

A small British company is responsible for a unique approach to full-range, learfield monitoring. Bruce Medwin likes what he sees and what he hears

The theory behind nearfield monitoring is quite simple. Using a farfield (or indeed midfield) monitoring system in a studio often doesn't overcome the effects of the control room's acoustics something which becomes even more critical in untreated listening environments. Basically, if your speakers are belting away in your Mum's spare room - where the only things that come close to dampening the reflected sound are the chintz curtains and/or candlewick bedspread - your only source of reference will be wildly inaccurate.

That's why mixes done on large monitors in rooms with less-than-perfect acoustics - such as hard, parallel walls which create unwanted standing waves often sound cluttered, badly balanced and loaded with over-wet effects. Even if you 'equalise' the room, the picture won't become much clearer - generally, equalisation is only effective in one listening position for a given number of

people, and the slightest alteration to the room's acoustics (for example, your Mum takes the curtains to the launderette) will throw the whole shebang out again. However, if you use nearfield monitoring in the same room, the principal signals reaching your ears will be those coming from the speakers themselves, and you'll be working with a much truer audio picture. But what if a better solution was discovered? Where would the technology behind nearfield loudspeakers stand then?

The 5Ls

Silver are one company who recognise the need for a better solution. The 5L system is their first own-brand attempt at an improved nearfield design - the company has been involved 'behind the scenes' in the loudspeaker industry for many years now, offering a design consultancy service. And as soon as you take the 5Ls out of their packaging, you notice just how different their approach to speaker design actually is. The 5Ls take the unusual step of employing three separate drivers in their units. Now, before you point out that hi-fi speakers have been using three drivers for some years now, I ought to point out that we are not talking about a separate bass, midrange and hi-frequency driver. Instead, the third driver is Silver's solution to the problem of 'light' bass response in small speaker enclosures.

Normally, a large baffle is needed to produce reasonable bass response; however, this automatically defeats the object of producing a small monitor cabinet. Instead, the rather clever guys behind the 5Ls have worked out that a third driver could effectively replace the large baffle. This is done by aligning driver number three to boost the low-end information in reciprocal, effectively lowering the bass response of the small cabinets to 50Hz.

As for the other two drivers - well, their response has been enhanced by aligning -

Silver 5L monitor system >>

them as closely as possible within the '3D plane' in front of the cabinets. By positioning the acoustical centres within 10 cm of one another, accurate nearfield monitoring is possible within about 50cm, and the time and phasing difficulties normally associated with separate-driver monitors are kept to a minimum.

The bottom end

But just in case you desire slightly more bass in your face than the 50Hz rolloff of the 5Ls can normally deliver, Silver have

Menufedo	रमा १६ अः।	=(. •
	5L	BH
Frequency Response:	130Hz - 18kHz	from 26Hz
Power handling		
(watts, nominal music pow	er): 150	150
Sensitivity (dB 1w, 1m):	88	88
Impedance (ohms):	. 8	8
Size (mm) w x d x h:	260 x 175 x 210	410 x 330 x 330
Net weight (kg):	4.6Kg	11Kg

produced a complimentary set of bass units, which handle any of the low-end information that might otherwise be ignored.

Many companies are now selling single sub-woofer systems to augment the response of the main satellite units witness the popularity of JBL's Control

"...their sound is engaging enough to win you over to them almost on the spot" One and Five setups. The accepted theory is that bass signals are nowhere near as directional as those from the middle and top ends of the frequency spectrum; therefore, by summing

the bass from stereo signals together, a single driver can be given the task of beefing the whole image up.

But once again, Silver have chosen to fly in the face of fashion by unusually opting for a two cabinet bass system. However, this isn't as strange as it first appears, since Silver have effectively removed what would have been the lowest frequency drivers from the 5Ls and packaged them in separate units, thus neatly side-stepping the problems of cabinet vibration in the main monitors. This rather neat design means that the 5Ls retain their integrity as nearfield monitors, as the BH Bass Augmentors can be placed almost as far away from the satellites as you like - so you get all the accuracy of nearfield monitoring, with all the 'oomph' of larger speakers. Exciting, n'est-ce pas?

