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# KILLER WATTS

**BLACK DEATH DEMO  
PUG PACKS EIGHT AMPS  
FOR ONLY TWO SUBS**

## HIGH-END COMPONENTS

**WHEN ONLY THE VERY BEST SOUNDS UP FRONT WILL DO**



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# DEATH BY AUDIO

Midbass has re-invented its Peugeot 206 to showcase the new Vibe Black Death competition subwoofer. With four giant amps powering each sub and designed for extreme SPL, we hesitantly took up the opportunity for a listen....



You have to doff your hat to Midbass. When it comes to innovative demo cars, it has pretty much rewritten the rulebook in the UK. From the bonkers Dredd movie vehicle to the Audi R8 completed earlier this year, Midbass has something to draw a crowd's attention toward every product range. This array of demo cars helps to create a fun public face, but more importantly, it can show off the many faces of Midbass. Following the SQ oriented R8, built to promote Space 3D components, comes Black Death which we revealed first in our VIBE birthday launch feature a couple of months ago. We were lucky enough to grab a few hours with the Peugeot between it leaving VIBE's HQ and arriving at Car Audio Security's store where it will sit for the next month.

## THE SUBS IN DETAIL

The car uses just two Black Death subs, but when you read the spec and listen to the car, you see that two is more than enough.

The Black Death sub is aimed at consumers who want full-on, no compromise SPL output from a subwoofer. The sub is currently available in 15 inch, with 12 and 18 inch versions promised by the end of the year. These monsters tip the scales at a whopping 23kilos, while most of its competition struggle to reach 20kg. Nearly 8kilos of the total weight is in the double stacked magnet alone.

Black Death comes in two variants: a carbon coned SPL model (BD151C) and a 'street bass' paper pulp version (BD154P). The lighter-coned carbon model has lower moving mass and hence greater sensitivity, while the paper coned model has increased damping.

The mechanics of both subs are nearly identical but the paper cone version uses a dual 4ohm voice coil while the carbon model runs a dual 1ohm set-up. The end result in terms of spec gives the paper cone model a sensitivity figure of 92.3dB and the carbon model 94.3dB. The frequency response also differs slightly with the carbon model reaching down to 15Hz and the paper cone equivalent to 10Hz while both operate up to 850Hz.

Both subs are rated at 2500W RMS power handling, with a claimed peak of 7500W. As with the best high-end competition subs, the new VIBE Black Death sub has a replacement cone system. This is useful for serious SPL competitors who push the limits just that little bit too far. The subwoofer can be re-coned in less than 2 minutes which is great news for the hardened SPL competitor as cone damage can be fixed between rounds if necessary.

## THE SUB ENCLOSURE

The whole box construction was completed in around a week, designed by VIBE's resident genius Rob Gurney and built by MDF maestro, Rich Laker. The enclosure is built from 1in MDF with a 3in baffle wall. Unfortunately, you will never see the essential internal bracing required to give the large structure rigidity. Rob told us: 'If we were looking to simply make big SPL numbers we would have tuned the enclosure for a specific frequency. As it is, although showing a peak at around 35Hz, a greater priority was to make the whole thing as musical as possible. No customer will want to hear a burp from what is essentially a street bass car, it needs to be more than a one trick pony.' The enclosure is common for both subs and is 14 cubic foot in capacity utilising a classic letterbox port. As it stands, Rob reckons the 206 can happily produce SPL numbers in the early 150's while remaining relatively musical.

## THE SUB CONSTRUCTION

From outside, the first feature you notice is the slightly unusual cone design. Instead of a traditional gently curved cone face, the Black Death features a dust cap that tapers to a point in the centre. This has been designed to force air down through the pole piece for optimum cooling during high cone excursion. This feature also effectively increases the cone surface area also.

The cone is supported on a high-roll foam surround. The surround is 'rolled tall' rather than wide to avoid eating in to valuable cone surface area while still allowing maximum cone excursion. If you look closely, the cone surround is tall at the very outer edge and tapers gently to the cone edge.

