



Top notch DAC for the price and tons of functionality in a compact transportable device



Review Details:



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**Pros:** Desktop class sound, DAC/amp very versatile for a wide range of iem/hp pairings, neutral and resolving yet engaging sound signature that pairs easily

**Cons:** Only (trans)portable, not quite convenient to use with DAPs, 3D switch a bit too close to volume knob may cause accidents

For the purposes of this review I will refer to the iDSD Micro Black Label as the BL

Thanks and appreciation goes out to iFi Audio for organizing this tour – it is a privilege to be given this opportunity to review the BL. This unit will be returned after 1 week to be passed on to the next reviewer in the tour.



Preamble:

This is my second official review on Head-Fi, so I would gladly welcome any suggestions for improvement, or tips on what I could include so that it would be more helpful for other Head-Fi'ers in evaluating gear for purchase. I thought a bit about how to structure this review because I generally find it challenging to review DACs as compared to headphones or earphones. This is

because it is not as easy to generalize a DAC's characteristics and sonic qualities as compared to a headphone (or earphone), and they might sound slightly different with various pairings. I think that the most useful way to pin down a DAC's sonic performance is to compare how it performs with different headphones and also comparing it with other DACs.

I value timbre and tonality, then resolution and soundstaging (depth and realism over plain width). My listening preferences tend toward neutral but slightly dark, and I appreciate good low-end extension, texture and slam. I'm a vocal lover so the midrange is very important to me – mids need to have clarity but retain a level of musicality so that it is engaging and not sound congested or too analytical/hollow. I'm highly sensitive to treble, and harsh/uneven/forward treble can fatigue me easily. However, I appreciate high quality treble e.g. tonal correctness vis-à-vis real instruments as I know them (cymbal/violin tones) without any glare or peaks. High quality gear tends to tick most of these boxes easily.

#### Packaging and Accessories:

The BL comes in a standard white box, and includes –

- 1) felt pouch for the BL
- 2) female USB A to female USB B cable
- 3) 3.5mm to 3.5mm adaptor
- 4) rubber pad (presumably for putting under the BL on a tabletop)
- 5) USB A male to USB B male adaptor
- 6) Two black rubber bands (for stacking the BL)
- 7) 3.5mm to 6.35mm jack
- 8) Standard manual that explains the jacks and switches that can be found on the BL

#### Design and Build:

The BL is solidly built, and beautifully finished. I personally love the metallic black finish, and aesthetically I prefer it to its predecessor in silver. It is a compact design, and at times I still wonder how iFi has packed all that functionality into its chassis. I wouldn't exactly call it portable but it is definitely transportable, especially if you are one who usually carries a small bag around e.g. a messenger or backpack (like I do). The volume knob allows you to do very fine adjustments, which can be very useful, and is quite smooth but retains enough traction for accuracy and to avoid accidental volume changes. The only gripe I have about the layout here is that when toggling the 3D switch I have the tendency of accidentally pushing the volume knob as well, because of my fat thumbs. People who have leaner digits or greater finger dexterity should have no worries though.

The XBass and 3D switches feel sturdy and have a nice tactile feel when flipped. There are switches at the bottom of the BL, one for toggling between using it as DAC/Amp and as DAC only, and IEMatch, for toggling in use with highly sensitive earphones. There are 3 other switches at the side of the BL, one for power mode, one for polarity and the last for sound filters. I find that the 3.5mm input jack and the 6.35mm output jack is well placed for portable use,

because that means that you can stack and still place the BL in an upright position in your back with those jacks facing up, allowing for fairly convenient volume manipulation on-the-go.



Gear used:

Concero HD  
Schiit Lyr (Philips 6DJ8 tubes)  
Onkyo DP-X1  
Sony A15  
Sennheiser HD650  
Hifiman HE400S  
Earwerkz (now Empire Ears) Legend Omega  
Aurisonics Rockets

Some of the tracks I used:

- 1) Don't Know Why – Norah Jones 24/192
- 2) Spanish Harlem – Rebecca Pidgeon DSD128
- 3) Tchaikovsky's Serenade for Strings in C Major, Op. 48: II. Valse: Moderato – Tempo di valse – LSO String Ensemble 24/96
- 4) Photograph – Ed Sheeran 16/44.1
- 5) Birds – Coldplay 16/44.1
- 6) What About Me – Snarky Puppy 16/44.1

\*note that I may not always comment specifically for each track in my review, but I am open to requests if you need specific information.

