

Neumann KMS 104: Hand-Held Cardioid Condenser

Neumann has introduced its KMS 104 hand-held wired microphone for live performance applications, a follow-up to the company's KMS 105 model. Designed for optimal transmission of the human voice on loud stages, the KMS 104 improves on the KMS 105 with the added feature of a cardioid polar pattern. Neumann's entire KMS series offers higher acoustic transparency than most other handhelds, allowing a wider frequency range with better resolution of audio transients.

I tested the KMS 104 through a warm, vintage Sunn power amplifier and mixer. The input response provided great attack and superior voice resolution. The extended frequency response did not present any distortion and provided accurate voice detail. The mic delivered an open presence with a controlled and accurate bass response, even in extremely up-close scenarios.

The mic is good with an in-ear monitoring system because of its sensitivity to crosstalk behavior and inherent low self-noise. The KMS 104 has a capsule with a cardioid direc-



tional characteristic to provide the best possible suppression of sounds originating from behind the mic.

Neumann has provided carefully adjusted acoustic filters and transformer-less impedance converters so that the mic can handle high sound pressure levels without overload. The KMS 104 features an invariable, built-in high-pass filter with a cutoff frequency of 120 Hz (-3 dB, measured in a free sound field) and a dynamic range of 132 dB. The maximum sound pressure level is a hearty 150 dB.

The low self-noise level of 18 dB-A permits the mic to be used at high gain levels at long distances without the risk of additional noise. This translates to increased freedom of movement for artists. The KMS 104 is packaged with a matching stand clamp and padded nylon bag that is durable for touring.

—John LaMantia

» Ordering info: neumannusa.com



Stroke Sharpener: OnBoard Research Beatnik RA1200P Rhythmic Analyzer

The Beatnik Rhythmic Analyzer by Onboard Research is the latest high-tech practice and teaching aid to hit the market for drummers and percussionists. The RA1200P cleverly combines the practice pad and metronome to help players fine-tune their time-keeping skills.

The Beatnik uses a sensor in the pad to detect each stroke, and instantly displays these strokes as data on a backlit screen. The unit's controls and layout are intuitive, with multiple settings and features that help percussionists improve their rhythmic consistency and groove.

One of the most important features of the RA1200P is its stroke analysis function. Each beat of the subdivision is displayed as a vertical line. Each stroke also produces another vertical line that tells drummers if they are behind, in the middle of, or in front of the beat. Simultaneously, a horizontal line represents the volume of each stroke, creating an X/Y visual grid that helps the player keep an even balance between both hands.

My favorite function of the Beatnik was the groove analyzer, a setting that measures consistency of pulse with changeable skill levels. If a drummer's playing deviates more than the set number of beats—starting at a generous 20 bpm and decreasing to a more challenging five bpm—a warning buzzer sounds. Helpful features also include the ability to go beyond normal subdivisions and practice groupings of 5 over 1 and 7 over 1. The ability to play along with 32nd notes is also helpful.

The RA1200P Beatnik Rhythmic Analyzer is a great way for players to solidify their sense of time and improve hand coordination. It's an effective teaching tool for students of all levels to stress the importance of playing with good time.

—Ryan Bennett

» Ordering info: tuners.com

JodyJazz DV Soprano, DV NY Tenor Mouthpieces: Flexible Wailing

JodyJazz has come out with two new gold-plated metal mouthpieces that give serious saxophone players further options for great tone and response.

The new DV soprano mouthpiece joins the company's DV alto and tenor models, designed for contemporary saxophonists as well as straight-head players who prefer a bright tone. I tested the piece on my curved Yanagisawa soprano using a selection of medium-hard reeds. The first thing I noticed was the huge sound the DV allowed, an outrageous improvement over the slightly "squeezed" sound of metal and hard-rubber soprano mouthpieces I've used in the past. I could put tons of air through the DV, and it responded with a quick attack and a brassy tone rich in harmonics.

I preferred the 7-star model,

as it gave me the best soprano projection I've ever experienced. It was a bit of a challenge to control so much air, though, and my pitch and tonal staying power suffered a bit until I got used to the piece (using a slightly harder reed than normal helped).

Lovers of Otto Link metal mouthpieces should definitely check out JodyJazz's new DV NY models for alto, tenor and soprano. These are modified versions of the NY, with a deeper chamber. I tried three different DV NYs on tenor, and found they offered slightly more resistance than the DV models and responded with a darker, more focused tone. The DV NYs were as responsive and easy to blow as regular DVs, whether playing loud or soft, and provided enough flexibility to accommodate various styles of playing.

—Ed Enright

» Ordering info: jodyjazz.com

