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# THE ISINE 10 BY AUDEZE

Marcus July 16, 2017



CanJam Singapore 2017 was when I finally got to hear the iSINE range for the first time and to be honest, even with a noisy environment I knew it had a little something that was 'oh so easy' on the ear.

It is a pity I do not have an iSINE 20 to compare with, that honor went to Mike but by all accounts, the 20 does seem to be a step up on the 10.

However, the premise is the same. This is the first full-range planar magnetic IEM in the market, priced at \$399. It is Audeze's "entry level" in the brand new iSINE series, a series with a fairly long soft-launch due to Apple's MFi certification process.

Importantly it is more than just an unusual looking IEM, it is fully integrated into Audeze's ever-growing vision of product integration with the Apple igadget eco-system so it comes with a few "extras".

Those extras come in the form of an integrated iOS app experience that really can make a big difference to the sound. No headphone jack? No Problem, say hello to the iSINE 10.

#### WHAT IS THE PITCH?

# **Technology**

Lots of pitches with the iSINE 10 and these mostly cover the iSINE 20 also at a broad level. First and foremost is the technology with the first full-range 30mm planar driver inside the most unique of shell designs in what is essentially an open back IEM. Much of what is possible with the LCD series has been shrunk down to make the iSINE series a reality.

The concept is new but the intention is a long-standing one and that is to produce essentially an accessible Audeze house sound we all know but at a much smaller level to create an in-ear planar experience. Inside you get the same Fluxor magnet technology with a patented Uniforce voice-coil that is just slightly shorter in length than the iSINE 20, hence the slightly different sound between the two.

All of this is pitched at a starting price of \$399 which makes it Audeze's cheapest product in the market to date and perhaps one of its most accessible products to the wider consumer market that maybe felt priced out of the flagship LCD series.

# **Cipher Cable**

The second is perhaps the longer and more involving pitch and that is the inclusion of an optional Cipher cable which is a Lightning terminated detachable cable capable of delivering 24-bit digital audio through Apple's own iPhone/iTouch and iPad series of gadgets. This is especially relevant with the advent of the iPhone 7 and its lack of headphone jack making BT or use of the lighting port the only option available if you want to listen to audio via headphones.

#### **DSP**

The Cipher cable though is not just a "jack. It also contains an inline amp and DAC as well as DSP technology that interfaces with Audeze's very own app that I believe brings a lot of interesting value to the iSINE series. The ability to customize your sound beyond simple EQ should appeal to both casual Apple enthusiasts looking for something unique as well as long-standing audiophiles.



#### **BUILD**

## Unique

There really is nothing like the iSINE in the market today in terms of form factor. You could argue the Baby Stax SR002 has the same premise. That is to allow the coils to do it's thing outside the ear and simply deliver sound down the nozzle into the ear via the tip.

On that crude comparative basis both the electrostatic miniature and iSINE 10 are similar but even so, the iSINE 10 is just so incredibly interesting to look at in comparison and does not need a transformer amp in tow either making the iSINE 10 much more pocket-friendly and also a good deal lighter.

## Design

The design of the iSINE 10 was done by Designworks, which is the same BMW Group Company responsible for the EL8 series of headphones. A design I quite like even if a bit heavy. The iSINE is a skewed hexagonal shaped hardened plastic IEM with a lattice or web design over the front plate. You know the memes already, no need for me to say which ones.

#### **Form Factor**

The shell is actually quite thin in depth at maybe just 4-5mm whilst the length and width are quite large to fit that 30mm planar driver at 31mm x 35mm. As such the majority of the iSINE 10 sits outside your ear with just a fairly long and angled nozzle intruding with user replaceable tips creating the seal.

#### **Cables**

## **Angled Detachable**

Again, in keeping with Audeze's design ethic right back to the mid to new revisions of the LCD line the iSINE 10 cable is not straight down but rather down and out at a slight angle keeping the cable away from the higher



part of the shoulders. A great idea for headphones but with the iSINE, it looks good rather than totally essential.

Note the iSINE 10 does come with a detachable cable design and the cables have a really nice 2-pin finish that when attached, seamlessly integrate into the overall design of the shells. It is a very slick concept in that respect.