Sound:

Well here comes the most important part. I am running Audirvana+ on a 2011 Macbook Air 13". Settings on the BL are usually on 'Normal' mode with IEMatch off unless specified.

The first setup sees the Sony A15 as DAC, with line out into the BL, paired with the Aurisonics Rockets. The second setup uses the Onkyo DP-X1 as transport, feeding the BL with USB into the HD650. Then, comparisons 1 and 2 pit the BL against the Concero HD, which is a widely praised DAC and my desktop driver, albeit with less functionality than the BL but priced higher (\$549 for the BL and \$850 for the Concero HD), through the HE400S and the HD650. In the comparisons I usually kept the bass and 3D switches off in order to give a fairer comparison, and added comments about their selective use.

Comparison 3 tries to pin down the performance of the BL in driving custom monitors (BA drivers), in contrast to my usual DAP, the Onkyo DP-X1.

Sony A15 (Line Out) > BL > Aurisonics Rockets (and HD650)



I remembered that I had the line out jack for the A15, and added this setup because I considered that this is actually a transportable option. Besides, iFi does provide 2 black bands for those who might want to stack the BL with their DAPs. It may not be convenient for many but the sound quality may change your mind. This is desktop quality sound, available on-the-go.

I volume-matched the A15 with and without the BL as accurately as I could, and I loved what I heard. Even with the XBass and 3D switches off, the audible difference is already significant. Comparing 'Don't Know Why' by Norah Jones with and without the BL, there are immediate gains in air, space, and imaging, with greater vocal presence and resolution. Norah Jones' voice is more focused; instrument placement increase in definition and clarity, and soundstage also gains some width and air.

With the XBass toggled on, the midbass is pleasantly elevated to give a little more slam, decay and texture. By texture I mean that the bass can be 'felt' more – a little bit more tactile. The caveat is that not everyone might like this difference, because it may be a little too much north of neutral for some. Without also toggling the 3D switch on, the presentation turns a little dark.

I loved the presentation with both the XBass and 3D switches turned on. The 3D switch re-balances the tonality of only the XBass switch by giving the music a treble lift. But that is an understatement. In this setup the 3D switch seems to provide a more 'open' sounding presentation. Vocals become a bit more forward and engaging without losing transparency. The soundstage increases in height, fills up the imaginary area somewhere above your forehead, along with a tad more width. The presentation also gains a lot more air and instruments have more breathing room and are nicely separated. The treble moves from the sonic background to a place where it suddenly has a little more sparkle and clarity.

The result? Greater immersion into the music with excellent resolution, transparency, and musicality. Switching back to the A15 alone causes the music to sound compressed and somewhat claustrophobic. Given that the A15 has a small footprint, I would actually seriously consider this portable stack as a serious rig that gives you desktop class performance that you can actually carry around in a messenger bag.

(I tried this stack with the HD650 just for kicks, of course with power mode on "Normal" and IEMatch "Off". Turning the XBass on put the thump into the low end of the HD650s, however, it might not always be tasteful depending on track and preference. In many cases it changes the HD650s bass from being heard to being felt, working well as a result. I also toggle the 3D effect on simultaneously, and for most tracks, again, most noticeably makes the stage taller and more immersive, and adds air in the vocals and slightly more instrument definition. Imaging improves, together with a greater sense of realism. Even on a track with heavy cymbal work, tonality is never compromised, and with the HD650 the presentation still maintains its coherence and cohesiveness. However, as I note later (heads up), I suspect that more treble oriented cans might not synergize tonally as well with this pairing. I am really enjoying how a (trans)portable stack can drive HD650s properly.)

## Onkyo DP-X1 > BL > HD650

The HD650s are the stuff of legend, and are well known for their audio quality. In fact, Massdrop recently ran a drop in collaboration with Sennheiser for the HD6XX, which basically replicates the sound signature of the HD650s. The HD650s are known to be slightly dark with a musical and lush midrange presentation, with the ability to scale up with better sources and amps.

