

SPL Phonitor

Model 2730 | £1,434

SPL's innovative solution to the age-old problem of monitoring in headphones, **Stuart Bruce** switches off the loudspeakers and rigs for silent running

WHAT IS IT?

A very high-quality headphone amplifier offering a more realistic stereo soundfield

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HIGHLIGHTS

- 1 A stunning new headphone amplifier
- 2 An innovative way of monitoring stereo in headphones
- 3 Great build quality

FutureMusic

Platinum Award

Accurate and consistent monitoring is high up there on the wish list of every engineer. Even if you take

your own monitors around with you, no two rooms sound the same, so what you hear is always a little compromised. Add to that your family's need to sleep and your neighbours dislike of your particular style of Drum 'n' Bass, and headphones would seem to be the ideal solution.

There are some fantastic sounding ones out there but one major problem stands in the way of using them to mix. Our brains judge the position of things by when they arrive at our ears. A sound to our left arrives at the left ear first, but our right ear hears it too, just a little delayed and a little quieter. Take away that crossfeed information and we get confused. That's what happens in headphones, they isolate us from the

acoustic environment, which makes frequency response very consistent, but takes away our ability to judge spatial information. That's why mixing on headphones can be disorientating and never translates well to speakers.

Phinal solution

So, enter the Phonitor, the latest in a long line of innovative devices from German company SPL. This deceptively simple unit attempts to solve the inherent problems of mixing in cans with very high quality audio circuitry and some novel control features.

My first impression on taking it out of the box was that I was looking at a very high quality piece of lab gear. With its vented metal casing and retractable legs, it's reminiscent of a small oscilloscope. Connections are on the back panel and consist of two XLR inputs and outputs and an IEC mains

input. The power and earth lift switches are also located at the rear.

The front panel has two retro looking meters for left and right, eight switches, three small stepped knobs that control the stereo image and a big continuous volume control. The headphone output is one stereo ¼" jack on the front.

Stunning results

The first thing I did was hook it up to a good quality CD player and listen to it as a straight headphone amp. The results are pretty stunning. Just using my old Hear Safe Big Phones (specially designed closed cans to minimise spill when recording), I've never heard them sound better. Switching over to my Sennheiser HD580's, which are my favourite 'listening' cans, I was even more impressed. Incredible depth and clarity, not a hint of distortion and detail by the bucketful.

The Phonitor utilises SPL's 120v technology which they developed for their mastering systems. The principal is based around the fact that higher voltages in audio circuits give increased headroom, lower distortion and enormous bandwidth. With users such as Bob Ludwig at Gateway and Simon Heyworth of Super Audio this technology is very much at the top of the tree. Hardly surprising that it sounds this good then!

However, beyond the astonishing quality of the amplifier itself, the real treat with the Phonitor are those three extra knobs on the front panel. The two knobs on the left are labelled Crossfeed



Headphone Choice

It's possible to spend as much or as little as you like on headphones. We decided to ask a couple of manufacturers for something in the range of £100 to £150 and £300 up to £350.

AKG sent us The K141 Mk2 and their flagship K702. Starting with the K141's these are the ones you may recognise from studios. They're half open, so the spill is low enough that you can use them for most tracking applications, they have a screw on adapter for 1/4" or mini-jack. They are very

comfortable to wear and even have a choice of earpads. However, I find the mid-range sounds pretty choked and this really disturbs the stereo image, so they wouldn't be my choice as listening cans.

Switching to the 702's is quite a change. Also very comfortable to wear, the lower middle sounds much better and the fully-open design makes them sound much more 'spacious'.

I preferred the sound of programmed and Dance music on these to anything with guitars and that maybe



suggests why they are popular in the DJ world.

Grado are a company you may not have heard of before but they've been making very high quality cartridges and headphones for fifty years. Their top of the range model costs over £1,000 but we got the SR60 and the SR325. The 60's are not the most

impressive looking of headphones for the price, but once plugged in they start to show their quality. Really good balance of frequencies and a very pleasing overall sound.