You can elect to buy a \$349 version without the Cipher cable and just the analog but our recommendation is to get the package with both cables, particularly if you use an iPhone or iTouch.

## **Analog**

The analog cable, apart from the blended 2-pin connectors at the top, is actually rather like a mini LCD-2 stock cable. It's black, 1.5m in length and fairly flat rather than rounded or braided as most traditional IEM

cables are. The cable is terminated with a fairly basic but well build 3.5mm gold plated stereo jack with decent strain relief at both ends. The Y-split is a low profile rubber tube with no adjustable chin strap.

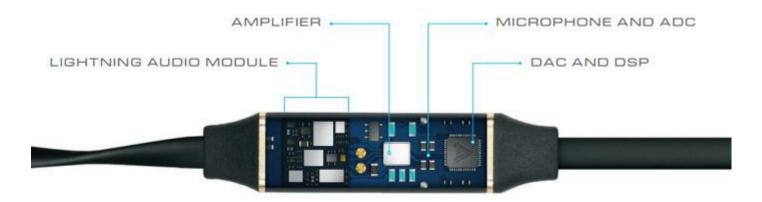
## **Aftermarket Cables**

Interestingly the 2-pin is 0.78mm making it a standard 2-pin termination. In theory, you can swap out the analog cable for an aftermarket "upgrade" if you wish and play around with the sound. In practice, though the swap is not that simple. The female socket is deep-set so wide barrels will block a full connection.

On some cables, such as the Whiplash Twag v4 I got lucky with a clean connection but given the vast majority of cables are worn over the ear and the iSINE 10 is straight down it became a tangled mess due to the memory wire pointing in the wrong direction. Ideally, you need a supply wire with virtually no memory retention and a thin pin tube for it to work properly.

# **Cipher Cable**

The Cipher cable takes the iSINe 10 in a whole new and interesting direction by allowing Audeze to build in their own amp and DAC/DSP inline module as well as interface with their existing Audeze app for iOS all via the lightning port. This is an MFI certified connection also so it has got the Apple seal of approval. It also has an iOS compatible mic and ADC control for playback and taking calls.



The cable is also in 1.5m length and has the same 2-pin connectors for the iSINE 10 driver ports. It differs from the analog with its lightning termination instead of a 3.5mm jack and a huge inline module, (replacing the rubber y-split in the analog cable), that carries all that tech as you can in see in the Audeze supplied picture above.



That module is long and reasonably weighty so it is not as light and easy to work with as the analog cable. However, the module is robustly built and the buttons feel tactile and well made. Strain relief on both ends is again excellent.

## **COMFORT & SEAL**

# **Balanced & Hooks**

Now the weight is just 20g, which is actually lighter than a few more standard shaped IEMs such as RHA's metal injection T-series but such is the size and the relative

skew in balance to the outside these will not stay in your ear that easily without some additional support.

To combat the balance issue Audeze has supplied a number of "hooks" that snap onto the inside of the shell and are designed to go in your ear or over your ear to keep the iSINE 10 steady as well as enhance the potential for a good seal with the supplied tips.

#### Hooks

You get 2 varieties of ear hooks, black and transparent but essentially the same design. Once they snap on they create an 'over the ear' hang with enough flexibility for a wide variety of ears.

Depending on where exactly you snap them on though the experience can be comfortable or painful. I find that moving them to a slight back angle increases the comfort level and forward



slightly increases the discomfort level. Also, the slight thinness of the hooks provides a slightly focused pressure point along the beam which can dig into the ear unnecessarily depending on that angle.

They also seem destined to either get lost or break at some point in their life, these types of accessories generally do. I would love to have seen a small compartment in the carry case underneath specifically to carry them also to prevent losses.



#### **Earlocks**

These are designed to apply pressure points in a comfortable fashion inside the ear rather than over the ear and were designed in partnership with tactical gear company Surefire. They are made of a more supple rubber material and smaller than the hooks.

