

PRO AUDIO REVIEW

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equipment
review

SLS Loudspeakers S8R Closefield Studio Monitor

by Tom Jung

SLS Loudspeakers, a manufacturer of touring speakers for almost 25 years, has recently introduced a closefield studio monitor using ribbon driver technology.

Features

The S8R is a two-way system with an 8" woofer and a 5" ribbon tweeter in a rear-ported reflex enclosure. I have never been able to figure out why designers and manufacturers don't make greater use of ribbon drivers. Ribbons can reproduce mid and high frequencies with the smoothness and lack of distortion that, in my opinion, cannot be achieved with horns or dome tweeters. No doubt ribbons cost more; perhaps that is why the bean counters in companies reject using them.

The ribbon driver in the S8R, made of a heavy duty casting and supporting a 5" long ribbon, with a neodymium magnet structure is very efficient. The flare on the hornlike casting results in a dispersion angle of 120 degrees horizontal and 40 degrees vertical, giving the S8R a nice wide image. This ribbon tweeter is flat at 20 kHz and rolls off at a gentle 6 dB per octave. It is thus usable out to 40 kHz — great for SACD.

The 8" woofer has a 2" voice coil with an integral phase plug that looks like a torpedo nose protruding from the pole piece as far forward as the mounding edge of the driver itself. One of the big problems with ribbon drivers' integration with conventional dynamic drivers is the polar response. As the frequency goes up, the woofer driver becomes much more directional or beamy.



When the woofer crosses over to the ribbon tweeter, you suddenly get this wonderfully wide, smooth response, making the crossover point painfully obvious. The S8R overcomes this effect by using the phase plug without any obvious compromises in low-frequency performance.

The crossover in the S8R is set at 2.2 kHz with 12 dB/octave high-pass and 6 dB/octave low-pass slopes. Sensitivity is rated at 90 dB, 1 W (2.83 V) at 1 meter, which is efficient for a speaker this size. Frequency response is rated at 44 Hz to 20 kHz +/- 2.5 dB with a maximum continuous output rated at 110 dB SPL.

The S8R was designed for use on the meter bridge of a recording console.

Consequently the ribbon tweeter is mounted on the bottom of the cabinet with the woofer on top. In my workstation, however, I placed the S8Rs on 30" RPG speaker stands. I flipped them over, positioning the ribbons on top, which places the center of the ribbon at ear level. Since the vertical dispersion is only 40 degrees, it is important to keep the ribbon at ear level, especially when used closefield. My studio setup is what I would call mid field — where the monitors are approximately 7' from the listening position and the vertical positioning is a little less critical, although I still prefer to be on axis with the ribbon.

The S8R enclosures measure 19" x 10.5" x 11.25" (HWD). The review pair is finished in black NeverMar texture. This covering is used on the SLS touring speakers and is apparently very rugged. While this finish may not appeal to everyone, I like its high tech look. An advantage to this finish is its almost rubber-like surface, which

At a Glance

Applications:
Studio

Key Features:

5" ribbon tweeter; 8" woofer; 44 Hz to 20 kHz +/- 2.5 dB; 110 dB max continuous output

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makes the speakers stay put. Optional finishes include golden or red oak on all surfaces, cherry veneer and an unfinished oak veneer for custom staining.

In use

When I first powered up the S8Rs I wasn't knocked out like I thought I might be. My initial observation was a lack of bottom end when compared to the super-extended high-frequency response. After listening for a few days, however, the bottom end came alive with bass extension down to a solid 40 Hz, rendering an overall spectral balance just about ideal in my room.

When I mentioned this to SLS, designer Tom Harrison told me he likes to see the S8Rs break-in period last at least 200 hours, I agree — the more I play them the better they seem to sound.

The first amplifier I connected to the S8Rs was a Pass X-150, which is a high-end stereo amplifier rated at (you guessed it) 150 W per channel into 8 ohms, which is the rated nominal impedance of the S8R. As I'm not real familiar with this amplifier, it isn't fair to judge the speakers based on this amp alone. I will say that the combination of this amplifier and the S8Rs produced astounding inner detail. Often times great detail comes at the expense of harshness, or even a sizzly top end. To some degree this was the case here.

I then switched over to my old faithful Hafler 9505, which is a MOSFET design with the characteristic warmth of vacuum tubes. Over the past week or so I have been listening to the S8Rs with the Hafler amp and the sound is very warm, smooth and easy to listen to for long periods of time. I do, however, miss some of the inner detail of the Pass amplifier. The S8Rs are so revealing that the differences in amplifiers become exaggerated. I feel the S8Rs have an ideal balance of professional monitor truthfulness with the lower distortion and added detail of a high-end speaker. The real bonus is that they make it fun to listen, especially with an SACD source. The ear-friendly SLS S8R may just turn out to be a new favorite of mine; listening to mids and highs on a nice ribbon can become addicting.

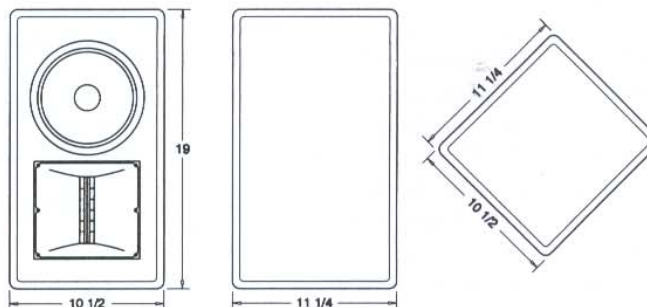
Summary

The S8R does a great job with the integration of a dynamic woofer to a ribbon tweeter, a feat few manufacturers have achieved. If you are looking for a speaker that is both accurate and fun to listen to, you must check out the S8R. Just remember to power it with the best amplifier you can afford.

The SLS S8R ribbon monitor is an excellent value.

Tom Jung, founder of DMP Records, is Pro Audio Review's technical consultant and a regular contributor.

S 8 R (2 - W A Y L O U D S P E A K E R S Y S T E M)



SPECIFICATIONS

FREQUENCY RESPONSE (HZ):	44-20,000 +/- 2.5dB	(3 METER, HALF SPACE ANECHOIC)
POWER HANDLING (W):	125 WATTS RMS	
AES STANDARD	500 WATTS PEAK	
MAXIMUM CONTINUOUS OUTPUT:	110dB @ 1 METER	
DISPERSION ANGLE:	120° HORIZONTAL / 40° VERTICAL	
SENSITIVITY:	90dB SPL @ 1M (2.83 V)	
NOMINAL IMPEDANCE:	8 OHMS	
CROSSOVER FREQUENCY:	2500 HZ w/12dB /OCTAVE HIGH-PASS	6dB /OCTAVE LOW-PASS
DRIVE COMPONENTS:	LF: 8-INCH WOOFER w/ INTEGRAL PHASE PLUG	HF: 5-INCH RIBBON
INPUT CONNECTIONS:	BINDING POSTS	
DIMENSIONS:	19" (48.3cm)H,	10.5" (26.7cm)W, 11.25" (28.6cm)D
WEIGHT:	25 LBS. (11.25 KG)	



L O U D S P E A K E R S

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