As tracks are playing I experimented with the BL's power settings. I found that the "Turbo" drove the HD650s better than in "Normal" mode, but with the drawback of not having much volume control headroom – in between being too soft with channel imbalance or too loud for any listening comfort. In comparison to "Normal", I found "Turbo" to provide slightly better control in the bass, and midrange notes were very slightly thicker. However, I ended up doing most of the listening in "Normal" mode for the reasons stated above.

Compared to my memory of the non-Black Label iDSD Micro, generally the BL improves on its predecessor by providing a tighter grip on the bass, retaining midrange accuracy but having somewhat thicker notes lending itself to a more 'musical'/engaging vocal presentation, for lack of a more appropriate term. Treble reproduction is remarkably accurate without giving in to any harshness or glare (perfect for someone like me), and maintains clarity without erring on the side of being clinical. Extension on both ends is very good, and detailing and resolution is top of its class in this price range.

The pairing with the HD650 is a fine combination, and makes for a pleasurable listening experience. Because the HD650 is slightly dark, it pairs well with the BL's neutrality and clarity to provide immersion into the music. The BL's 3D switch, again, gives tracks a slight treble lift (and more), and also required tuning down the volume knob a notch when applied. However, the net gains seem more track dependent than with the Rockets (on some tracks it worked wonders for soundstage and imaging, but on others recessed/thinned out the mids and did weird things to the imaging – became too diffuse), I would say that the 3D function/crossfeed is generally very well implemented, and worked well for most tracks that have decent mixing and mastering. I would imagine that with neutral or more treble oriented headphones or earphones this boost may not work as well, and might even in fact cause an overemphasis on treble reproduction.

Comparison 1:

BL > Lyr > HE400S

Concero HD > Lyr > HE400S

My HE400S is grill modded and Focus A pad swapped, which helps improve its inherent staging qualities and bass extension. The comparison is done with the switches on the BL off, and set to

“Preamplifier” mode. To be honest, when I first swapped out the Concero for the BL on the HE400S, I was a little shocked at its performance –the tonality was quite similar, and technically it is pretty close. In fact it was so close I was hard pressed to tell the difference at first listen, and it was only after critical listening that I managed to sieve out some small differences. This speaks volumes of what iFi has managed to achieve with the BL, when you get a DAC that competes easily with higher priced DACs in the sub \$1k category.

The Concero HD gets the edge for macrodynamics – bass slams a little harder and the presentation is slightly more energetic. The Concero HD low-end extension also reaches just a step lower than the BL. However, the BL’s bass is hardly far behind, albeit *comparatively* quicker and faintly lighter.

Midrange/vocal resolution and clarity is top notch on both DACs, and I cannot pick them apart. For vocal-centric music both DACs present a highly immersive performance, drawing you into the music. Cymbal work comparatively sounds very slightly tizzier/hotter on the BL, but I’m really nit picking here, and so the Concero gets the nod for a slightly more natural treble timbre. The Concero HD also seems to extend a hair more than the BL but my ears are not as good with treble extension so take this last comment with a pinch of salt.

Staging is a touch wider on the Concero, but seems a touch deeper on the BL. Imaging and separation brings both DACs neck to neck.

I suspect that this result has also got to do with the pairing of the headphone’s sonic qualities, and in this case, the pairing of the Concero HD and the HE400S is more synergistic for my preferences. I conclude that this is a very impressive showing by the BL as DAC.

Comparison 2:

BL > Lyr > HD650

Concero HD > Lyr > HD650

Results are mostly similar to the HE400S, however, an interesting point of deviation worth noting is that I prefer the treble tonally on the BL with the HD650 over the Concero HD. This leads me to conclude that it has to do with DAC/headphone pairing when it comes to tonality. It also squares with what I have learnt in my personal audio journey, that synergy between your gear is the most important thing – getting the most expensive gear is not as important, because upstream gear may not play nice tonally with your current gear.

Comparison 3:

Onkyo DP-X1 > Legend Omega (Balanced)

Onkyo DP-X1 (line out) > BL > Legend Omega

Well, what can I say – naturally as a compact desktop level DAC/Amp offering the BL in SE trounces the Onkyo in balanced, even though the Onkyo does put up very decent competition, and performance is close.

