

EQUIPMENT REVIEW
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# AUDIX D4 INSTRUMENT MICROPHONE

By Andrew Roberts

ith the introduction of the D4 microphone (\$329), Audix has both entered the market of bass drum-specific microphones and completed its own repertoire of drum kit microphones. If the D4 is as capable as the D1 and D2 are as snare and tom microphones, it should become a staple for sound reinforcement engineers. Owning several popular kick drum microphones myself, I was quite pleased to accept the assignment for evaluating the D4.

#### **Features**

Upon opening the box, I was surprised at the size of this microphone. The D4 is only 1.5" x 3.85" — quite compact compared to my AKG D112. The other noticeable feature is that the D4 is also very light. With a beautiful glossy black finish and a weight of only 4.5 ounces, I momentarily thought the chassis was made of some type of high-tech plastic. Handling the micro-



phone for a moment longer made me speculate that the chassis is made of aluminum, which I later confirmed. With respect to aesthetics and attention to detail, the D4 is superb. It is a very attractive microphone that exudes fine craftsmanship and durability. The windscreen fits perfectly into its mounting ring, which is rare, and the element looks neat and sterile.

The D4 is a dynamic hypercardioid microphone that utilizes Audix' VLM (very low mass) and Sub-

Impulse technologies. Audix claims that this enables the microphone to accurately pick up the subtle nuances of sub-impulse harmonics. Basically, the lower mass of the diaphragm coupled with an extra-sensitive internal air suspension allows the outer wall of the diaphragm to react to sound waves, harmonics and sub-harmonics quicker than other microphones. The D4 has a frequency range of 38–19 kHz and a maximum SPL rating of 144 dB.

In use

My evaluation of the D4 consisted of two parts. First, I used the microphone on several sound reinforcement jobs that involved different drummers in a rock/pop format. Second, I recruited one of the Washington, D.C. area's premiere jazz drummers, Dominic Smith, for a comparison test in my home studio.

In live performance situations, the D4 is an excellent kick drum microphone. From inside the drum

AT-A-GLANCE

**Applications:** Project studio, recording studio, sound reinforcement. **Key Features:** Dynamic hypercardioid pattern, stated 38 Hz–19 kHz frequency range and 144 dB maximum SPL, VLM Sub-Impulse technology, aluminum chassis.

**Price:** \$329

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about three inches from the batter head, I found it to possess an enhanced audible response in the range of 200 Hz–1 kHz as compared to the AKG D112. This yielded improved audibility during some of the more raucous moments. However, I did not notice as significant a difference in the response below 100 Hz as I would have expected from a microphone with such a LF rating. The D4 is also said to be ideal for other instruments including guitar and bass.

One feature I did come to appreciate was the D4's small size. It allowed me to get the microphone through a particularly small hole in the front head of one of the drums I miked.

In the studio evaluation, I compared the performance of the D4 to both the AKG D112 and the Audio-Technica ATM25 (another hypercardioid). Dominic has a beautiful 1957 Gretsch kit that is all maple with a 14" x 20" bass drum. He uses Remo Fiberskyn heads with no hole cut in the front (remember he is a jazzer) and a wool cover on the beater. I placed all three microphones about two inches out from the head surface and about an inch and a half off center. The signal was routed through a Mackie console with flat EQ and the LF filter disengaged. I recorded the sounds on a Roland VS880 hard disk recorder so I could later edit the sounds together for quick compar-

ison

Again the D4 did not seem to have significantly better response below 100 Hz, but the low end seemed to be slightly less muddy. However, it did demonstrate a better mid/high response than the other two microphones. The natural sound of the drum was quite "soft" and the D4 gave it just the slightest bit of definition and airiness.

### Summary

The Audix D4 is a little dynamo of a microphone. It is small and lightweight with a big sound. Being a hypercardioid, it has excellent rejection of peripheral sounds and is therefore able to hone in on the "sweet spot" of a particular instrument. It will be particularly appealing to those engineers that are looking for an alternative to the "scooped" mid loss of most current kick drum microphones. With a list price of \$329, it is an exceptional bargain for a microphone of this caliber.

Andrew Roberts is an independent sound engineer and a contributor to **Pro Audio Review**.



## AUDIX D4 INSTRUMENT MICROPHONE

### PLUS

- +Light and compact
- +Strong mid/high response
- +Big sound
- +Price

### MINUS

- None

### THE SCORE

The D4 is a very compact microphone that can hone in on a instrument's sweet spot and comes at a price that is hard to beat.

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