

Heil Sound

PR Series Microphones

By Mark Amundson

At the AES show, I met a brash older man with some amazing microphones. That man was Bob Heil, a legend in his own right as the owner of a sound company and builder of sound system speakers, amplifiers and mixers years ahead of what has been available from other manufacturers. While most of us thought that Heil Sound Limited had faded into history, Heil's other passion of amateur radio has kept his engineering skills sharp. And that sharpness was enough to design microphones for ham operators and broadcast talent that kept Heil innovating in microphone technology. Through the encouragement of collaboration with Heil's longtime amateur radio friend, Joe Walsh of the Eagles, Heil brought forth the PR series of large diaphragm dynamic microphones suitable for live sound applications.

For this Road Test, I received three PR-series microphones (PR-20, PR-30, PR-40). Although only the PR-20 is a handheld vocal microphone, the PR-30 and PR-40 work well in other live sound applications, such as critical instrument or instrument amplifier pickup. The PR-20 is a 14-ounce handheld vocal mic with a nice steel grille and gold trim ring attached to a nicely curved zinc grip. The PR-20's tight cardioid pattern is impressive, but its lack of bass proximity effect makes it almost impossible to believe. The PR-20's 40Hz to 18KHz frequency response hides reality: Its ultra lightweight quilted-aluminum diaphragm over a neodymium magnet gives the mic an amazing high-frequency response that rivals diva-grade condenser in response and betters it in fidelity at high input SPLs. And the high-tech sorbothane shock-mount system makes handling noise disappear.

The PR-30 is no slouch either. While aimed for broadcast usage with its barrel-shaped body/windscreen and 1.5-inch dynamic element, the PR-30 comes with a normal mic clip and makes a killer instrument microphone perfect for corporate-type gigs. Also with a 40Hz to 18KHz frequency

response, the PR-30 takes the PR-20's perfect mid- and high-frequency and adds a real warmth to the low-mids without the expected proximity effect mud that other mics can add.

The PR-40 mic takes its position on the top of the series with even better cosmetics and a beautiful dark hardwood case to store the mic after performance. The PR-40 is 15-ounce beauty of a microphone with 28Hz to 18KHz frequency, and it is apparent that this mic is at home in recording, broadcast and live sound applications. The barrel mic casing and very large diaphragm dynamic element provides more warmth at the expense of a little top-end frequency response.

The Tests and the Gigs

Placing my focus on the PR-20, I went to my mic trunk and collected up my usual best-in-class vocal mic suspects. No, this is not a shootout, but listening to a good mic requires a perspective that only some A-B listening can resolve. So I brought out a bunch of Audix, Beyer, Electro-Voice and Shure dynamic and condenser vocal mics for critical listening. My conclusions were that the PR-20's mids and highs are as good as the best live sound condenser microphones, and the lack of any low-frequency proximity effect is almost spooky with the transparent low-end. Because the lows are so well-balanced with the rest of the frequency spectrum, the PR-20 would excel with bass voices, or for all those mumbling mic eaters out there to help catch a little more diction on their lyrics. And the rappers and their live sound mixers could really enjoy the diction enhancement and high SPL cleanliness, even with the windscreen partially cupped.

Running the PR-30 and PR-40 through similar tests was just plain unfair as the even larger diaphragms warmed up the low-end, but mostly kept things brilliant through the presence band. I liked the PR-30 as an all-around perfect voice and instrument mic. The PR-40 was nice too, but all top end from PR-20 and PR-30 spoiled me when the PR-40

rolled off a touch above 10KHz.

Out at the gigs, the PR-20 held its own as lead singer's dream microphone. The almost hyper-cardioid pattern and the lack of proximity effect meant that the singer's lyrics cut through a loud rock 'n' roll band with ease. And placing the PR-30 and PR-40 on guitar amps made those sources light up compared to the usual suspect instrument mics.

If you are collector of mics as tools for tough vocal and instrument applications, then having all the Heil Sound PR-series mics is a must. And at their prices, you can purchase the whole bunch for the price of a typical professional studio condenser mic. And if someone offered up a bunch of PR-20s at a house gig, I would have thought I had died and gone to heaven. ☘



What
high

Who
need
mic
hand

Pros:
man

Cons:

How
\$289

PR40