

EBS NEO110/112 Bass Speaker Cabinets

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EBS new compact bass speaker cabinets NEO110 and NEO112 feature the latest generation of neodymium speakers. Of course, compact cabs are nothing new, since most bassists are tired of carrying a lot of heavy equipment. The innovative touch in EBS' NEO range is not only a compact design and low weight, but EBS' refusal to compromise build or sound quality.

The NEO cabinets employ the same quality of construction and attention to detail as EBS' range of full sized cabinets: black felt, durable plastic corners with grooves, a chromed woven front grill, two spring-loaded handles, a sturdy metal cover with connections and a 2" titanium tweeter with a level control. The metal plate feature two Speakon and two regular 1/4" jacks, all connected in parallel. The width of the cabinets is the same as standard 19"-effects unit or for example EBS' own amplifiers. To keep the weight low all cabs use spruce instead of birch and the speakers use neodymium magnets.

In a traditional speaker, the magnet is a sizeable share of the overall weight. Neodymium is a new exciting material that is both lighter and with more magnetic properties than traditional magnets. A neodymium magnet with the same magnetic property as a standard magnet weighs only about 5 % of a regular magnet. Unfortunately, this also means less mass to cool the voice coil, which translates as heat, where a speaker might actually "fry". The first generation of neodymium-equipped speakers had that problem.

Gradually performance improved into a second generation of neodymium-equipped speakers with



more efficient cooling. The traditional solution was to add cooling material, but obviously, that also added the overall weight. In some cases the weight increased by 2-3 times and was often compensated by a less sturdy speaker frame construction. In all fairness, the ambition was not always to keep weight low but to gain other positive features, i.e. efficiency or sensitivity of the cabinet.

Now EBS claims to have created the next generation, with less cooling material, improved cooling and despite more power (equals more weight) and a molded speaker frame, the weight is lower than a traditional speaker. The 2"-titanium tweeter is the same tweeter being used in EBS' larger cabinets. It is fitted with a variable level control where zero/ ± 0 dB is unity gain, and +3 dB, maximum position, results in a slight increase. There is no active amplification; +3 dB is exactly that: 3 dB's more than unity gain.

Traditionally EBS has always shown exceptional ability to design user-friendly and flexible products but sometimes these practical applications are easily overlooked and the NEO range is no exception. The first example is the cab shape and another the location of the handles - on one side and under the cab. This may seem strange since they are positioned a little to close to the front to give a satisfying stability when carried. However, the smart thing is that it is possible to position a cab at an angle by using the handle irrespective of a cabinet's position - vertically or horizontally.

So, if two cabs are used I can think of no less than 14 (see sidebar) working combinations with an amp placed on top of them. The cab's plastic corners use grooves to prevent the cab on top from falling off. Regrettably, this does not work with an amplifier head since it will probably slide backwards because of the vibrations. One possible solution is to put the amp's rubber feet over the cabinet edge. If the two back corners were prolonged maybe, they could work as a stop-block.

IN USE

The low weight and compact format are positive when you carry or load/unload your rig in or out of a small car. In fact, the cab is so small that you can probably use local transportation to and from your sound check and gig. The many options to position the cab is helpful, depending on the size of the stage and where you want the cabinet. If you prefer to raise the cabinet from the floor, you can place it on an empty case, a borrowed beer crate, or a specially designed support. The absence of wheels can be questioned and since the cab is supposed to be portable, it is a little surprising. On the other hand, the cabs are almost too small for wheels, but an optional accessory much like Ampeg's Porta Bass cabinet that features a removable cart with a telescope-handle would have been nice.

The fundamental sound characteristic is quite close to EBS' most recent cabinets and combos, i.e. Evolution Pro Line 2000 and Gorm ET-350. The sound is warm, smooth and open with full-range characteristics. The cabs small size and the laws of physics is a limiting factor, of course, but the sound is surprisingly large with lots of depth.

To get a more detailed "picture" I played a NEO112 cab with an EBS HD350 amplifier head and compared the sound to an EBS Drome combo with a 1x12"-speaker. The amps are two different beasts, but it was easy to hear that the NEO112 cab have a warmer more open character while the Drome have more midrange and a sharper, more aggressive sound.

I tried out the NEO112 cab with different instruments and it worked well with aggressive plectrum playing and/or more traditional finger style-playing. It might have had some trouble with the lowest notes of a five-string bass when played louder, but with the size of the cab in mind, it passed the test with excellence. It sounded "happier" when I picked up a fretless bass where it brought forth a pleasantly woody character. The best features surfaced when played with a high tech or slap-technique, maybe no surprise because of the fundamental sound characteristics. In fact, it was child's play to get a modern transparent sound with a focused low-end and lots of punch.

The tweeter level control is very useful for handling the top-end and change the sound character. For some high-tech sounds you may well increase it, but when playing traditional finger-style it is very easy to reduce unwanted fret sounds.

The NEO110 sounds more similar to a NEO112 than expected. It does not sound quite as big but with a pleasing tightness, and even if the price difference is slight, it might be your ideal sound and the one that you would prefer even with its slightly

lower power handling. If you use two cabinets, the difference in sound characteristics increased.

The NEO line is a good alternative from an economic viewpoint. Besides being a compact professional bass rig, it may be an interesting alternative to a combo amplifier. If we take a look at EBS' range, a combination of EBS 350HD/NEO112 is roughly in the same price range as the Gorm ET-350 combo amp. In a head to head comparison, the first alternative gives you only half the output since the NEO cab is 8 Ohm. But if you already have an amp and use a 4x10" cab and have been thinking of getting a combo amp for smaller gigs, then the NEO cab is a cheaper, and almost as light, alternative to lets say, EBS Drome combo (150W, 1x12").

CONCLUSION

In my opinion, EBS has done a great job again. Both cabinets, NEO110 and NEO112 are of the same quality that all EBS products profit from, in material, connections and the sound quality. Using spruce and neodymium speakers keeps the weight down and make them a viable alternative for the working musician. If you play in smaller clubs, restaurant or theatres they are perfect and if you already have an amp head, they are an interesting alternative to a combo amp.

Positive

- + Good sound
- + High quality
- + Low weight
- + Small and portable

Negative

- No wheels

FACTS

EBS NEO110 & NEO112

Type	Bass speaker cabinet
Materials	18 mm spruce (ply) with gray/blue/black felt covering with plastic corners with grooves, two metal handles and a hand-woven chromed steel front grill.
Speaker	1 x 10" EBS NEO110, 1 x 12" EBS NEO112 Neodymium magnet + Titanium tweeter
Power Handling	EBS NEO110 - 250 W RMS, 500W program EBS NEO112 - 300 W RMS, 600 W program
Frequency Response	50 Hz - 18 kHz (NEO110) and 45 Hz - 18 kHz (NEO112)
Impedance	8 Ohm
Connections	2 x 1/4" and 2 x Speakon
Dimensions	490 x 340 x 340 mm (NEO110), 490 x 370 x 340 mm (NEO112)
Weights	EBS NEO110 - 10,8 kg EBS NEO112 - 11,5 kg
Country of Origin	Sweden
Internet	www.ebs.bass.se

