you only have to swap the aluminum plate with the ESX logo and the aluminum frame of the port. Since the tunnels are the same size, the housing tuning remains the same, and the unused tunnel is then included in the chamber volume. This is as simple as it is ingenious, because it makes the DBX BPs great problem solvers for ski bag vehicles. The DBX208BPA has an amplifier module on board, the DBX208BPQ is the passive variant. This is the next ESX subwoofer in the test that can benefit from the ingenious Power 4 built-in amplifier, because this uses the same installation opening as the double connection box of the passive variant. We clearly recommend the active variant here, because you won't get a better amplifier for the moderate extra charge of 180 euros. Of course, if you have a suitable amp on the shelf, you can go for a passive woofer.

### Measurements and sound

The power amplifier module, which is also available separately as a 4 or 2 Ohm version, impresses first with its excellent integration capabilities. With EPS Pro, the

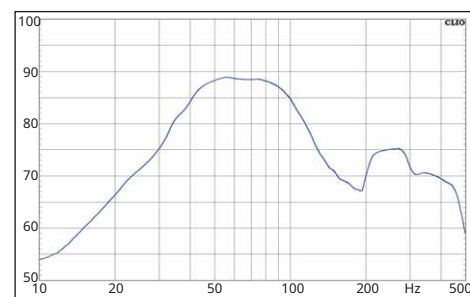


The BPQ has a double terminal for the two woofers

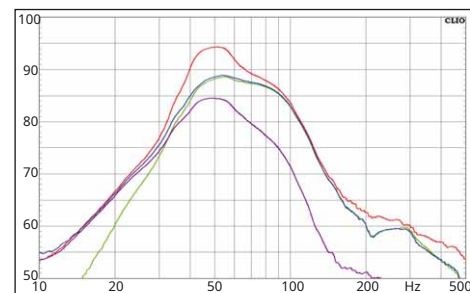
Module is the best fit for all kinds of factory systems, with the adjustable input impedance, diagnostic head units are no problem. And with the ability to handle signals up to 40 volts, the active sub also works with premium factory systems with significant amplifiers. In addition, the 400 watt power amplifier is very powerful for an active subwoofer, our DBX works great. Both woofers are, except for the power amplifier,



Metal basket with rear ventilation openings and punched upper pole plate for the 20" woofer



The passive bandpass operates from 40 to 80 Hz and achieves 89 dB at 1 W



The active bandpass is equipped with subsonic filter and boost



Here is the bandpass Towards the trunk open



Two of the 8 inch woofers with Paper membrane work in every housing



## LEVEL TIP

Top class  
**CAR & HiFi** 5/2024

level identical, equal match Voting falls classic The woofers take care of frequencies between 40 and 80 Hertz, the most important bass octave. The tuning is also not too wide, and as a reward you get a really good 89 dB sound pressure level at just one watt. The clean tuning means the woofers also sound clean. They hit the beats without any spongy sound and create a lot of pressure. The bass is completely sufficient for everyday use, and anyone who doesn't listen to extremely produced electronics will be very satisfied. Bass drums kick very nicely and the woofers give bowed double bass an impressive volume, so we recommend them at any time.

### Conclusion

Whether in a convertible under the top compartment or in the trunk of a limo on the back seat, the DBX bandpass woofers are real problem solvers in all vehicles with a ski bag opening because they efficiently bring the bass forward. With top-quality workmanship and sensible tuning, they are of course also great woofers for everyone.

Elmar Michels



The bass driver was given a double ferrite drive

## LEVEL TIP

Top class  
**CAR & HiFi** 5/2024

### ESXDBX208BPQ

Price	around 350 euros
distribution	Audio Design, Kronau
Hotline	07253 9465-0
Internet	www.esxaudio.com

### Evaluation

sound	50%	1.3	----	--
Depth	12.5%	1.5	----	--
Pressure	12.5%	1.0	----	--
cleanliness	12.5%	1.5	----	--
dynamics	12.5%	1.0	----	--
laboratory	30%	1.3	----	--
Frequency response	10%	1.5	----	--
Efficiency	10%	1.5	----	--
Maximum level	10%	1.0	----	--
processing	20%	1.0	----	--

### Technical data

Basket diameter	21.0cm
Installation diameter	18.5cm
Installation depth	12.1cm
Magnet diameter	11.0cm
Housing width	78.0cm
Housing height	29.0cm
Housing depth	29/39cm
Weight	22.6kg
Nominal impedance	2 x 2 Ohm
DC resistance Rdc	2.17 ohms
Voice coil inductance Le	1.66mH
Voice coil diameter	50mm
Membrane area	216cm <sup>2</sup>
Resonance frequency fs	33Hz
mechanical quality Qms	6.19
electrical quality Qes	0.65
Total quality Qts	0.59
Equivalent volume Vas	17.4l
Moving mass Mms	86g
Rms	2.90kg/s
CMS	0.27mm/N
B x l	7.75 Tm
Sound pressure 1 W, 1 m	89dB
Performance recommendation	200 – 500W
Test housing	BP 55 I
Reflex channel (dxl)	155cm2x25cm

### ESXDBX208BPQ

Top class 1.2

**CAR & HiFi** 5/24

Price/performance: very good

"Thanks to the changing tunnel, it's perfect for opening the ski bag."

### ESXDBX208BPA

Price	around 530 euros
distribution	Audio Design, Kronau
Hotline	07253 9465-0
Internet	www.esxaudio.com

### Evaluation

sound	30%	1.3	----	--
Depth	7.5%	1.5	----	--
Pressure	7.5%	1.0	----	--
cleanliness	7.5%	1.5	----	--
dynamics	7.5%	1.0	----	--
laboratory	40%	0.9	----	--
Frequency response	10%	1.5	----	--
Maximum level	10%	1.0	----	--
Power amplifier performance	20%	0.5	----	--
Practice	30%	1.0	----	--
equipment	10%	0.5	----	--
Processing Electronics	10%	1.5	----	--
Processing mechanics	10%	1.0	----	--

### Technical data

Housing width	78.0cm
Housing height	29.0cm
Housing depth	29/39cm
Design/Volume	BP 55 I
Reflex channel (dxl)	155cm2 x 25cm
Weight	23.4kg
Chassis diameter	2x20cm
Nominal impedance	4 ohms
Voice coil diameter	50mm
Power at nominal impedance	404 W
Sensitivity Cinch max.	170mV
Sensitivity Cinch min.	5.3V
THD +N (<22kHz) 5W	0.07%
THD +N (<22 kHz) half load	0.16%
Signal-to-noise ratio (A measured)	85dB

### equipment

Low pass	40 – 120Hz
Bass boost	0-6dB/45Hz
Subsonic filter	5-35Hz/12dB
Phase shift	Polarity reversal switch
Low-level inputs	•
High-level inputs	•
Automatic switch-on	•, DC or signal
Start-stop capability	• (7V)
Remote control	•, Gain
Miscellaneous	EPSpro

### ESXDBX208BPA

Top class 1.1

**CAR & HiFi** 5/24

Price/performance: very good

"Thanks to the changing tunnel, it's perfect for opening the ski bag."