

Review of EAT B-Sharp turntable  
by Ken Kessler, 08/2020 on :



## EAT B-Sharp Turntable



Despite shedding all 'non-essential cosmetic adornments' EAT's B-Sharp still cuts a dash in the world of plug-and-play turntable solutions. Does it sound as slick as it looks?

Conditioning has, I believe, led the cynics among us to assume that 'plug 'n' play' is a sexy euphemism for 'lowest common denominator' or 'user-friendly-enough for anyone to appreciate'. After all, this is what freed normal souls from going crazy with pre-USB computer peripherals. Today, it welcomes newcomers to vinyl, referring almost exclusively, in a hi-fi context, to turnkey turntable/arm/cartridge packages, because every other audio source has always been plug 'n' play.

While EAT's £1198 B-Sharp turntable is nearly as plug 'n' play as it gets, this is still a true audiophile item, with all the tweaking and upgrading potential usually eliminated by sealed systems. Of course, no turntable/arm/cartridge since the days of the Technics SL-7/SL-10 is truly straight-out-of-the-box plug 'n' play because you have to fit the counterweight and balance the arm, though market leader Pro-Ject has come as close as any to eliminating even that stage of set-up.

The B-Sharp, offered in gloss black or white, with or without a pre-fitted Ortofon 2M Blue MM cartridge, requires less assembly than an IKEA bookshelf, while the instructions are as thorough as a LEGO kit.

## Plinth Of Two Parts

A proponent of the school established years ago by Rega, the B-Sharp does without a spring-suspended subchassis requiring complex adjusting but differs from the Prelude, the EAT model below it and which resembles a Rega Planar 3 'slab', in the design of its plinth. This is a two-part, low-profile affair with an MDF top-plate that rests on thermo-plastic elastomer (TPE) cones within in a frame. This frame plays host to the AC synchronous motor and also features three adjustable feet, which can then be used to level the deck.

Follow the instructions and set-up is a mere ten minutes. It's a familiar drill, and every necessary tool is supplied. Remove transit screws. Slide sub-platter/bearing spindle into place. Fit belt, main platter and felt mat. Fit counterweight to arm, balance and apply tracking force with the supplied Pro-Ject stylus balance, or do one better and use an aftermarket device. Fit dust cover and level the deck.

Connect the high-quality, supplied leads to the nicely-made phono sockets at the back and connect the earth lead. Connect to your phono stage or preamp. Plug in the external mains adapter. Put on an LP, screw-down the clamp and you're away.



Yes, you read 'high-quality, supplied leads' and 'clamp' and 'stylus balance' – this really does come with everything to get you up and running, aside from a spirit level. The threaded LP spindle and screw-down, aluminium clamp preclude an extra purchase, the felt mat is probably the most popular type out there, and the leads look like they cost £150 on their own.

## Infinitely Tweakable

And yet designer Jozefina Lichtenegger is such a hardcore audiophile and knows her clients so well that she has ensured the deck is still infinitely tweakable. It starts with the arm, which looks too complex to be fitted to so affordable a platform. It features a conical carbon fibre tube, with aluminium headshell, a 'cardan' bearing in the horizontal axis, with hardened tips sitting in a 'zircon bowl', and ABEC7 ball-races for the vertical axis. The counterweight is damped with the same thermo-plastic elastomer used to damp the (underside) of the alloy platter and support the MDF top-plate.

While I first used this arm with the rather fine Ortofon 2M Red [HFN Oct '08] – and I do not recommend buying the deck with pre-fitted 2M Blue cartridge, as it costs more than buying the cartridge separately and fitting it yourself – I was eager to listen to it with a cartridge surely destined for the B-Sharp: the EAT Jo No5 moving-coil at £799 [HFN Dec '18].

OK, that seems a lot to pay for a cartridge in a £1200 deck, but the B-Note arm is exceptionally welcoming, with fully-adjustable VTA, SRA and azimuth, and it is easily capable of dealing with cartridges way above its price category.