These are super comfortable to use once you work out how to use them. I still prefer the security of the hooks, call me old fashioned, but the 'Earlocks' create less pressure and I do not feel their presence as much.

## Open Back

This is an entirely open back design and by that I mean you will get little or no isolation compared to regular IEMs. Those coming from Baby Stax or EAMT designed oBravos will understand that setup so do not expect to use these in the hope you can block out background noise, you simply cannot.

I am a huge fan of open back designs, they bring a whole new dimension in sound quality to IEMs, quite different to regular IEMs which are the equivalent of closed headphones in some ways.

## Seal & Depth

However, much like IEMs you still need tips with the iSINE 10 for a few reasons. First, you need a certain level of seal to deliver the full audible range of the iSINE 10. If you break the seal you lose body and bass quickly. Second is the depth of the nozzle needs a little bit of steadying and the tips help with that. Note the pics show a smooth tip, the new tips now shipping are grooved for better grip.



# **ACCESSORIES & PACKAGING**

The iSINE 10 comes with a fantastic set of accessories wrapped in a very professional retail package. The whole portability design is well thought out from the executive styling of the nylon thick case, the inset holder for the drivers and the wrap around cable thread.

Just to understand why the iSINE 10's are inset as they are in the travel slide out holder it is not simply aesthetics. Inside each driver is a fairly powerful magnet so if you place them next to each other they will have a life of their own which would not suit a typical carry case. Using this method keeps the magnets fairly peaceful during transportation.





Aside from the executive carry case you get a user guide and warranty on a USB stick, your cables (can be

just analog or both depending on the option you purchase) as well as the certificate of authenticity.

Inside a single plastic bag you get the remaining selection of accessories including the two sets of ear hooks and Earlocks as well as a shirt clip and a range of single bore silicone tips in large, medium and small size. You also receive a small cleaning brush for use with the tips and keeping the nozzle free of wax and dirt after usage.

#### **SOUND IMPRESSIONS**

# **Tonality & Presentation**

The tonality of the iSINE 10 is variable to some extent, particularly with the two cables and what they can do. At heart the iSINE 10 is a very musical sounding presentation with a very airy and spacious but definitely a planar sound primarily due to the open design. This marks it out as something quite different to the majority of other IEMs out in the market today. The key difference between the two cables is really the clarity and top end extension.

#### **Analog**

With the analog cable I found a warm to natural but lively tonal quality that shifted slightly depending on the source in terms of richness but otherwise delivered a fairly distortion free experience. Staging is wide and spacious with an out of head feel but it lacks a little height with the analog cable which presents more of a bass to mid-centric quality to its presentation than the Cipher cable.

#### Cipher

The Cipher cable, with its DSP magic, pushes forward the treble, brings in a little bit more dynamic contrast, particularly with vocal spacing and introduces a bit more sub-bass presence and impact.

If the analog cable is the easy going cable, then the Cipher is the more energetic and possibly the more balanced of the two when compared side by side from a compatible iSource. The analog cable really comes into its own when you scale up and being true to its planar design the iSINE 10 can take decent power and sound better as a result.

Personally, I think the immediate impact will always be the DSP baked Cipher cable with its perceptibly more balanced presentation but matched with the right amp and source I think the analog can do some great things also.

## **Bass**

With the analog cable, the iSINE 10 low-end was impactful, clear and well defined with excellent sub-bass extension and presence.

It is perhaps weighted more to the sub-100Hz sub-bass performance so kick drums have a solid impact and weight but the rest of the curve didn't exhibit any signs of mid-bass bloom or over cooked warmth muddying up the excellent level of clarity in the upper bass and lower mids.

Overall it has a fairly linear and clean sounding performance from 100Hz onwards with a fairly gentle drop to the mid-range. The fundamentals also are excellent giving the iSINE 10 a healthy dose or PRaT and injecting some welcome power and musicality into lower pitched instrumental notes.

#### **Cipher Bass**

Bass performance using the Cipher cable is far more aggressive with a definite dB uptick from the sub-bass up to the mid-bass response. This is slightly less linear in presentation but at the same time more engaging and dynamic sounding. Bass fundamentals with the analog cable were good, accurate and weighted but the Cipher cable sounds much more planted and visceral.

