Fender Passport Studio: Monitors Go Mobile!

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- JBL LSR305 Genelec M030







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Monitor speaker technology continues to move ahead, much to the benefit of project studio users. Monitors are getting smaller and cheaper while simultaneously improving in quality. The JBL LSR305 active monitor is a great example: a small-format speaker with built-in amplification at a street price well under \$200. It's part of the new 3 Series from JBL, of which Peter Chaikin gave readers a sneak peek in his September 2013 interview; there's also a larger model, the LSR308, that we didn't test this time. Let's look at what's on offer from the LSR305....

### Speaker details

The LSR305 is a 2-way monitor system with 5" low-frequency and 1" high-frequency drivers. These are combined with a rear-ported cabinet design that allows for accurate reproduction of low frequencies, and twin 41 Watt amplifiers. The components are contained in an 11.75" x 9.37" x 9.88", 10pound package that is perfectly sized for both desktop and console-top use. The rear panel includes XLR and 1/4" TRS balanced inputs, a standard power cable and switch, a Volume pot (I left mine set all the way up), -10/+4 Input Sensitivity control, and two 3-way switches for LF and HF Trim, -2/0/+2 dB (the speakers sounded great in my space with both set flat).

But the details of this system imply something special. JBL claims a frequency response from 43 Hz through 24 kHz, which is very impressive for a small monitor. The LSR305 also comes with a unique housing design dubbed the "Image Control Waveguide"



## JBL LSR305 Powered Monitors New design breakthroughs come down to an unbelievable price

by JBL, a technology first developed for the ultra-tweaked-out M2 mastering monitors introduced last year. It's meant to improve stereo imaging even in non-optimal studio environments. This all sounds pretty good, but how does it hold up for real work?

### In use—general monitoring

I was lucky enough to get several months to live with these monitors in my home/work studio. I tend to work on widely varying projects (from video editing to theater sound design), so I wanted a chance to become comfortable with the system before I had to comment on them. This is especially important because my work area is hardly the pristine listening environment I wish that I had.

Alas, my work area has morphed from being a comfortable mixing/listening zone to something that looks more like Dr. Frankenstein's laboratory. In addition to my DAW gear (computer, interface, monitor and such), I've got a pair of modular synthesizers, a number of keyboards and controllers, a rack of dubbing tape decks and turntables, and the requisite bins of cabling. But I also have several projects in partial stages of completion: a miniature 18-channel audio system I'm testing for an art installation, a soldering and breadboard area with halfbaked and half-completed hardware experiments, bookshelves, boxes and a (sadly underused) treadmill. In essence, I've got a "modern studio".

But I need to get quality work done in this environment—and your situation most likely mirrors mine. Therefore, we need a monitor system that is forgiving of its surroundings, works with a wide variety of source material, and is able to do so without eating up a lot of space. The small footprint of the LSR305 is a good start, but I also needed a great sound that could support the different projects I do.

I started my tests by pulling my normal workspace monitors off the tabletop and replacing them completely with the LSR305s. This isn't something I do lightly, but I had scheduled a window of time for listening to the system before I had to accomplish anything important. Of course, I had just plugged in the final audio cable when I got a call to pull together some quick updates for a video project. Crunch time!

This wasn't super-detailed work, but it would force me to work with a system that I didn't yet completely trust. I popped off the edits, inserted them into the video, then nervously test-drove it on the consumer-level systems that occupy the rest of my house. I was pleased to find that the sound held up well across various environments, and that any initial concerns I might have had about the LSR305s were unfounded.

After that quick-hitter, I reverted to more general listening using the LSR305s. When working on the analog systems, I was surprised that the low end was discernable even at pretty low frequencies; the monitor's ported bass was able to give me most of the information I needed when working down low.

But it was the detail of the high end that was most revealing. When doing sound design on the modular systems, small changes in a patch can add surprising (and sometimes undesirable) amounts of high-frequency trash. The LSR305s produced super-clear highs, keeping me intimately in touch with the sound I was obsessing over. That same characteristic made these speakers perfect for test-driving MP3 compression runs, where undesirable artifacts could be easily revealed.

## In use—detailed mixing

Of course, eventually I had to buckle down to do some "real work"—detailed monitoring where I would have to live with the results of a mix. I had two client projects that would put this monitor system to the test: composition for a dance company, and a mixdown session for CD release. Since I'd already become comfortable with the overall sound of the LSR305s, I needed to verify their ability to withstand long hours of grind-it-out editing.

I needed to know if the system was easy on my ears. I can quickly suffer from ear fatigue, and sometimes small-format, self-powered speakers can be too shrill or distorted to allow for longer editing sessions. The LSR305 system, while being bright, never seemed to hurt my ears. This is probably a result of well-matched speaker drivers with an equally well-matched set of amplifiers. Thankfully, I had no problems doing day-long editing sessions with these monitors.

I was also concerned about low-frequency response. While these monitors would benefit from adding a sub (see below), I found the low end usable for most mixing functions. Of course you need to gain familiarity with the monitors before forcing yourself to do critical mixing, but there still has to be some level of bass response. I found that the LSR305s gave me sufficient information to make good mixing decisions, and the results held up on test listens. If I were working on wide-frequency mixing (dance music, orchestral work, or field recording cleanup) I would need bass augmentation, but for my typical workload the LSR305 system worked well.

Stereo imaging (the ability to discern the stereo location of items in the mix) is difficult in my work environment; you can get sound bouncing around all of the studio gear, smearing itself into an unfocused mess. In this case, the small driver size, combined with the unique waveguides molded into the cabinet, provided a very clear image of the stereo spread of my mixes, especially in the midrange frequencies where a less-than-optimal listening environment can often provide a lot of smearing.

All in all, I found the LSR305 to be a good choice for detailed work. It was easy on my ears, provided good feedback on my mix choices, and translated well out-of-studio.

### Conclusion

I have to admit something at this point: I started working with these speakers before doing any significant research on them; I just plopped them into the studio and started working. My conclusion was going to be along the lines of, "The LSR305 is a good monitor system that is well worth a mid-line price point"assuming that a mid-line price point was many hundred dollars. I'd used many small-format, near-field monitors over the years, and had an intuitive sense of the price-to-performance characteristics of these systems. But upon doing some price research, I was shocked to see that the LSR305 system is not only way more affordable than my "mid-line"—it competes in price with junky desktop computer speakers!

At a street price well under \$200, it is hard to do anything but rave about the



value of the LSR305 monitor system. Whether you need a desktop starter system, a secondary "reference" system or near-fields for atop your meter bridge, the LSR305s are a set of monitors whose price will have you grinning almost as much as their sound will!



[Editor's Note: As we fact-checked this review just before the 2014 NAMM Show, JBL's Peter Chaikin was kind enough to give us a sneak peek at a new 3 Series speaker set to debut at NAMM: the LSR310S subwoofer, which offers 200W of power into a 10" driver with a patented port design for low-frequency response below 27 Hz. Bass management can be internal or external, and a special XLF mode lets the speakers act as check subs for audio intended for dance club playback. It will sell for \$499. We enjoyed hearing the LSR310S in quick demos at the NAMM Show, and we look forward to bringing you a review as soon as it's available.—MM]

**Price:** LSR305 (as reviewed), \$199.99 each; LSR308 (with 8" woofer), \$324.99 each

**More from:** JBL Professional, www.jblpro.com

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