While the nylon thread's loop for the anti-skating is a touch fiddly to attach, the system works perfectly, and adjusting the little weight to one of its three positions is a matter of sliding it along. Attesting to the universality of this arm, EAT can also supply a heavier insert for the counterweight, held in place by magnets, to accommodate extra-heavy cartridges. Speaking of magnets, the armrest contains one to hold the arm when in the resting position.



### **Oozes Authority**

Attesting to how this deck can operate 'way above its pay grade', I used it initially with a system of its price sector, an old Cambridge A1 integrated amp, JBL 4321M speakers and Pro-Ject Tube Box DS2 phono stage. When the Vinnie Rossi L2 'Signature Edition' integrated amplifier arrived, I couldn't resist feeding it into that august unit, auditioned through Falcon Acoustics LS3/5as [HFN Dec '18]. Trust me: the B-Sharp performed admirably.

It started with an album that seems to have slipped past too many, when it is, indeed, an historic musical event and something to be treasured. Stills & Collins' *Everybody Knows* [Cleopatra/Sony 19075801061] finds the former lovers reunited after a half-century, performing a mix of classic rock and folk-rock numbers. Aside from the momentousness of the occasion – I suppose you have to be over 65 to appreciate it – the pairing is a delight to match the Lou Rawls/Dianne Reeves duet of *At Last* for contrasting voices.

Stills' voice, always distinguished by a minor rasp, is showing the years, and he has acquired a slight impediment. It is still rich and characterful, while Collins' remains the model of distaff vocal clarity. At the risk of delving into the sort of pretence best left to Spinal Tap bassists – you won't wrest from me any 'fire and ice' analogies – the two singers manage to juxtapose textures so disparate that only an audiophile would consciously listen to them as a measure of a sound system's capabilities. For the B-Sharp, with either Ortofon 2M Red or EAT Jo No5, both were conveyed with every nuance intact.

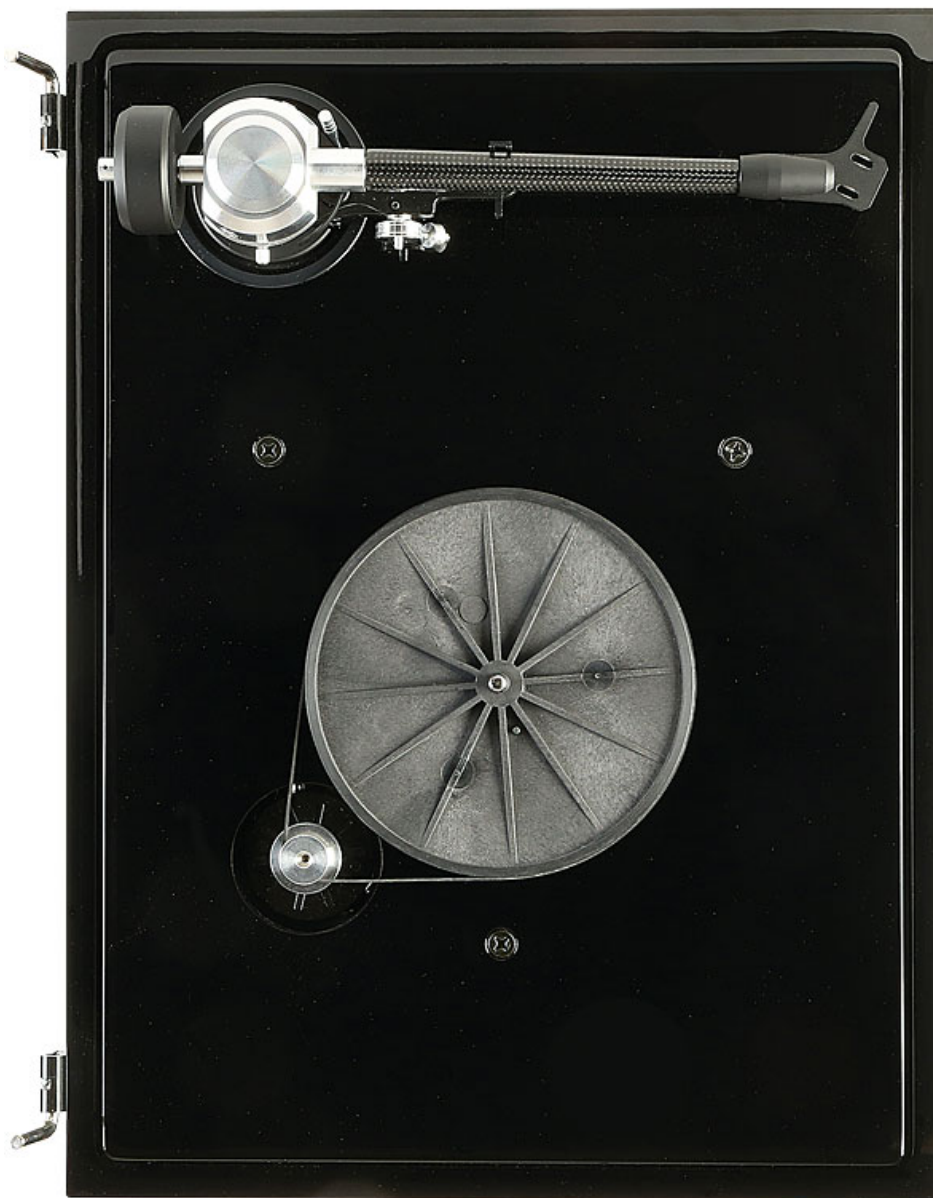
What proved so marvellous about the experience was hearing how they blended and complemented each other. They shared a clearly defined, if studio-devised space, while the sound was coherent regardless of the accompaniment. Notable was the acoustic guitar work on their magnificent interpretation of Tim Hardin's 'Reason To Believe', delicate, airy and just 'woody' enough to bely the mid-fi price sticker. This turntable oozes with authority.

