



ProAudio Review

The Review Resource for Sound Professionals

INSIDE:

- **PAR RECOMMENDS:** Options In Portable PA
- **SINGLE SLICE:** Brian Tarquin's "Blue Wind"
- **IN USE:** McDSP Emerald Pack



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PAR Session Trial

Large-Diaphragm Condensers

with Berliner, Brauner, JZ, Neumann, & Violet



Singer/Songwriter
Neil Jackson in a live
solo acoustic session

ROB TAVAGLIONE

A *PAR* SESSION TRIAL: Large-Diaphragm Condensers

Our first installment in a new review series features five select large-diaphragm condensers — five proven performers for *PAR* reviewers in '08

The “large-diaphragm condenser” class of 2008 was loaded with gorgeous and innovative contenders, and we here at *PAR* would like to revisit the top five “LDCs” we reviewed to compare them in close proximity. Note that this is the first installment of our new Session Review series —not a clinical “shootout,” per se, but parallel testing and evaluation to seek the best applications for these proven winners and suggest their comparative strengths in the real world.

by Rob Tavaglione

With the enlistment of some great local clients, The Lights Fluorescent (a talented group with a couple of engineers for members), we configured our usual tracking setup. Then we began adding our test subjects to the setup, finding where each mic improved upon (or detracted from) our “baseline.” The results were sometimes sur-

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▶▶ Test Equipment

Large-Diaphragm Condensers in a *PAR* Session Trial

MIC PREAMPLIFIERS: Neve 4081, Manley TNT, Earthworks 1024, Sytek MPX and True Precision 8

BASIC RIG: Soundcraft Ghost analog mixing console with Digital Performer 5.12 DAW clocked by Lucid Gen X6-96 and monitoring via JBL LSR4328 with LSR4312 subwoofer

prising and hugely informative, providing comparative info that is very hard to find under average (i.e., rushed) studio conditions.

Neumann TLM 67

The TLM 67 (\$3,858 list) offers the K67 capsule, three patterns, -10 dB pad, an EA 87 suspension mount, and case. Its big, warm sound screamed U 67, even without a tube present. Ty Ford's original review [*PAR* October 08] proved to be extremely accurate, as we both found the 67 to have an unhyped bottom end, smooth mids and a classic, comparatively understated top end. This top end was extended, but never strident or brittle. There was a bump in the low mid response that proved to define the character of this mic; somewhere around 300 Hz, this bump was sometimes essential and other times detrimental.

The 67 excelled in drum-kit reproduction with a punch in the lows, without tubbiness and with a smoothness of

highs that needed no EQ (highly recommended for overheads or room mics). Electric guitar was very nice and smooth, but that low-mid bump often needed subtractive EQ; it is good for jazz or clean tones, not so good for heavy distortion or "carved out mids" type tracks.

This mid bump was interesting on bass guitar, but only for bass lines that required lots of mid definition. Vocals were similarly hit or miss. For these sessions, that low-mid bump made nasal vocal qualities unbearable, but provided some thickness and body to our female vocals — a highly recommended app.

JZ Black Hole BH-1

The BH-1 multi-pattern condenser (\$2,295 list) has some very interesting design qualities, with the rectangular hole in its center being the most obvious. The provided shockmount is attractive, but not as effective as hoped. *PAR* reviewer Russ Long had success with it [*PAR* July 08], but its use perplexed me. I never could get the mic to sit still, as minor movement jarred it out of position and the windscreen made the ensemble top-heavy and unstable.

In our sessions, the Black Hole BH-1 offered a lean bottom end and aggressive top. This frequency response was too crisp for drums, with sizzling highs and insufficient bottom. This tonality worked better for electric guitar amp and was very nice on detailed acoustic guitar work. We were most surprised with the BH-1 on bass guitar amp; its lean bottom allowed the perfect definition of low notes without muddiness or boom with great high string detail — a



JZ Black Hole BH-1

very modern, aggressive bass sound.

Vocals with the BH-1 proved to be a matter of taste. Here, its aggressive top was simply overbearing to me (on either men or women), although if you like sibilance and pronounced definition for stylistically engineered vocal sounds, you may justifiably feel otherwise. In omni, the BH-1's qualities all became positive on a group backup vocal track with its great detail and room air.

Violet Flamingo ME

The Flamingo ME (\$6,990 list) is eye-catching, yes, but it was the ear-shaped diaphragm and its "vented" gold sputtering that intrigued us. Cardioid only (its sole drawback), the ME has an inviting sound with a full and accurate bottom, smooth velvety top and a touch of low-mid emphasis. This response emphasized snare and toms, while taming cymbals and rounding out transients: It was beautiful.

The ME performed predictably on guitar amp, although you'll probably need some EQ to add top and carve those low mids a



Neumann TLM 67



Violet
Flamingo ME

bit. Same thing goes for bass guitar, where the 200 Hz emphasis may help or hinder you. In our original review, Russ Long loved the ME on male and female vocals [*PAR* January 08], and I completely agree. It may be too dark for basses or mumblers, but the ME's tube and transformer precisely tamed harsh consonants and aggressive rock yells yet maintained definition — all this without a touch of unwanted sibilance.