The chassis of the Black Death is cast aluminium alloy to keep the weight down and give the best possible strength. The heavy-duty bright yellow powder-coated chassis is built for function over form. The twin stacked magnets surround a voice coil supported on a six-layer conex spider. This gives immense support to a cone that will probably be getting a severe pounding every time the sub is powered up.



## M.E.N. SPEC: MIDBASS PEUGEOT 206

**SOURCE UNIT:** FI SWAT 5 head unit. Car uses VIBE Critical Link cabling  
**FULL-RANGE SPEAKERS:** three pairs of SE-K 60 components in front doors and one pair of Slick 60 speakers in tailgate  
**SUBWOOFERS:** Pair of Black Death 18in subwoofers in ported enclosure.  
**AMPLIFIERS:** Eight BlackBox 5 bass amplifiers strapped and bridged to run four amps per sub. Two BlackBox Stereo 4 amplifiers for full-range speakers. 3 heavy-duty 1050CCA 130AH Energy Batteries

The pair of paper coned subs in the 206 are mounted in an enclosure which fills the space where the rear seats would normally be. They fire forwards from the baffle wall behind the driver and passenger and there is a huge slot port at the bottom of the enclosure.

## POWERING THE SYSTEM

Up front, the doors of the Black Death 206 contain three pairs of SE-K components as well as an extra pair of tweeters mounted in each mirror pod. The whole system is driven by no less than ten BlackBox amplifiers mounted in the luggage compartment. The full-range sounds are delivered by a pair of BlackBox Stereo 4 models. These supply 4x1 10W (at 4ohms) into the SE-K components in the front doors.

The low frequencies come from eight BlackBox Bass 5 amps, running four amps per sub. The BlackBox amps are what Vibe refers to as Class GH. Class G operation raises the power supply voltage when high output swings are detected while Class H refers to input signal modulated control of the higher power supply output. The aim of this amp range is to deliver the efficiency of a Class D amp with better sound quality. The BlackBox range sees amps

optimised for 2ohm operation, especially when strapped together to make a clean power source for big SPL output. The BlackBox Bass 5 model features a built in DSP, which helps provide clean signals when using the amps as they are here, with one master and three slaves per sub. The amps are simply daisy chained together to run from one master. The RMS output of each of these amps is quoted as 1500W so you can only imagine the resulting power being fed to the sub voice coils.

## THE REST OF THE CAR

The 206 was bought from a foreign tuning company (hence, why it is left-hand-drive) and was used last year as the Midbass FIU range demo car. For its 2008 make-over the car has gained a new paint job replacing matt black with a cool House of Kolor aluminium paint finish, which has to be seen to be believed. The car takes on a whole new shape now with this paint scheme as the curves and shape of the wide arch kit are much more defined. To take the weight of 50kilos of subs, the enclosure and ten amplifiers, the suspension on the Peugeot has been replaced with "air ride" and can be raised to get the car onto its trailer or dropped when parked up at shows. The

wheels are something special too being TSW Pindrives. As the name suggests, the wheels have a single centre nut as you see on race cars.

## CONCLUSION:

You cannot help but be impressed by the sheer amount of effort put in by Midbass to promote its brands through demo cars. It doesn't matter how big or renowned a brand gets, a demo car will always be the most effective way of selling car audio. With this much power available to these monster competition subs, many potential customers will have never heard anything so loud. The car was demonstrated at VIBE's birthday bash a few weeks ago and I witnessed it running under half power. That output was almost unbearable then and was shaking light fittings off the ceiling (seriously, the Midbass guys counted 12 as they left the hall!). Now, running full power, I have a feeling VIBE will be making good use of the notice that goes with the 206 warning anyone getting in of the dangers to hearing. Of all the demo cars we have seen recently from Midbass, the 206 squares up most boldly to the competition, doing what it does best: insane bass in a small space.