

# Silver 5L

## Closefield Monitors

*PAUL WHITE tests the latest Silver closefield monitoring system, which can be extended to full-range use by the addition of bass enhancement cabinets.*

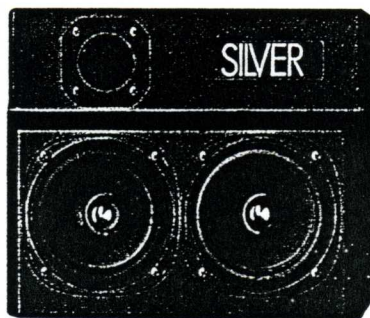
There's certainly no shortage of nearfield monitors on the market, but one company tackling their manufacture is taking a slightly different angle. Silver Productions produce very well thought-out monitors which deserve to be taken very seriously; at the recent 1995 APRS show, it seemed that nearly everyone was using Silver 5L speakers to demonstrate their products.

### CONSTRUCTION AND DESIGN

The 5L monitors are physically very compact (260 x 175 x 210mm) and as is true of virtually all very small speaker systems, the bass end rolls off quite swiftly — at about 80Hz or so. However, for use in applications where a full-range bass end is required, the BH passive bass enhancement cabinets are available, and these allow the 5Ls to function as part of a full-range system. Nearly all nearfield monitors (or closefield, as Silver prefer to call them) are based on 2-way, passive driver systems, often in ported boxes, but Silver have gone right back to basics and have attempted to eliminate the baffle effect by using two very small bass/mid drivers in a small, unported cabinet. The baffle effect is due to the fact that the sound from a loudspeaker is also reflected from the surrounding baffle. This produces a 6dB increase in level, which might not seem a bad thing, but unfortunately, unless the baffle is very large, low frequencies (with wavelengths which are long compared to the dimensions of the baffle) suffer — a 6dB drop in level is produced at the cutoff frequency of the baffle. Silver have tried to obviate this problem by fitting a second driver in a separate acoustic compartment. This second driver has a

response tailored to counteract the baffle effect, by supplying additional energy below the baffle's cutoff point.

Because the 5Ls are so small, the cabinets have little tendency to resonate, and the close geometry of the two 4.5-inch magnetically-shielded bass/mid drivers and the single one-inch tweeter helps maintain a sensibly wide listening angle. The bass/mid drivers employ polypropylene cones in roll surrounds and the silver 'prop spinner'-shaped central section is actually a phase plug. The chassis are injection-moulded magnesium.



The passive crossover comes in at 2.4kHz with a 12dB/octave slope to drive the ferrofluid-cooled, soft-dome tweeter, which is stepped back from the other drivers to preserve phase accuracy. When the crossover response is combined with the tweeter's natural characteristics, the resultant crossover slope is around 24dB/octave, though no high-pass filtering is used in the feed to the bass/mid driver. The designers rely on the natural roll-off of the driver, and claim that the lack of filter components improves cone damping at low frequencies.

The second bass/mid driver looks exactly like the first, but employs additional low-pass filtering which brings it into play below around 400Hz, where the baffle cut-off frequency occurs. Connection is via banana plugs only, and there is no provision for bi-wiring.

### SUB BASS

The response of the 5Ls starts to drop away at around 80Hz, and that's where the passive BH bass enhancement system (if fitted) can come into play, extending the system response down to 30Hz. Each

of the BH Bass Augmentor cabinets measures 410 x 330 x 330mm, and encloses a 10-inch paper-coned woofer featuring a roll surround and a heavy cast magnesium chassis. Two separate cavities within the box provide band-pass loading on the driver, and the entire sound output comes from a single, large-diameter port. Used with the 5Ls, the frequency response in a reverberant field is nominally flat down to 45Hz or so, then drops off fairly sharply, though there is some usable energy as far down as 25Hz.

Constructionally, the BH cabinets are pretty unexciting, with a simple port on the front and two sets of banana sockets on the rear, one for the amplifier output and the other to feed the 5Ls. Triple-mounting spikes are provided on the bottom of the cabinet to ensure good coupling with the floor. Because the BH cabinets are passive, you don't have the expense of buying a second power amplifier, and because there's nothing to adjust, the balance between the main and bass speakers should always be correct.

### LISTENING IN...

Without the bass enhancers, the 5Ls still turn in a remarkably solid performance with very precise stereo imaging; the overall sound is clear and open, with just a hint of stridency at the top end. The 5Ls have been redeveloped from their original form to minimise the impedance dips that give many amplifiers a hard time — so the choice of amplifier isn't as critical as it used to be.

With the bass enhancers wired in, the bottom octave of the sound fills out nicely, but without in any way clouding the existing mid-range. It would appear that the designers have wisely adopted a policy of sonic honesty rather than boosting the bass to try and impress. The resulting system is capable of handling

### SILVER 5L MONITORS £649

#### PROS

- Open sound with good imaging.
- Optional bass enhancers.
- Realistic pricing.
- Will fit in even the smallest studio.
- Magnetically shielded.

#### CONS

- Some users prefer terminals to the banana sockets employed for speaker connection.
- Sound tends to be just slightly bright.

#### SUMMARY

A practical and flexible system that can be used for nearfield/closefield monitoring or, with the bass enhancers, as a full-range system. Particularly appealing to those working in confined or awkward spaces.

## SPECIFICATION

### 5L MONITORS

Size	260 x 175 x 210mm
Impedance	8Ω nominal
Amp Power Requirements	30 to 100 Watts per channel
Magnetic Shielding	Compensating magnets
LF/Mid drivers	4.5-inch, polypropylene cone with phase plug, mounted in a magnesium magnetically-shielded basket
HF Driver	1-inch soft dome with Neodymium magnet in glass-reinforced moulded fibre chassis
Crossover Frequency	2.4kHz
Cabinet Material	MDF
Weight	6kg

### BH BASS AUGMENTORS

Size	410 x 330 x 330mm
Combined system Impedance	8Ω nominal
Amp Power Requirements	100W per channel minimum
Cabinet Material	MDF
Weight	14kg

System Sensitivity	87dB @ 1m @ 2.83V @ 8Ω
Power Handling	150W nominal music power

full-range monitoring up to quite high SPLs in small and medium-sized rooms, and experiments confirmed that the bass cabinets can be positioned in variety of locations without significantly affecting the integrity of the sound, so long as the cabinet fronts are nominally in line with each other.

## CONCLUSION

Silver have produced a sensibly-priced monitoring system that works well with or without the bass enhancers. Because the 5Ls are so compact, they can be conveniently positioned in even the smallest studio, and their high efficiency

means you don't need a huge power amp to run them. On the whole, the tonality is accurate, though as stated, I detected a slight high-end edginess on some material. The imaging is very good, and the dispersion pattern is wide enough to maintain an essentially consistent tonality over a wide listening area.

Bass enhancers can be problematic, but the BHs work particularly well without intruding on the clarity of the 5Ls, and when you consider that the whole system costs little more than £1000, the Silvers stand up well against the competition on both price and performance. Of course, if your budget is tight, it's also worth considering that you can buy the 5Ls and then save up for the bass enhancers later.

**SOS**

## FURTHER INFORMATION

- E** 5L monitors £649. BH bass enhancers £509. Prices include VAT.
- A** UK Sales: The M Corporation, The Market Place, Ringwood, Hants, BH24 1AP.
- T** 01425 470007.
- F** 01425 480569.
- A** International Sales: Silver Productions, 29 Castle Street, Salisbury, Wiltshire, SP1 1TT.
- T** 01722 336221.
- F** 01722 336227.