Turning to something more raucous, and far removed from the gentility of Stills & Collins, was the Tina Turner album *Simply The Best* [Parlophone 0190295378134]. Her remake of 'Nutbush City Limits', while not a patch on the original, still exudes power and the woman is incapable of whispering even when performing a love song. This track, as well as the revamped 'River Deep, Mountain High', is a cornucopia of sounds, the kind of recording which suits a quickie demo in a hi-fi store on a Saturday afternoon because it lacks only the kitchen sink.

Attack could be assessed through powerful percussion and ferocious guitar transients, while the bottom-end was full and responsible for impressive weight, even through small two-way speakers.

### **Miracle Maker**

Another attribute of the B-Sharp is its scale and openness, Tina's most deliberately epic cut – 'We Don't Need Another Hero' – was positively majestic in its presentation, and the live version of 'Addicted To Love' had all of the touches one needs to recreate a concert atmosphere.



Ultimately, I turned to the Yes album *Fragile* [Mobile Fidelity UD1S 2-012] because 1) 'Roundabout' is one of those all-time great audiophile demo tracks with near-universal approval, 2) One-Step pressings are unfailingly quiet and 3) I had to hear how the B-Sharp handled an LP that cost 10% of the deck itself. I wasn't merely impressed: I was overwhelmed, as the previous play of this LP was on the TechDAS Air Force III Premium [HFN Jun '19], and – as expected via that source – it bordered on the life-changing. (I only say that because I am old enough to recall the first time I ever heard *Fragile* in late '71.)

The EAT B-Sharp managed to capture what I will define, through an admittedly, wholly arbitrary measure, around 85% of what the TechDAS front-end delivered. The latter comes in at a price of over £60,000 for deck, arm and cartridge. Even if you fully accept the Law of Diminishing Returns, the B-Sharp's delivery is thus nothing short of miraculous.

Above everything, 'Roundabout' features exceptional details that listeners love to focus on, all the while marvelling at what is a succession of heart-stopping transients. The opening swell, the delicate guitar work – the build-up promises a musical 'happening' rich with ornate keyboard figuring, robust percussion, lush harmonies and just about every sonic trope that would help define prog-rock. This track, however, eschews the pomposity that would render the genre a self-parody. And if there's a reason that the B-Sharp turntable does so well with the complexity of 'Roundabout', especially Rick Wakeman's virtuoso work at the organ, it must be Jozefina Lichtenegger's overriding passion for classical music – her gauge for everything. It shows.

