

i-fidelity.net

Phalanx Micro 200A
Test result: very good

Issue 08/2012

HECO PHALANX MICRO 200A



i-fidelity.net
Price tip

**“Heco's Phalanx Micro 200A
produces positive surprises
on all fronts”**

The sugar cube

A sugar cube contains more energy than almost any other food type. This is something Heco also promises of its Phalanx Micro 200A mini subwoofer, which exhibits elegant workmanship, over 300 watts of power and three cones. Power cube or soup cube?

Heco's Phalanx Micro 200A is adorably small. Its elegant packaging is smaller than that of many a subwoofer and, weighing in at 8.2 kilogrammes, the ultra compact unit isn't the heaviest either. However, for its volume it is one heck of a unit, as compact speakers of a comparable size are typically only half its weight. When freed from its cardboard and film packaging it wowed the i-fidelity.net testers straight away with an elegant workmanship that is totally unexpected in this price range, leaving us wondering how it's even possible.

The apparently seamless MDF cabinet has immaculately rounded edges and corners and is refined in a finish that is very reminiscent of "real" piano lacquer. Three bass chassis, which appear to be enormous for the housing, seem to be invisibly embedded in the unit, because its basket, after having been screwed in place, has been covered with a perfectly seated rubber sleeve. The same goes for the rear: Perfect, tiny gaps demonstrate the level of precision that has gone into manufacturing and installing the electronics module. Everything is finely sealed and secured in place with a large number of flush countersunk screws, which really inspires confidence.

Quality is the common thread

The chassis themselves exhibit excellent workmanship. The blackened rigid aluminium cones with their padded, inwardly directed and shimmering matt rubber surrounds look as though they have been fused in place. The three drivers appear identical from the outside, however, only the front driver is powered by the powerful digital amplifier and features both a magnet and a voice coil. The two side passive cones operate acoustically like a bass reflex tube with the added advantage of not producing any kind of flow noise. This acoustically elegant solution, unfortunately, is rarely used because, as you can easily imagine, it is much more expensive than a plastic tube. This makes it even more astounding that Heco has managed to incorporate two of them in this affordable subwoofer.

The usual suspects for a subwoofer in terms of connections and controls can be found on the rear. An unusual but positive move was the decision to use a pure Euro standard power cable. This connection, which is often referred to as a "razor" cable, works without a ground wire and requires more elaborate protection for the electrical installation. This is rather favourable for a subwoofer, as the ground wire is often the weak link in ground loops, which can result in a particularly damaging effect for the bass unit. This typical source of error is thereby eliminated. The standby switch has an Auto setting and an On setting. When set to "Auto", the woofer switches to the standby mode if it has not received a signal for a few minutes. When the music streams again it rapidly switches everything back on. The "On" setting (for continuous power) is intended for people who, for example, disconnect the system completely when it's not in use by means of a switched power strip. A change in colour of the LED indicates the sleep and operating status of the Phalanx unit. As this wonderfully compact subwoofer is not solely utilised with comparatively small speakers, the controller can be adjusted up to 200 hertz for its upper cut-off frequency. What is unusual is that the variable phase shifter does not only switch the phase from 0° to 180° as is usual, but it regulates continuously to 360°.

A glimpse at the inner values

When i-fidelity.net's testers get hold of the unit it's naturally part of their duty to take a look behind the large metal plate, which also serves to cool the electronics. After a good few minutes of using a cordless screwdriver the electronics module can be removed. This

rewards the testers with an amazing sight: All loose cables have been covered with insulating material for protection against flow noise and all of the components that could potentially vibrate or oscillate have been glued to each other and to the circuit board itself. This is an expense that is more frequently reserved for high-end devices, as it also reduces microphonic effects. Delving deeper into the housing reveals the woofer's impressive magnetic drive and the aerodynamically shaped baskets that are used for the two passive drivers. Then it's back in with the electronics module and tightening the screws with the correct torque.

The first practical experiments with the Heco unit left the testers grinning every now and then because of the positive surprises. Subwoofers of this size and/or in this price range often sound blustery and monotonous, or they "mumble" rather uncontrollably. During the initial level setting procedure many candidates produce annoying, snorting noises in the bass reflex port and they even generate mechanical noises when the woofer is pushed harder. But what about Heco's Phalanx Micro 200A? Nothing of the sort. No asthma, no creaking joints. This instills hope. And the testers aren't left disappointed. The small, powerful cube remained virtually free of flow noise and distortion even when subjected to high levels and low frequencies with large cone excursions.

For a subwoofer with a volume of barely 15 litres it filled our test cinema with astonishing levels. The Phalanx stunned us with reserves that really were amazing, especially when used in combination with compact shelf speakers; what normally happens in such a setup is that the subwoofer tends to give up when things start to get loud. The sub, however, reached its full potential in our chain. This is reversed in a surround setup. When the LFE channel for an action film demands an extra dose of pressure, you can tell that the level-dependent limiter of the low-frequency range is trying to prevent an overload after a certain, yet considerable volume.

Anyone who loves their sound to be action-packed and loud at the same time will either need to learn to live with this compromise or, and this really is an alternative, use two of these inexpensive, ultra-compact and easy to conceal subwoofers. Furthermore, by using two of these units you can enhance the acoustics of the room and generate an even more homogeneous bass line at the listening position.

General listening impression

Heco's unit sounds larger and more mature than it is, and it also sounds much more expensive than you would expect from its purchase price. Even fully fledged subwoofers from experienced manufacturers costing a similar amount aren't capable of playing much louder or much deeper, and they generally draw attention to themselves in midrange levels in terms of compression, distortion, mechanical noise or flow noise. Heco's offering remains admirably stoic here with regard to music and it doesn't generate any noticeable interfering effects, which is great.

When using large or several acoustic units together which utilise the rear sound of the active chassis, i.e. reflex tubes, or two passive cones in this instance, there is a danger of precision being left by the wayside. The bass may then seem full-bodied, but it loses somewhat in terms of contour and produces a "bubbling" sound at worst. For its design the Phalanx Micro 200A sounds amazingly precise and dry.

Test result

Heco's Phalanx Micro 200A produces positive surprises on all fronts. This begins with its compact dimensions, continues with its flawless workmanship and finishes with a surprisingly mature bass range that generates a deep, loud and dry sound that is capable of filling even large rooms, regardless of whether it's used in a home cinema setup or as an addition to shelf speakers. A sensational package!