Brauner VMA

One of the costliest microphones we have recently reviewed [*PAR* March 08], expectations were understandably high for the Brauner VMA (\$9,719 list). It is gorgeous in its craftsmanship, most notably in the cylindrical windscreen, allowing up-close singing for groups in omni or duos in figure eight. The power supply of the VMA was particularly nice with patterns of cardioid, wide cardioid, hyper-cardioid, figure eight, and omni — all continuously variable. The VMA employs the capsule/electronics of the original VM1 alongside a second capsule

(not just filters) for a “classic” mode with conservative top end and vintage tonality. Essentially, it is two microphones sharing a body; as a result, its versatility significantly softens the blow of the price.

Across all tests conducted, the VMA was either our top choice or very close to it. The reason? It offered a palpable sense of realism to its tracks, very accurate and extremely nuanced. This lack of color allowed faithful reproduction of most any source placed before it. Bass response was very extended, but without hype or emphasis bumps; this made the VMA my top choice for bass guitar amp. Drums via VMA were faithful and accurate, with quick transients and no discernible distortion. Vocalists of all varieties should find success with the VMA; its neutral flexibility allows a variety of vocal sounds with some minor EQ. The only app that didn't immediately impress us was on electric guitar, where the VMA exposed some undesirable traits



Brauner
VMA

in our guitar setup. Matched with the right rig, I'm sure the VMA could excel.

But the VMA “classic” mode, you ask? Yes, it is distinct, and very desirable. With its thicker bottom and sculpted, musical top, I loved this mode for lead vocals and “normal” mode for BGVs.

Berliner U77

Unfortunately, the U77 [\$3,495 list] didn't make it into session evaluation in time for initial drum, bass, and guitar tracking. Such a shame, as **personal testing revealed an extremely musical mic that was simultaneously very flattering and yet very naturally accurate on most any source.** Although its



Berliner
U77

classic “big 3” patterns make it versatile enough for many instrument apps, I'm in love with this mic for vocals. Like the Flamingo ME, original reviewer **Dan Wothke [*PAR* June 08] found the U77 very desirable for both men and women vocalists; that's a rare quality, and I strongly support Dan's findings.** Lead, BGV, or group, loud or

tender. The U77 shines in most vocal situations.

The U77 is also a first pick for acoustic instruments. Its inherent balance, natural transients and ever-so-slight high-frequency emphasis worked nicely on acoustic guitar, piano, or most any natural source where realism is your goal.

On VO Work

I did some commercial spots with male voiceover artist Charles Curcio and found something likable about all five of our mics. Ultimately, we chose the Neumann TLM 67 for its smooth, yet articulate top end, with minimized sibilance problems. Low frequencies were flattering without any undue girth while plosives were never an issue, even at really loud levels.

The Brauner VMA in classic mode was our second choice for this VO session; it was wonderfully detailed and natural, if ever so slightly strident on hard consonants. The Berliner U77 was



L to R: JZ Black Hole BH-1, Berliner U77, Neumann TLM 67, Violet Flamingo ME, Brauner VMA

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“Results were sometimes surprising and hugely informative, providing comparative info that is very hard to find under average (i.e., rushed) studio conditions.”

nearly as likable as the TLM 67, except for a little missing “chestiness.” I must say, however, that the U77 would be my “best-all-around” choice if I could buy only one mic for all VO work. The Flamingo ME was very warm and supple; I would prefer it with female voice artists. The Black Hole BH-1 had the most top end of any mic tested here — great for definition on deeper voices, but too sensitive to plosives in cardioid. Even with two pop screens employed, we had to switch to omni to get suitable results.

Singer/Songwriter Sessions

With this collection, I also knocked out [live] singer/songwriter sessions

and predictably got some great tracks. The performer, Neil Jackson, sings loudly with an edgy quality, and the Flamingo ME was the ideal transducer for its rounding qualities. The original mode from the VMA was our primary choice for acoustic guitar (with its welcomed linearity), coupled with either the U77 or the Black Hole BH-1 for some exciting sizzle. With the TLM 67 picking up room ambience, the result was slightly enhanced reality without a dreadful DI anywhere in sight.

Evaluation’s End

Here, the top performer overall was the Brauner VMA for its incredible accuracy, “dual mic” flexibility, and supreme package of accessories.

Russ Long gushed about the VMA, calling it “stunning,” and I definitely agree. The Violet Flamingo ME was an unexpected favorite with smooth reproduction and a sonic quality geared for the environment of digital recording. The Neumann TLM 67 was very impressive, with its own smooth sonics and a lack of harshness, although its mid bump proved to be problematic in some apps. The Berliner U77 offered the most overall flexibility and was simply stellar on vocals and acoustic instruments. Finally, the JZ Black Hole BH-1 is an extremely desirable transducer hindered only by a questionable shock-mount and an overstated top end, which many may find more desirable than I do.

“The SIGMA captures performances with a special warmth and vibe that only vintage ribbon mics do. It IS the new vintage standard!”

Michael “Fish” Herring, Artist/Producer
New Kids On The Block, Christina Aguilera, Mariah Carey

SIGMA

Active Ribbon Microphone



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