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EQUIPMENT REVIEW

B&W 802 Diamond

By Jason Kennedy

The 800 Diamond series was launched last year to replace the 800D models but save for a silver ring around the drivers you'd be hard pressed to tell them apart. This is the third incarnation of a range that was initiated by the Nautilus back in the nineties, a speaker that was worth its weight in marketing potential if not actual sales. Still, it remains one of, if not the most elegant and sculptural speakers ever put into production and I wouldn't mind a pair if I had the requisite eight channels of top notch amplification!

For the Diamond revision Bowers & Wilkins added its diamond tweeter to all the speakers in the range, the 805 and 804 being the obvious beneficiaries here and discontinued the biggest model from the D series the 801. It's big boned proportions being presumably too much of a challenge for even the dedicated music lover in these frugal times. The 800 is thus the daddy now and rather spectacular it sounds too, this was the model that Bowers & Wilkins demonstrated in full effect at its R&D labs for the product launch, the speaker that inspired me to write an Every Home Should Have One about Arab Strap's Philophobia. However, as I have reviewed both the previous incarnations of the next model down the line, the 802, it made sense to get its Diamond variant in for assessment.





For this model the engineers at Steyning changed little on the outside but nearly everything on the inside. The main cabinet is largely unchanged as is the Marlan midrange 'head' but three of the four drive units, the cast aluminium plinth and the crossover are new. These are the bits that the company has managed to find ways of improving in the five years since the D series was launched, the rest it seems, can't be bettered.

“The tweeter retains the diamond dome that gives the speaker its 33kHz high frequency extension but the motor system that drives it has been revised with an extra magnet.”

Starting from the top the tweeter retains the diamond dome that gives the speaker its 33kHz high frequency extension but the motor system that drives it has been revised with an extra magnet. This sits right at the front of the system in front of the primary magnet and increases magnetic flux, thus raising sensitivity which is always a good thing, and particularly in a tweeter. The other important change is to the surround material which is slightly softer than before and which improves treble dispersion at frequencies above 15kHz. This should make the speaker's character more consistent from room to room and improve image precision. The free standing tapered tube housing has also been changed but for production rather than acoustic reasons, it remains on a compliant Sorbothane mounting to the Marlan head.

The midrange drive unit is very similar to that in the D series, it retains a six inch woven Kevlar cone, the low profile FST surround and the skeletal, cast chassis of its predecessor. The only change is to the bullet shaped phase plug which was formally black rather than sexy silver aluminium.

The biggest single change for the MkIII 802 is the magnet material on the bass drivers, this has gone from ferrite to neodymium. A situation that has changed the shape of the motor system which is now long and slim rather than flat and wide, which is good for rearward venting and the neodymium means higher flux at the point where the long coil surrounds a short magnetic gap. This change is reflected in a 6mm increase in coil and former diameter, and thus a different size spider that has better mechanical compliance. The cone itself remains Rohacell, a composite of a woven skin with a foam core for maximum stiffness to weight. The dustcap or mushroom that you see on the cone is smaller than its predecessor.

The cabinet is a formed laminate shell with the company's Matrix bracing system inside, this vents down onto the cast plinth which has been changed for production purposes but retains the three point fixings for four castors or threaded feet. The latter have a spike at one end and a nylon rather than rubber tip at the other, the old rubber tips were a little too soft for long term abuse resistance as I discovered with the 802D.

Most inconveniently these speakers arrived a week after the Mark Levinson No.53 monoblock power amps departed. This superb amplifier is the direct descendent of the No.33 monoblocks that Bowers & Wilkins' engineers use for their R&D work and would have made a most effective partner. This is not a particularly difficult speaker to drive however, its specified 90dB sensitivity and minimum 3.5ohm impedance means that you don't need hundreds of watts to exploit its potential. My 200 watt Gamut D200 Mk3 is not the most powerful of amps yet it reveals most of the grunt on offer, more of which was apparent when Micromega's AS-400 turned up with its 400 watts (4 ohms) of class D grip. This amp proved to be a particularly well suited partner in most respects thanks to its even handedness, resolving powers and dynamic abilities. The speaker warrants as much transparency as you can muster but revealed nothing untoward in this Apple Airplay compatible integrated.

One thing that became apparent early on was that the 802 Diamond needs to be bi-wired for best results, changing from one pair of Townshend Isolda DCT speaker cables to two brought about a considerable improvement in dynamics as a result of extra speed and power in the bass. The PMC Fact8 speakers which they took the place of worked better with single wiring from the same amplifier. The bass is the most obvious part of the spectrum that the Diamond revision has improved, it is clearly more transparent and nimble so you can hear the texture of bass instruments and the full harmonic envelope ►

▶ of low notes. The 802D had excellent bass depth and power but was relatively leaden and sluggish, a powerful and fast amplifier could minimise this but you can get fleet footed results with the new 802 without having to shell out for such exotic beasts. Now the shape of bass notes is always very distinct and the speed with which they start and stop means that you are never far from a distracting piece of music that will obliterate your troubles and cares for as long as the beat goes on.

