Gear » Field Test: Holophone H3-D Surround Microphone

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Field Test: Holophone H3-D Surround Microphone
Oct 1, 2007 12:00 PM, By Kevin Becka

Since debuting the H2-PRO 7.1 microphone in 2004, Holophone has released two other surround mics, both 5.1 with embedded LFE transducers: the H4 SuperMini for on-camera use and the H3-D reviewed here. Billed as the “world’s most inexpensive surround mic,” the $1,695 H3-D offers all the portability and setup ease of the H2-PRO, though with fewer possibilities above 5.1.

The H3-D’s 8X6-inch, 3-pound, egg-shaped “head” has five full-bandwidth mics strategically embedded around its perimeter (L/R/C/Ls/Rs) combined with an internal LFE capsule that covers the 20 to 300Hz range. The head is supported by a sturdy, aluminum swivel standmount, which is adjustable from two knobs at either side and allows for cable passage. The top of the head offers an LED that glows when the necessary phantom power is applied. The head’s underside has a permanently attached, 15-foot cable that terminates in six Neutrik XLR connectors, with all cables well-labeled to identify their corresponding mic. The unit ships in an extra-sturdy, foam-lined case with locking latches. You can also purchase a pistol grip ($250) and windscreens ($350) for field use.

HEAD GAMES
I used the H3-D on a number of sessions in both surround and stereo. One notable problem I encountered throughout the review involved my use of certain mic preamps with the H3-D. My first three sessions involved using the mic with SM Pro Audio PR8 preamps, Focusrite Control|24 preamps and a MOTU 8pre. When using the H3-D with all three of these units, I heard a low-end “motorboat” drone across all channels that was quite audible. The only time I got a clean signal that I would consider usable was when I went with preamps from an SSL 4000 G or a Toft Audio Designs ATB16 console. I checked with Holophone, and the company confirmed my results with tests at its facility. You absolutely must provide full 48-volt phantom power to the H3-D for optimal results.

I first used the H3-D set up dead-center in a large studio with 18-foot ceilings and ran it into a Pro Tools HD rig through Focusrite Control|24 preamps. I then did a session involving surround overdubs with a percussionist and a guitarist/vocalist. Despite having noise problems with the preamps, the surround image and microphones sounded excellent, providing balanced, full-range coverage of all instruments.

I next used it over a drum kit through the SSL 4000 G preamps. I panned the front three mics left, center and right in my stereo mix, and used the rear capsules as rear mics facing the 18-foot ceiling. This particular cut was a Latin tune in which the drummer played lightly with sticks and brushes so there was a lot of nuance. The Holophone “glued” the kit together, unifying the separate drums with a natural sound that I hadn’t previously heard with this drum kit and player.

Notably, the Holophone’s stereo “view” is unlike anything you’d get from a spaced pair or X/Y mic setup. The meter deflection shows much more interplay between the channels than you’d get from the other setups, which is attributable to the way the “head” funnels stereo information around itself to the mics, which are in fact miniature omnis. I couldn’t find this information in the documentation. Collectively, they offer another flavor of stereo or surround that is less discrete than what you get from separate mics, which have no mass between them. This construction allows the sound to wrap around and reach the other transducers before it dissipates. It sounds more like a stereo X/Y pair of omni mics, but more discrete.

I next applied the H3-D as a knee-high drum mic placed about six feet back from the front of the kit. I panned the front three mics across the stereo field, which yielded great detail in the cymbals, toms and snare with ample, solid low frequencies — even without using the LFE mic. I used the H3-D’s LFE feed to record the bottom of a Leslie cabinet. Two Neumann U87s were employed in stereo at the top rotor and provided most of the stereo information. The H3-D LFE was panned center and brought up in the mix, offering plenty of punch and low-end definition for this bass/organ/drum trio track.

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