If you want some additional depth to your staging then use the Cipher cable. You lose none of the speed and detail in the process which makes it more ideal for metal and EDM.

## Mids

I really love the timbre of the iSINE 10 mids on the analog cable. It is a perfect match to hard rock and metal with a crunching full blooded but clean sounding lower midsection, just perfect for a Les Paul to show off its rhythmic magic.

It doesn't quite have the level of resolution and control of some of the TOTL multi-BA designs out there and it lacks a little in the way of holographic imaging but it has excellent width with a generally more forward mid-range performance akin to a live small concert hall feel.

One thing for sure this is not an analytical or lean performance, it is highly musical and at times euphoric sounding. A hint of warmth combined with solid fundamentals adds a fantastic sense of power to its instrumental presentation without ever coming off as overblown.

Vocals vary a little for me and again this is related to source and power and at other times it is really the source track. On some brighter mixes using the iTouch the analog cable would slip in a bit of sibilance on higher pitched vocal attacks, and at other time sit sounded wonderfully natural and smooth sounding.

# **Cipher Mids**

Using the Cipher cable the mids sounded a little cleaner than the analog cable and also with a little less warmth in the timbre but it still had that authoritative lower mid-range power, perhaps even more so with the sub-bass dB increase.

Instrumental layering and separation are a little clearer than what the analog cable offered, particularly using an iGadget such as the iTouch. The analog cable is capable of a superior performance on better amps but on this platform, the Cipher cable produces the more holographic staging quality and superior imaging.

Vocals have slightly better spacing, sounding a little more formed also. The better treble response doesn't push down quite as much on the upper mids as the analog cable tended to do on the iTouch.

#### **Treble**

Treble on the analog cable is a little more relaxed sounding than the Cipher cable with less brilliance emphasis and a slightly harder tone particularly when transitioning from the upper mids and into the lower treble.

That boost of energy moving up from the vocal range peaks around 5-7k though not by a huge margin so it doesn't sound hot. It is more of a slight lack of body combined with a partial overtone that can make its presence felt at times on cymbal crashes, tambourines, some higher pitched female vocals.

Some of this may be power related though. Feeding a better amp signal using the analog cable with the Chord Mojo, which packs a decent punch, did fatten up the lower treble body a bit more than an iTouch amp and the resulting percussion timbre, whilst a touch glassy still, sounded a lot more natural and pleasing to the ear.

## **Cipher Treble**

The DSP inside the Cipher brings the whole treble response on the iTouch further forward than the analog cable and adds a bit more substance and note body in the process.

Upper mids to lower treble is still energy dominant and it still has a little hardness but there is better final octave extension beyond 8k that adds to an airier sound with a bit more sparkle.

#### **MATCHABILITY**

# Efficiency

If you are using the Cipher cable you will be limited to an igadget of some sort so the internal DAC/Amp from the iSINE 10 cable will look after everything. This is a noise free experience with decent gain and will drive the iSINE 10's pretty good actually and certainly one of the better pairings I have had with an iTouch.



# DSP/EQ

The baked in DSP also lifts everything considerably beyond jacking in with the analog cable as described in our sound impressions. The use of the Audeze app with its real-time EQ functionality is also a handy edition. I do like it, it lifts the gain a touch and adds some impressive responses particularly with the bass control which I sometimes turn to using this pairing.

# **Analog Power**

With the analog cable on an iGadget, I thought it comparatively weak sounding and lacking in upper mids and lower treble body. This is a planar driver after all and even at 16 ohms and 120dB rating, the iSINE 10

can still suck up plenty of output power, especially if it is matched with gain control that is not super aggressive. Basically with the analog cable pair it with a quality DAP or portable amp to make it shine.

#### **ANALOG PAIRINGS**

# The Bit Opus#3

\$849

This is a relatively smooth sounding pairing in low gain with a mid-centric bias. You can elect also to switch up to high gain without any present noise.