On to the 325's and things really start to get cooking. The same great balance, but the detail is incredible, especially in the mid-range and low bass. These were the cans that I did the mixing on and they really showed how the crossfeed on the Phonitor worked. Fabulous stereo imaging and for me, the best-sounding of the four.

and Speaker Angle. What the Crossfeed control does is to feed some of the left signal to the right, and the right to the left utilising tiny delays so that the resultant stereo image remains more natural, allowing our brains to decode it successfully. Speaker Angle allows you to further control the stereo width of the signal so that you can match the width you prefer to hear from your speakers. These controls are rotary switches so once you have found the setting that suits you it's possible to



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This is a real high-end product. It's beautifully built, sounds fantastic and allows us to work in a way that we've never been

return to it every time. The third control is called Centre Level and allows you to adjust the 'false centre' of the stereo image. When you use the Crossfeed and Speaker Angle, a side effect is that the centre of the stereo image gets boosted. Centre level allows you to control this so it accurately matches what you hear through your speakers.

Recording tryout

I took the Phonitor to a three-day overdubbing session in the living room of a country house. I was in the room with the musicians so I couldn't monitor on speakers, and as it was all acoustic, even setting up was tricky due to feedback. My normal approach would be to cobble together what I hoped was the sound I wanted, record a bit and then play it back to check it.

With the aid of the Phonitor I was able to accurately gauge what I was

recording, both in terms of EQ and ambience, and have it translate fantastically well onto speakers. It made the whole process much simpler and a lot quicker. SPL's claim that it helps reduce ear fatigue was certainly borne out by my experience over those three days. For a change it was a pleasure to be listening to headphones and not speakers.

Conclusion

Finally, I tried a couple of mixes on it back in my studio. Working on the drum and bass sounds wasn't that easy, I missed the physical reaction of the low-end in the room. I did a fair amount of that on speakers, but when it came to balancing and all the finessing, it was great.

Even setting up spatial effects like reverbs was simple and the whole thing translated really well onto speakers.

able to before. For me, the combination of innovation and quality makes it worth every penny. For those with a smaller budget, SPL have put the Crossfeed technology into their new 2Control monitor controller, which is considerably cheaper. So there, you even have a choice! **FM**

FutureMusic VERDICT

BUILD [Progress bar: 10/10]

VALUE [Progress bar: 8/10]

EASE OF USE [Progress bar: 10/10]

VERSATILITY [Progress bar: 9/10]

RESULTS [Progress bar: 10/10]

The best headphone amp I've heard. It makes working in cans a real possibility and a pleasure.

SPECS

- Frequency Response:** <10Hz to >200kHz (-3dB)
- Crosstalk:** -67dB (@1kHz)
- THD:** 0,005% (@ 1kHz, 0dBu input level and unity gain)
- Noise:** -97dBu (A-weighted)
- Dynamic Range:** 129,5dB (@ 600 Ohms Impedance)
- Inputs:** XLR balanced
- Outputs:** XLR Balanced. Through from the inputs
- Controls:** Solo L and R, Phase reverse L and R, Mono on / off, Crossfeed / Speaker Angle: On / Off.
- Crossfeed Control:** Stepped six position switch.
- Speaker Angle:** Stepped 6 position switch from 15 to 75 degrees.
- Centre Level:** On / Off
- Centre Level Control :** Stepped 6 position switch, -0.3 to -2.0 db.
- Dim:** off / -20 db
- Meter Mode:** VU / PPM
- Meter Cal:** 0 / +6
- Dimensions:** 216 x 393 x 106mm
- Weight:** 4.05kg

ALTERNATIVES

There are some great quality headphone amps out there, although most of them are built for high-end Hi Fi applications rather than studios. To get this kind of quality in a studio environment, you'd have to go back to what we used to do – get a good quality power amp feeding the headphone circuit and use 600ohms cans to bring the level in line. However, there's no real alternative as nothing has the Crossfeed technology. This is a real one off.