

Hands-On Review

Yamaha DSR Powered Speakers

Great sound with state-of-the-art features

Features & Specs:

- Advanced digital sound processing with 48-bit internal processing
- D-CONTOUR (Dynamic-CONTOUR) multiband dynamic processing
- All new Class D amplifiers with PFC switching mode power supplies
- Extensive protection of the transducers, amplifiers, and power supply from high-performance DSP
- Extended bass response



By Jon Chappell
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It's hard to really audition a set of speakers at a NAMM Show, given the high level of ambient noise and general mayhem, but the new Yamaha DSR powered speakers prevailed over such adversities mightily when I heard them demo'd in Nashville last June. Yes, the Yamaha rep risked getting busted by the "sound police" patrolling the aisles, but for a few glorious minutes, I listened to the new DSRs in all their full-throated glory. Would those crystal-clear highs, punching bass, and focused mids I heard on the show floor still be there when I had a set of my own, and put it through repeated use?

Suffice it to say, I was not disappointed in the several weeks I had the DSRs doing sound-reinforcement duty. The speakers that had impressed me in a few short minutes some months before continued to deliver over time, under scrutiny, and in critical work situations. Let's get to it!

Overview

The DSR series comes in several configurations: a choice of three two-way, full-range cabinets—the DSR112, DSR115, and DSR215—and an optional subwoofer, the DSR118W. Of course, being powered speakers (with parallel inputs), you can devise any configuration, but my review setup consisted of four speakers: two mid-level DSR115s and two DSR118W subwoofers. The DSR115s' sides are gently sloped inward from front to back, making them appear as full-width main speakers when facing the audience, while retaining enough of an angle to serve double-duty as floor monitors. While the cabinets are not light weight, neither are they boat anchors, owing to their efficient Class D amplifiers, all-digital DSP and filter section, well-balanced design, and well-placed handles.

Hookup and operation are straightforward and set-and-forget. On the DSR115, you plug the XLR or 1/4" cable into the cab's input. An XLR Thru jack is also included for daisy-chaining speakers together from a single signal source. The back panel functions are blessedly simple to operate, even while they control sophisticated circuitry. There's a single-level control with a center detent to put you right at a calibrated +4dBu line level. You can also switch in a handy boost circuit if you're plugging a mic directly into the cab. Three additional functions, each with its own dedicated switch, perform the following: 1) disable the front LED; 2) activate the high-pass filter (for eliminating stage rumble and wind noise); and 3) activate D-Contour—Yamaha's multiband dynamic processor that monitors and adjusts the output levels. The power outlet and heavy-duty rocker on/off switch are safely located on another part of the cab, further down.

The DSR118W's hookup scheme is only slightly different. There's no 1/4" input, but there are left and right XLR In and Thru jacks. The Front LED Disable switch and Level control are present, along with a Normal/Inverted Polarity switch (that you'll sometimes see referred to erroneously as a "phase" switch on other gear).

Under the hood

Though they don't have user-adjustable parameters, there are several systems at work in the DSR series that keep your sound humming along efficiently and distortion-free. The crossover network, called FIR-X Tuning (Finite Impulse Response), employs high-order filters that simultaneously optimize both frequency and phase

response, adjusting the time alignment between drivers. This improves clarity in general and imaging specifically, which is especially obvious in recordings with complex and full-range instrumentation.

I confirmed this with my favorite reference CD of the Los Angeles Philharmonic's version of Holst's *The Planets*. The sound is noticeably more open and intelligible on the DSRs than in my other live rigs. Other circuits at work include a high-efficiency switching-mode power supply using Power Factor Correction (that maximizes power output providing a clean waveform with minimal noise), and DSP Protection (that digitally protects the power supply, power amp, and speakers from damaging spikes and other line irregularities). Like good plumbing, when everything works, nobody notices. And in the case of these enhancement and protection circuits, they save you from bad sound at least, and in severe cases, permanent system damage.

In use

From the top of the frequency spectrum to the bottom, with rock bands and symphony recordings pumping through them, the DSRs delivered with power, reliability, and great sound.

For most of my applications I run in mono, and while I was grateful to have two DSR118Ws (and a matched pair of cabs), I found that from a power perspective, I really didn't need the second subwoofer—even in the loudest application I had, which was running sound for a rock band at an outdoor event. Speaking of bass, in many systems, turning up the bass simply causes things to smear out, to lose the punch. Not so here. In fact, this was the biggest surprise of the DSR series. I had expected to hear pretty good quality out of a Yamaha sound system in this range, but not to be blown away by a bass response that simply never lost focus and tightness, no matter how loud the band cranked it. It was the best bass response I've heard in a powered speaker system.

Conclusion

The DSRs are a shining example of the continual refinement of powered speakers coming out of Yamaha. They are a delight to work with, with features working in the background to make you sound better, maximize your power, and protect your system. And you'll never hear bass frequencies as consistent, as loud, and as clear, as in the DSR118W. In addition to the elegant design and perfectly focused, smooth, and clear sound—even in under less than ideal or predictable conditions—the DSR series deliver solid performance and outstanding quality every time.

For the best in live sound, get a set of Yamaha's DSR powered speakers and experience top-quality sound, ultra-reliable operation, and state-of-the-art protection and processing circuitry. Call today and get Musician's Friend's 45-Day Total Satisfaction and Lowest Price Guarantees.

DSR112 Active Loudspeaker		
H02701MSRP \$1,199.00	\$799⁹⁹
DSR215 Active Loudspeaker		
H02702MSRP \$1,649.00	\$1099⁹⁹
DSR115 Active Loudspeaker		
H02703MSRP \$1,349.00	\$899⁹⁹
DSR118W Active Subwoofer		
H02700MSRP \$1,499.00	\$999⁹⁹