The amp though in the Opus#3 is not the strongest at 140mW x 2 compared to equivalent DAPs and portable amps so it tends to exhibit a slightly glassy upper mids and lower treble on some percussive passages and a hint of sibilance on the upper mids. This is similar to what I found using the analog cable with an iGadget setup though the details levels are much higher and you do get a more refined presentation.

# **Shozy Alien+**

\$435

I tended to prefer using the mid gain setting on Shozy's new Alien+ DAP just to get a bit more gain control on the rotary analog pot. The iSINE 10 really does much better with superior power output using the analog cable and in the case of the Alien+, it is superior to the Opus#3 for power.

This is a clear and natural sounding response with a smoother vocal delivery and outstanding detail retrieval. It is, however, more neutral sounding than the Opus3# and in some instances that little hard sounding lower treble creeps in on some brighter or busier tracks.

Overall though I prefer the Alien+ stock sound compared to the Opus#3 with the iSINE 10. Graphical EQ on the Opus#3 can bring out some areas that the Alien+ can't though such more low-end fullness or a more subdued lower treble.



## Astell & Kern AK380

\$3,499.00

Noise and power wise the AK380 does perfectly fine with the iSINE 10 and in fact, it is one of the most refined pairings out of the DAPs I had tested. It will push up the gain a touch at around 80 - 95 which is quite a bit higher than a lot of other IEMs bar the RHA 1500hm monsters.

Considering both have similar DACs it is not that surprising that the AK380 has a very similar tonal presentation to the Alien+. The main differences for me with the AK380/iSINE

10 is just a touch more body in the upper mids and lower treble than the Alien+.

The AK380 also has a softer attack on the iSine 10 but not as soft sounding as the Opus#3 so you get decent 'bite' in percussive sequences. Vocals on the iSine 10 are also a bit more forward with the Alien+ than the Ak380 and sound a bit more lively.

# Cayin I5

\$399

The i5 has a bit more power than the Opus#3 also and here it starts to cope up with the trace of sibilance found in the weaker Opus#3 producing a more natural sounding upper mids and lower treble. It is still energetic but not as brittle sounding.

This is a musical match with a more aggressive low end than the Alien+ or the Opus#3 but with less detail and texture than the more refined AK380.

Custom EQ settings using the I5 worked really nicely with 6dB sub bass increase followed by a linear drop of 4dB gradually to 1k. Then a 2-4k hump with a gradual drop off post 5k as well as a tiny bump at 12-14k. This played really nicely on the iSINE 10 with trance, EDM, and modern pop/rock and provided some excellent depth to the iSINE 10 performance.



# **Bakoon HPA-01M**

\$1295

This is some serious magic sauce and I love this pairing. It fattens out the treble note body of the iSINE 10 with the analog cable but keeps everything else tight and well defined.

This is a seriously smooth and quick pace presentation with excellent resolution, zero noise, and impressive dynamics. Be warned though you do need to high gain to get the best level of gain control which is similar to how the LCD series full sizes planar headphones worked with this portable beast.

I actually find this a more natural sounding and refined presentation than the Cipher cable on the iPhone. If I want some EQ I can just input it from whatever source I am using with the Bakoon.

The HPA-01M still seems to be king of portable amps for planar pairing and its impressive credentials for the LCD range translate easily to the iSINE 10.

#### **SELECT COMPARISONS**

# oBravo ERIB-5a

£319.00

## **Technicality**

The ERIB-5A is a hybrid planar IEM in a more traditional build design with a single planar tweeter and a dynamic driver. It is far more power hungry than the iSINE 10 at 16 ohms and 102dB sensitivity rating and generally speaking I find I am powering up the oBravo on big amps like the Bakoon HPA-01M and even the Cypherlabs Sustain84 to get the most out of them.

In terms of form factor, the oBravo's are more traditional in design and as such is a comfier over the ear fit than the iSINE 10. They also come with a balanced cable option, something I would like to see in the iSINE range.



## **Tonality**

Tonally the iSINE 10 outperform the ERIB-5a by a considerable margin. Staging is more open and spacious on the iSINE 10 with an out of head experience making the ERIB-5a sound a little one-dimensional and "small" in comparison. Only the ERIB-5a's smoother upper mids and better lower treble body comes in slightly ahead due to its better body but even then the detail is just a bit lacking for me.