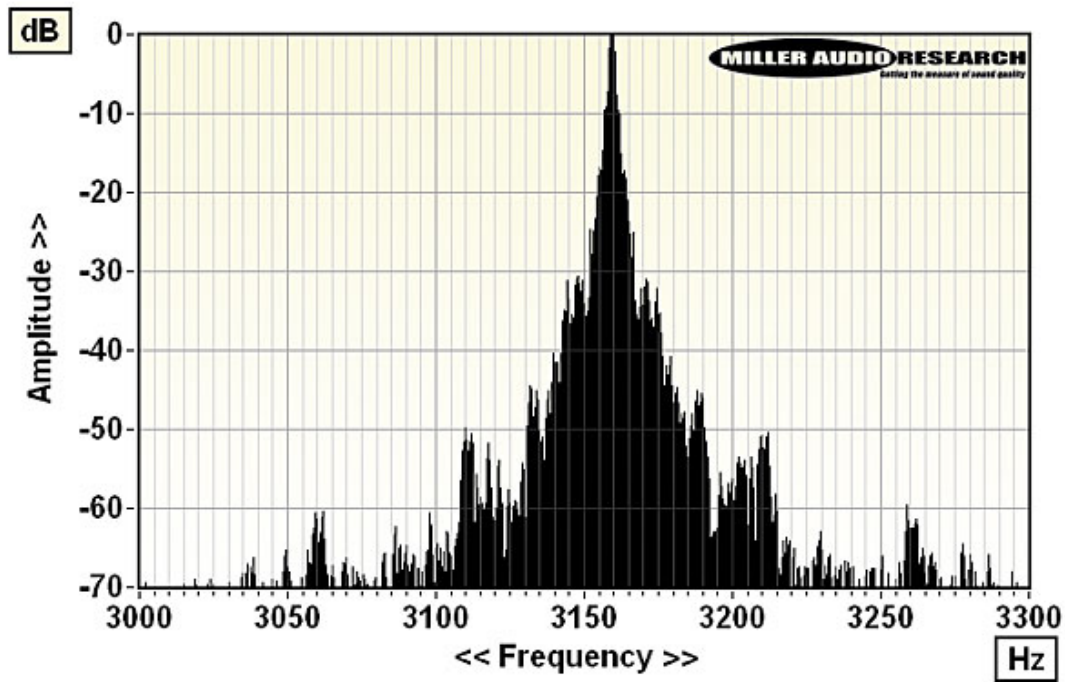
### **Hi-Fi News Verdict**

When one lives with costly gear while reviewing something affordable, it takes self-discipline to judge the latter in context. The EAT B-Sharp, however, is so musical, user-friendly and resistant to obsolescence that I had to keep reminding myself of its price. For novices, it is an elevated place to start. For veterans on a budget, it's free of compromise and I'll now use one as my sub-£2500 reference.