The aforementioned Gamut power amp helped them to reveal the electrifying presence on Gabriel's rendition of Boy in the Bubble taken from a 24/96 WAV download played through the Resolution Audio Cantata and Pont Neuf Ethernet bridge. This version produced obviously greater low level resolution than the CD of the same thing despite the removal of 10m of CAT5 cable and a computer. It did have Pure Music on its side however.

As with previous Marlan headed 800 series models the balance improves with level, visit Bowers' R'n'D dept and you'll hear why, those guys like to play loud and this is how the speaker was balanced. They have more measurement capability than most of the industry in that building but how a speaker sounds at balls-out level is what matters. Fortunately it's not necessary to emulate this at home, I rarely do these days despite the temptation that a speaker like this presents and have to say that my musical enjoyment does not suffer as a result, well just a bit. I was inspired to do an Every Home Should Have One on Rickie Lee Jones' Flying Cowboys when I heard it on the Pro-Ject RPM10.1 turntable and these speakers, it's an album I've been using to assess kit with for years but not one that often gets past the first track or two. This time I was hooked for a whole side and while the RPM10.1 is good it didn't prove to be this engaging in other circumstances. Perhaps it's one of those synergy things where recording, player, amp and source come together to create the elusive sum beating total of parts.

The 802 Diamonds continued to shine with other analogue and digital sources after this experience thanks to their ability to reveal what's going on in a non critical way. This makes them easy to live with on the one hand but it's immediately apparent when truly impressive recordings or hardware are in are hooked up. A good example is Well Tempered Labs' latest creation the Simplex, this remarkably affordable turntable has phenomenal timing, it makes the LP12 sound lacklustre in the pace department and has swung at least one prime advocate of that classic deck over to its way of playing. The Diamonds let you know exactly how good it is by producing a boogie inducing sound that your feet cannot resist whenever some Little Feat or ZZ Top hits the platter. In other words this speaker is a transparent conduit to the timing qualities of whatever feeds it, the Fact8 is





TECHNICAL SPECIFICATIONS

Tweeter: 25mm diamond dome

Midrange: 150mm woven Kevlar cone

Bass: 2x 200mm Rohacell cone

Nominal impedance: 8 ohms (min 3.5 ohm)

Sensitivity: 90dB

Frequency range: 27Hz – 33kHz (-6dB)

Cabinet Dimensions (HxWxD):

1135x368x563mm

Weight : 75kg

Finish: Cherrywood, Rosenut, piano black gloss

Grille: black cloth

Price: £11,500 per pair

Manufacturer: B&W Group Ltd, Dale Road, Worthing, West Sussex, BN11 2BH

URL: www.bowers-wilkins.co.uk

Tel: 0800 232 1513

very strong in this respect too but doesn't touch the bass extension nor power handling on offer here. I haven't heard the Naim Ovator S600 used in anger yet but would be highly surprised if that beat master could better these Bowers & Wilkins beauties.

This transparency works both ways of course, when a fabulous piece of review kit goes away it takes more than a little time to get used to the merely great ones that form the reference system. I spend a lot of time tweaking and trying alternative cables for both power and signal trying to get close to those peaks of experience but eventually take solace in the fact that time and new kit will take the pain away. The answer is to keep exploring new music and this after all is the point of the audiophile exercise as I see it. The plethora of new young trumpet players on the jazz scene keeps me distracted of an evening and the good ones, like the unpronounceable Verner Pohjola from Finland sound superbly open and detailed in the Diamond's hands. They reveal huge soundstage depth in which Pohjola's horn stands solid and real. I am not a big fan of trumpet recordings because they often seem to overload mics and mixing desks but this one and several others for that matter are entirely listenable on these speakers, which suggests that what's often overloaded is the loudspeakers at this end of the chain as much as anything else.

Less modern recordings such as Chick Corea's original Return to Forever which has recently been re-issued on vinyl by ECM, also work rather well. The precision of image placement was what struck me about this album, the speakers revealing a palpable realism to Airto Moreira's percussion instruments.

My lust for low frequency girth inspired the firing up of a Classé CA-2200 that while not the most exciting of power amps is not short on real power. This certainly did the trick of bringing extra ease to demanding material and giving Kraftwerk's Minimum-Maximum album the sort of grounding you need to recreate a live event in your living room. So power is still useful but not as crucial as quality.

Eleven and a half grand, it's a lot of money, but look at what the competition offers in terms of engineering and build quality at this price and you will soon see that the value on offer is pretty impressive. Can you name one high end company that can muster the R&D manpower that Bowers & Wilkins does and offers a speaker of this complexity at this price level? It looks like pretty good value in the general scheme of serious loudspeakers and positively cheap by the standards of many companies with rather less in the way of reputation.

It's not just an extremely revealing, highly capable and fabulously enjoyable speaker it's a good looking one too. So the question has to be what's not to like? Unless you feel the need to have a boutique brand loudspeaker in your system there are few competitors at the price that can get close to the 802 Diamond for sheer musical thrill power and the new solid copper binding posts are very shiny! +