The oBravo's low-end response is also a reserved and not as deep or powerful sounding as the iSINE 10. Vocals on the oBravo though are natural sounding and a bit more forward than the iSINE 10. However the details and dynamics are just not as enticing or engaging, you really do have to pump the power in the ERIB-5A to get close.

# **Baby Stax SR002**

\$490

## **Technicality**

If any IEM even comes close to remotely resembling the iSINE 10 and its basic design then it is the Stax SR002.

The shape maybe a bit more vanilla and just stick in your ear rather than use detachable hooks but the shell design is similar. You can elect to attach a headband on them though which does help. In short, they are an open design electrostatic IEM but like the iSINE 10 planar IEM, they sit outside your ear with a nozzle and tips to deliver the sound, seal, and level of comfort.

Though an improvement on the SR001 classic, the SR002 is still an uncomfortable fit for me with pressure placement still relatively off and the nozzle a bit thicker. The iSINE 10 is a better design in that regard and more comfortable in the ear. You still need a good set of tips to work with the SR002, much like the iSINE 10 a lot of the seal and final comfort levels will depend on the tips. Isolation on both is low to non-existent.



## Tonality

Tonally both have good mids but overall these are very different signatures. The electrostatic sound is at its warmest and most mid-centric with the SR002 but it still lacks height and depth as well as the sheer physicality compared to the more planted iSINE 10.

The bass however on the Stax is fast and very detailed, somewhat faster than the iSINE 10. On balance, though I would take the substance and body of the iSINE 10 bass response over the speed of the Stax for the power and rumble it

can deliver. The same pattern for the mids with the Stax favoring a clean and detailed presentation with very precise control and imaging over the iSINE 10's richer timbre, better fundamentals, and sheer musicality. The Stax has a cleaner less brittle lower treble, I find the upper mids and lower treble to be just a bit more refined than the iSINE 10.

The Stax does have a nice spacious and smooth delivery much like the iSINE 10 but lacks that depth and headroom and even the relaxed analog cable of the iSINE 10 bests it for extension. For genre matching, I would take the Stax more for a roll on audiophile recordings and the iSINE 10 for modern rock, metal, and EDM.

## **OUR VERDICT**

Mike scored the iSINE 20 at 8.5 but without the benefit of listening to the Cipher cable and opening up the possibilities there with the Audeze app and iOS integration. Personally, I think if he had he would have scored the iSINE 20 a bit higher knowing how he thinks which is why it is important you do buy the package with both cables.

By all accounts, the iSINE 20 is a superior audio experience to the iSINE 10 which piques my interest because I actually think it is the iSINE 10 that should get the 8.5, not the 20. I would assume we are talking 8.8 or perhaps higher for the iSINE 20 but I won't go there until I hear it for myself.

On its own, the iSINE 10 is a truly unique experience as an IEM. Sure, it is open back and for that, you have to take into consideration the total lack of isolation. Where and when you will use it is something I urge you to consider. Having said that, open back designs and planar ones at that, are a joyous experience and

the iSINE 10 is no different and stands as a very welcome introduction at a keen price. The fact you can throw in the Cipher cable and produce something audio worthy and exciting on an iGadget is the icing on the cake.

For me, though, I am plenty happy with the experience out of some planar friendly analog amps with a great DAC. It is a fun musical and very spacious sounding experience that I really find hard to compare to much else out there. At \$399 these are a bit of a steal.

## **TECHNICAL SPECIFICATIONS**

- Style In-ear, universal fit
- Transducer type Planar magnetic, semi-open
- Magnetic structure Fluxor
- Magnet type High-grade Neodymium
- Diaphragm type Ultra-thin Uniforce
- Transducer size 30mm
- Maximum power handling 3W
- Maximum SPL >120dB
- Frequency response 10Hz 50kHz
- THD <0.1% @ 100dB</li>
- Impedance 16 ohms
- Cable type non-microphonic
- Dimension 31mm x 35mm
- Weight 11g (per side)

