



Kii Three BXT

Thursday, January 26, 2023
Jason Kennedy

The phrase 'game changing' is bandied around a little too liberally, but every now and then a piece of kit comes along that most definitely warrants that definition. The Kii Three BXT active DSP loudspeaker system is such a product. When I reviewed the Kii Three standmount four years ago I was mightily impressed by a design that was so cutting edge, and a sound that was extraordinarily transparent and revealing. The Three was joined a couple of years ago by the BXT, which at first glance looks like a subwoofer system that also forms a stand for the Three. But that's because we have never seen a speaker system like this before. The BXT does give the Kii Three extra bass extension, but it is not a simple sub system. Instead, it integrates with the Three and the pair combine to become a single floorstanding loudspeaker.

The Kii Three BXT system is controlled by a single DSP crossover that allocates signal to its array of 14 drivers which are powered by 3,500 Watts of Purifi Class D amplification. To my knowledge, nobody has ever put 14 drivers in a loudspeaker of this size, but they do things that few other speakers can. The processor is programmed such that dispersion pattern is a cardioid shape when viewed from above. That is, there is very little output to the sides and rear of the system. This is not something that can be achieved with conventional loudspeaker design, which controls directivity passively through the shape of the cabinet and by waveguides around the drivers. In these cases, energy becomes omnidirectional as frequency reduces: the lower the notes, the harder they are to project from the front of the speaker alone.

The Kii Three uses its DSP to create a virtual point source, which makes it sound as if all of the signal is coming from one driver. When the BXT is added, the combination behaves more like a line array, which has the benefit of reducing reflections from the floor and ceiling. It drives the room more efficiently so that you can have higher volume without the colourations or the sense of strain/loudness that usually comes with it.

Kii are a bit cagey about the exact construction of their cabinets, but the painted parts are a high-density PU (polyurethane) while the black anodised top, bottom and sides are aluminium. They contain 12 identical looking 6.5-inch bass drivers with aluminium cones, a

Kii Three BXT

similar 5-inch midrange unit and 14 channels of Class D amplification. The tweeter is a one-inch unit but like the other drivers no information is given about its exact nature.

The presence of both DACs (the low, mid and high drivers have their own converters) and amplifiers within the loudspeakers and the Kii Controller (providing volume control) means that you only need a source to play music, and that can be analogue or digital. In the case of the former the signal goes straight from say the phono stage to the left and right loudspeakers where there's a single XLR input. Given that the signal cable needs to be longer than usual,



balanced cables are probably the best way to go. With digital sources you need either a USB, coax or an optical output to connect to the Controller. I used the USB option as that's the way I usually send signal from streamer to DAC. But this speaker is so revealing that it would have been very interesting to have tried the alternative routes as well. Although it is equipped with an IR receiver, the Controller isn't supplied with a remote, however it can be programmed to work with most varieties, including the Apple one that controls the Townshend Allegri preamp that is usually in my system.

It is possible to use this system without the Kii Controller via the XLR input (which is also an AES/EBU digital input) but you would need a DAC with a volume controlled digital output and that's a very rare beast. Alternatively, the speakers can be controlled with an analogue preamp, but the Controller would be required to set this up and not using the digital input means going through an extra stage of A/D conversion which would be crazy with a digital source.



Kii Three BXT



Set up

Setting up the Kii Three BXTs is a case of fixing the machined aluminium base to the underside of the BXT section, preferably after you've attached feet or spikes, then sliding the Kii Three into a milled aluminium shoe atop the BXT. It locks into the latter which makes the whole assembly a solid 50 kilo plus tower. Not being a fan of spikes, I took up distributor Sound Design's offer to supply Isoacoustic Gaia isolating feet, which were threaded into the base with the aid of an adaptor. Later on these were removed and I put the system on Townshend Seismic Podiums which proved very worthwhile.

It's possible to adjust the output of this system in two ways with boundary and contour settings. For the former it's a case of dialling in the distance to the rear and side walls. Contour is like a tilt style tone control that allows a part of the band to be chosen and increased or decreased. Essentially you choose top and bottom frequencies and then adjust output in small increments. This needs to be done with the Controller but it would be fabulous if Kii were to create an app so that it could be done from the listening seat.

Sound quality

I tried three streamers with these speakers and unsurprisingly the most expensive was clearly the best. It was interesting working from an Innuos Pulsemini to Auralic's Aries G1.1 and finally the Lumin P1 that I had to hand. With every upwards move there was a clear and tangible increase in resolution and naturalness. The Kii speaker system is explicit about the source components and everything around them to a degree that is very rare indeed.