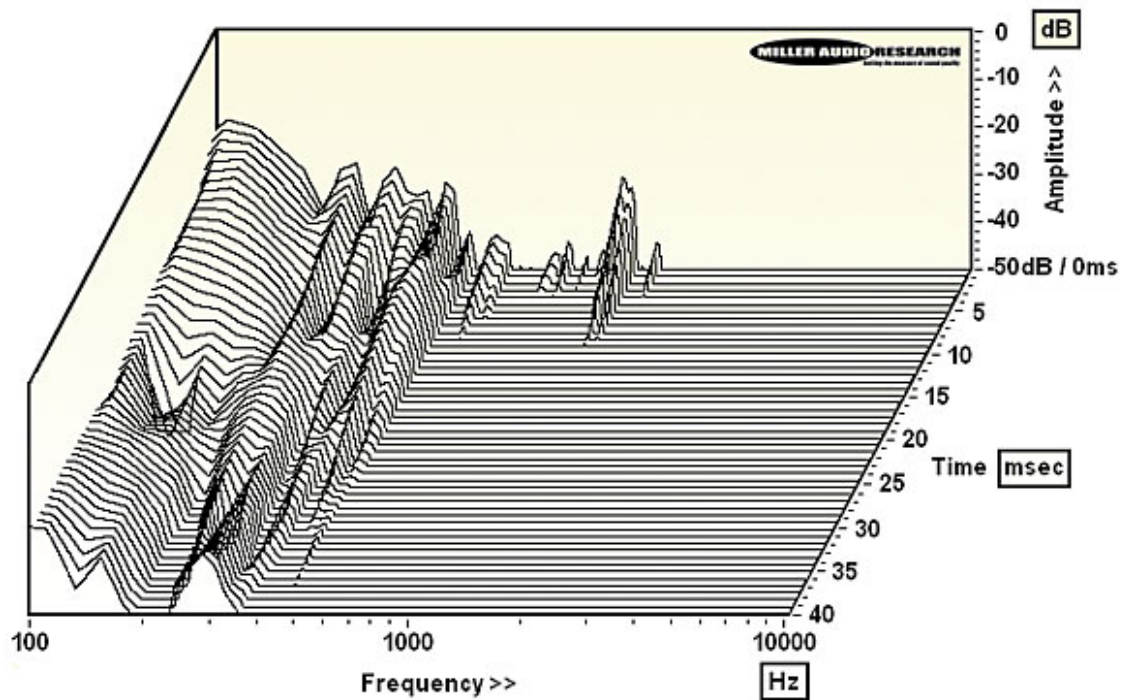
### **Lab Report**

Measured directly through its relatively basic hardened steel bearing, rumble is a little higher than measured with EAT's C-Sharp [HFN Feb '15] at  $-67.3\text{dB}$  (DIN-B wtd, re.  $1\text{kHz}/5\text{cm}/\text{sec}$ ). However this figure improves substantially to  $-71.3\text{dB}$  (through groove), and further still to  $-72.1\text{dB}$  with the lightweight screw-down clamp, thanks to the isolation afforded by the felt mat and the polymer-damped alloy platter. Also, the lightweight plastic sub-platter and 1.85kg main platter assist in the swift  $\sim 4\text{sec}$  start-up time and while the (Pro-Ject) M-500 'synchromotor' runs slightly fast at  $+0.3\%$  its speed stability is truly excellent. So, peak wow is a very low  $0.02\%$  [see sharp central peak, Graph 1] while flutter effects are limited to sidebands clustered around  $\pm 12\text{Hz}$ ,  $\pm 28\text{Hz}$  and  $\pm 50\text{Hz}$ , the latter contributing to a peak-wtd  $0.04\%$ .

The partnering B-Note 9in tonearm is clearly derived from EAT's earlier fat-tubed carbon fibre models, including the 10in C-Note that featured what EAT describes as a 'traditional Cardan bearing', or pin and block unipivot. The B-Note offers similarly good stability and low friction ( $<10\text{mg}$ ) in both planes but with a simpler bias mechanism and slightly lower 12-13g effective mass, enhancing its compatibility with popular pick-up partners like the Ortofon 2M Blue. The B-Note's tapered carbon-fibre tube and bonded alloy headshell have a main bending mode around  $110\text{Hz}$  [see Graph 2, below] with another mode at  $235\text{Hz}$  and harmonics/twisting resonances at  $280\text{Hz}$ ,  $300\text{Hz}$ ,  $345\text{Hz}$ ,  $375\text{Hz}$  and  $410\text{Hz}$ , all quelled by the tube's internal damping (carbon tubes can exhibit high-Q resonances if undamped). The sharp mode at  $1.2\text{kHz}$  seems to be linked to the alloy headshell and fingerlift, but is short-lived. **Paul Miller.**



WOW AND FLUTTER RE. 3150HZ TONE AT 5CM/SEC (PLOTTED  $\pm 150$ HZ, 5HZ PER MINOR DIVISION)



CUMULATIVE TONEARM RESONANT DECAY SPECTRUM, ILLUSTRATING VARIOUS BEARING, PILLAR AND 'TUBE' VIBRATION MODES SPANNING 100HZ-10KHZ OVER 40MSEC