The driving force

So what do you need to drive the four cabinets? Well, the BH Augmentors carry two sets of terminals, so if you wish to connect the system to a simple stereo amp, no problem - you simply plug the amp into the BHs, and then the BHs into the 5Ls. (Incidentally, all the connections are on banana plugs.)

However, since both sets of cabinets incorporate their own dedicated crossovers (rather than the bass drivers handling all the crossover duties, as usual), you could also choose to bi-amp them. By providing the bass drivers with a separate power source, you can easily regulate the amount of bass in the stereo image - you could feed them enough signal to blow the tape out of your multitrack, or you could turn them off completely, allowing you to use the 5Ls on their own. Interestingly, the 5Ls are so efficient that they can be driven accurately with as little as five watts coming from the amplifier, although Silver recommend 30-100 watts as being the ideal driving power.

So having worked ourselves into a frenzy of anticipation over these fascinating theories, just how does the 5L/BH system sound?

The performance

Now, we at *Home & Studio* are used to being being bombarded with press information about how this-or-that product is revolutionary, new-and-improved and generally brilliant because of an exciting new development in some sphere of design or technology. And, being a cynical lot, we normally cast our eyes heavenward, connect the new product up in our technical centre and rapidly pull it to pieces, before finally making our own minds up about how revolutionary the technology involved really is.

But from the moment I played my first CD through the 5Ls, I knew Silver really had come up with the goods. After several experiments with different amps and cables, it became clear that the best results from the system could be achieved by bi-amping the units as the manual suggested. Luckily, I had a pair of identical TLA amps and a four-channel Yamaha P4050 to hand, so this posed no real problem. Two principal cable types were employed: some ludicrously expensive hi-fi oxygen-free-with-bells-on, and several metres of bog-standard 13amp flex (which I stubbornly prefer the sound of). As usual, the sound sources were mixes from multitrack (Dolby Sequipped open-reel), DAT (48kHz), cassette (Dolby C, chrome tape), CD and vinyl (you can't beat the bass from a decent 12").

And, as I said, the 5L/BH system is a winner. Driving the units at a reasonable listening level produced a sound that is best described as cool, calm and collected. No nasty peaks in the response were evident; the eveness of the frequency response is admirable. All the

signals exhibited a spaciousness that I found immediately attractive, and even after a long-night mixing session, ear fatigue was pleasantly absent. Now, I'm not saying the 5Ls are the most ruthlessly accurate monitors I've ever heard (although there is precious little signal coloration in there), but their sound is engaging enough to win you over to them almost on the spot. Of course, all of this can be taken as a personal, and subjective, opinion - but it's an opinion reinforced by several colleagues who dropped in on my sessions with the Silvers, and who remarked on the 'charisma' that seems inherent in this system's reproduction. It's also worth pointing out that Silver's concern over off-axis response has served them in good stead - the imaging of the system is very respectable indeed.

My only reservation was concerning the bass response of the 5L cabinets on their own. With all the hype I'd read in the pre-release information concerning this new 'pseudo-baffle' approach to cabinet design, I was almost (unreasonably) expecting my teeth to be shaken from their sockets by bass. Yes, the response of the 5Ls on their own is admirable, but it might be stretching things a little far to suggest they replace the thundering tones of my 15" Tannoys. Which is why I thoroughly commend the option of having the BH Augmentors biamped into the system; I found myself cranking the level to the BHs slightly higher than the rest of the signal, in order to boost the bass response. And, I am pleased to say, this approach worked well. I admit that my tastes in bass may be a little OTT for many people, but at least the 5L/BH system is capable of satisfying my low-frequency hunger.

Conclusion

As Silver themselves say, good monitoring may be an art for the recording engineer, but it's also a science for the loudspeaker designer - and the 5L/BH system bridges the gap between art and science very cleverly indeed. It will be interesting to see what other loudspeaker manufacturers make of Silver's new product; but at the end of the day, all the talk of design concepts is academic. To the guy in the field, monitors have to be accurate, pleasant to listen to and able to combat the nastiness of Mum's spare room - the 5L system does all that and more.