Some have found the Kii Three BXT system to be a bit bright or shrill and credited this to the use of DSP and Class D amplification but experimentation with sources, cables and ancillaries like noise reducing filters and network switches suggest that the shrillness is just a reflection of the incoming signal. The Kii system is unflinchingly revealing. It's easy to hear why these speakers are also sold as studio monitors; they are extremely transparent to detail and will let you know about any shortcomings in the ancillary equipment without hesitation. I found that upgrades to network cabling around the streamer and server plus a change of network switch totally transformed the results from being a little bit exposed through the mid and top to being as smooth as Teflon. Given that there are short cables between BXT and Three elements it would be intriguing to hear whether better quality connections here would also be beneficial.

With a less than clean source it's easy to hear why other reviewers have found the mid and top to be slightly exposed. This speaker is not voiced to smooth over problems with the incoming signal, but I found that the more I did to improve the source the better the sound became, and it became extremely good in the process. It shares some characteristics with another active loudspeaker brand in ATC. They too can sound slightly aggressive if the partnering equipment isn't up to par. It's a typical monitor characteristic and will appeal to

anyone who really wants to hear recordings in all their glory.

I played a fair amount of vinyl through the Kii system as well. Here the phono stage was initially connected directly to the loudspeakers, but I don't have a particularly good interconnect that's sufficiently long (3m) so used an ancient example with XLR adapters on the end. This made the vinyl sound less real and transparent than digital sources. So experiments were done and I found that using my regular Fractal interconnects to the Townshend Allegri Reference preamp and then hooking that up to the Kiis with balanced cable worked a lot better, in fact it



was magnificent.

Vinyl is magic even when the cartridge is cold, it encourages level like nobody's business because there's none of the usual amp/speaker colourations and compression, it just delivers oodles of detail and surprising dynamic range from albums that you wouldn't expect to, and superb results from those where expectations are higher. An example being Dan Berkson's Dialogues, where the keyboard player was joined by a pick-up band to make a recording double quick. The Kiis make it abundantly clear that Berkson is the star in the band even though he rarely takes centre stage. This album produced real concert in the home sound, in fact few concert systems are this good, just dim the lights and you're there.

The degree of transparency on offer from these speakers means that the quality of recordings is blindingly obvious, and some real gems appeared, many of which were more recent productions. It would seem that digital recording and mixing has come on in leaps and bounds over the last few decades.

The degree of control on offer from all that power is inevitably most obvious in the bass which, as one listener suggested, is "very stop starty". I have never known bass control like it. Active systems are usually good at this sort of thing because there's no crossover between the amplifier and the drive unit, but even by active standards the Kii system is "fast and bulbous" as Captain Beefheart would have it. Even over-the-top productions like Lorde's Royals stop and start on a dime yet also deliver serious low-end weight and power. You get no sense of a box vibrating either. It's super clean bass that's achieved by the quantity of drivers and quality of amplification, rather than the internal volume of the cabinet. Class D has always been good in

this respect. It's faster than Class AB and offers huge control. The usual weakness of this tech is that the sound can lack body: Class D amps have a tendency to feel a little hollow. But that is definitely not the case with the Kiis, which use Bruno Putzey's Purifi amplifier modules - and he knows more than most about Class D.

A friend who owns the Kii Three BXT system mentioned that they take an age to warm up and this turned out to be the case. Unfortunately, digital amplification is just as sensitive to thermal conditions as the analogue alternative, and because it's a lot more efficient this takes longer to change. The answer apparently is to leave them on at all times in the Naim style, which, with current energy prices, is not very appealing. But the results are worth it when you find tracks like Spaceship: Earth by Mop Mop or Teardrop by Massive Attack, not forgetting David Sylvian's Rain Tree Crow which has the juiciest bass around. Arab Strap's New Birds holds up really well too. Here it's the bass playing that really impresses, the drums build up a phenomenal climax, but the playing isn't quite in the same league.

I was surprised to find that you can't send DSD to the Kiis, it's a PCM-only system, but most streamers have the option of converting formats so it's not an issue unless that's your favourite format. The real question about Kii Three BXT is why isn't it more highly regarded, and why haven't at least half the people who can afford high-end system got them? They are very good value when you consider how many roles they perform. The answer may be that they are perceived as not being upgradable: a loudspeaker that contains the DAC and amplification limits the upgrade options. This is naturally a big issue for dealers who survive on repeat custom and rely on the hope that you will buy a new box every few years. Yet, as I discovered when making changes to the front end, there is plenty of scope for upgrading. Streaming systems in particular are very sensitive to their environments and respond well when noise on



the mains or the network is reduced. This means upgrading ancillaries rather than major components in a system, but those upgrades are just as significant. There is likewise no end to how far you can go with a turntable, arm, cartridge and phono stage and the Kiis will let you hear the benefit at every step.

Conclusion

The Kii Three BXT could be seen as a high end solution in two attractively fashioned boxes with a wide variety of finish options, but it is equally a beginning to discovering exactly what was involved in making your favourite recordings. It really is an extraordinarily revealing system and yet manages to combine this with incredible musicality. After all, that's exactly what the artists we love laid down on stage or in the studio, and this system gets you closer to it - a lot closer. I heartily suggest you listen for yourself, it's quite a treat.