Power mode is on “Eco” and IEMatch is at “Ultra Sensitivity” – that leaves ample room for the volume pot, even though comfortable listening levels for me hover at around the 9 to 11 o’clock markings on the knob.

With Norah Jones through the BL, her voice is slightly more focused with a bit more resolution and clarity. Imaging also gains a little more precision and definition, with some added air in the presentation. Because the Legend Omega is slightly dark in presentation, using the XBass on added too much bloom and decay to the bass for my liking. However, the 3D switch provided pleasing results. The treble gains precision and detail, and with the lift in treble the presentation also gains some air. Again, soundstage most noticeably gains height and a sense of “openness” (similarly, height and a smidgen more width). Notes are a little cleaner and more defined. However, the only thing I noticed is that the mids, although with some improved resolution, seemed to have taken a small step back in presence and is relatively less engaging than just with the Onkyo’s balanced out. On further listening I suspect my mind may be playing tricks on me as it adjusts to a larger stage presented through CIEMs. Somehow in my audio experiences midrange quality and soundstage spaciousness seem inversely proportional most of the time (i.e. the thicker and realistic the midrange, the smaller the stage; the thinner and hollower the midrange, the larger the stage). Of course this is a generalized observation based on the select gear that I’ve had the opportunity to listen to.

With only the 3D switch on now, on Coldplay’s “Birds” track, through the BL, bass reaches down low, and has great attack and impact. If I can summarise the sound, two words I would use are ‘control’ and ‘precision’. I hear a lot of detail in individual instrumental and vocal spaces. The increased soundstage height from the 3D switch really helps with the spatial presentation and definition. Bass is well defined and fairly tight without being too analytical. Midrange is clear without losing much musicality, and the treble sits harmoniously with the rest of the spectrum without sacrificing any detail or sparkle. Tonality is pretty spot-on here, and with the detail retrieval and spatial qualities it’s one heck of a listening experience.

The 3D switch is really beneficial on most classical tracks because of the increased presence of the HF spectrum and the improvements in air and staging. Most of the time it helps immerse one in the music and allows you to zoom in on any single instrument and passage. The balanced out on the Onkyo alone presents treble in a softer manner, and instruments are not so defined. If I may invoke a visual analogy, it’s akin to switch from 4k (BL) to 1080p (balanced out). This difference may prove starker (read: more audibly discernible) when applied to classical music than genres like pop, because of the number of instruments at play. I would also add that the BL has better microdynamics e.g. small volume changes in different sections are slightly more audible than just using the balanced out. The BL also hits slightly harder, so in terms of macrodynamics it also has the slight edge. The BL’s ability to render clarity and retrieve detail without losing musicality really allows the listener a fine experience over the Onkyo’s balanced out alone. Here the BL is definitely the better performer, especially so for classical music lovers.



## Conclusion:

The iDSD Micro BL is truly a formidable device with a fantastic DAC and a ton of functionality, suited to the most sensitive of in ear monitors to the most inefficient and demanding of headphones. Its strengths lie in its neutral yet cohesive and very musical tonality, presentation of space and ability to resolve fine detail. Together with the capability of toggling the presentation with the XBass and 3D switches it is incredibly versatile, presenting the listener with a range of options for pairing with different headphones/earphones with varied sound signatures. I personally really dig the 3D switch, and I feel that it is very well implemented. It works wonders with darker sounding headphones with improvements in air and soundstaging (and sounds superb with the HD650). I suspect its effect varies primarily because it is track dependent (and headphone dependent).

For audiophiles who do not mind the inconvenience of stacking, I would highly recommend the iDSD Micro BL as a (trans)portable option, paired with a DAP like the Sony A15 it will yield wonderful sonic results. As a DAC/Amp desktop solution for someone looking to enter the world of hi-fi I cannot more heartily recommend it. At \$550 I think it has tremendous price to performance value (albeit a little steep if one is only starting out, but worth it), its DAC section easily competing with more expensive DACs in under the \$1k range. Its functionality and small footprint is an added bonus. Bravo, iFi Audio, for a most excellent product!