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The Holophone H2-PRO is a distinctive microphone fast becoming a staple among surround engineers. So why would the music department at a mid-sized university — such as Central Michigan University, where I am employed — be interested in this $6,000 device? In a word: simplicity. I tend to prefer a spaced omni recording setup. But I’ve found that it’s just not practical to send that out on location, especially with short setup times or inexperienced student engineers. With the H2-PRO I figured perhaps we could get a reliably high-quality recording, as well as dive into location surround at the same time. I soon discovered how true that was!

**FEATURES**

The patented Holophone H2-PRO multi-channel microphone is a lightweight, yet sturdy built three-pound “head” unit with major dimensions of 7.5 inches x 5.7 inches. Rising Sun Productions, Ltd. — a Canadian firm headquartered in Toronto — developed and now builds the Holophone microphone “system.”

The H2-PRO captures 7.1 channels of surround audio via its eight DPA 4060 capsules, each offering frequency responses of 20 Hz – 20 kHz ±2 dB on the first seven and 20 Hz – 110 Hz ±2 db on the eighth. Maximum SPL is 134 dB SPL before clipping; THD is 123 dB SPL peak (<1 percent THD); output impedance is 30 - 40 ohms. When coupled with eight phantom-powered mic pre-amps the H2-PRO acts as a ubiquitous surround sound front-end; it is compatible with all the regular multichannel audio-encoding standards (DTS, Dolby Digital, and Circle Surround) and provides L, C, R, Ls, Cs, Rs, Top and Sub signals.

The included 15-foot multi-signal cable takes all gathered signals to its end (eight labeled XLR connectors) and features a rubber stress reliever at the point where it attaches to the head. The manufacturer notes that the H2-PRO has cable drive capability of up to 984 ft. Additional “Gear” for the H2-PRO includes a windscreen ($350) and a handy pistol grip ($250). The Holophone concept was first developed in 1994, and the company’s website recounts an extensive list of major projects in video, film and music that have utilized the mic.

**FAST FACTS**

**APPLICATIONS**
Field and studio — music recording, audio for broadcast and film

**KEY FEATURES**
Eight DPA 4060 capsules; small, lightweight and sturdy construction; eight-channel XLR-terminated 15-foot cable; compatible with common audio broadcast standards

**PRICE**
$6,000

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The band in order to release a CD with material sampling several years. Here the challenge was...
to find a venue and recording setup that we could use any time. This eliminates the stadium, so we brought the band into our 500-seat concert hall. The band would never fit on stage, so they took the seats and the H2-PRO got parked right behind the director, who was standing at the stage’s front edge.

The concert hall control room sports a Grace Design M801 eight-channel microphone preamplifier. The stepped rotary gain controls made it much easier to work with a carefully balanced system like the H2, as opposed to the potentiometers of the Fostex. A Meitner controller and Genelec speakers complete the setup.

A pair of omnidirectional mics flanked the H2 above the stage, with another pair at the back of the hall to capture the snap of the drumline. Time was short, so we only monitored in stereo. We opened up the full surround mix once the band had left. And what a mix it was! The power and color of the 220-member band unfolded around us, and with only a modest contribution from the extras, the H2 made its point in vivid detail.

Next, I tried the H2 in front of some more delicate fare. I parked it in front of our Festival Chorus—a 100-voice choir that performs a major work with our orchestra every fall semester. The program was just one work: Mozart’s Requiem. This hall—a fairly dead space of about 1,400 seats—has been a challenging place to record. To get enough distance from the ensemble and still get any diction and presence from the vocal, soloists has been nearly impossible. I placed the H2 in the middle of the second row, about 10 feet high, with spot mics on the soloists and a pair of omnidirectional mics hanging in front of the chorus. I could only monitor on headphones, so was eager to get the recording back over to the studio.

My first task was to mix the stereo CD, which needed to be ready in time for the students to take home during finals week. It wasn’t long before I realized that the spot mics on the soloists were entirely unnecessary. I mixed the center-front and rear-stereo elements from the H2 at -6 dB with respect to the front pair, and added a touch of the choir mics to preserve diction. I found the balance and mix of the ensemble to be excellent in every respect, and was delighted with the clarity of the soloists and the balance between the sections of the orchestra.

We then racked up the tracks on the surround monitors, and the sound really came alive, as we expected. Soloists, chorus and orchestra sparkled, with clear diction and placement. I may just have found the perfect recording system for that space in the H2!

| SUMMARY |

The H2 could handle dozens of situations—everything from one musician to hundreds with clarity and ease—and was simplicity itself to set up. The optional windscreen and pistol grip will adapt the H2 to nearly any situation, and I anticipate the chance to try it with our jazz bands, the local folk festival, or maybe even out in the woods some evening.

Scott Burgess is the director of the Center for Creative Media at the Central Michigan University School of Music.

| SECOND OPINION |

Real time surround sound recording in the field is good for many things. And the Holophone H2-PRO Surround Sound microphone is a tool offering great potential in this area.

| SOUND IN THE ROUND |

The industrial Holophone H2-PRO is no traditional-looking microphone, no gleaming consumer version of a four-wheel drive military vehicle. The H2-PRO, resembling a giant grey ostrich egg mounted sideways on a heavy duty aluminum yoke, is not aesthetically obsessed. Rather, it is a purpose-driven, second-generation device from Rising Sun Productions, Ltd.—a Canadian firm that claims the H2-PRO is the only patented device “specifically designed for capturing discrete 5.1, 6.1 and 7.1 channels of sound for all professional audio applications.”

| RECORDING A LIVING ROOM |

My testing process was fairly modest. I did some spatial recordings directly into a Zaxcom Deva V using the on-board 48 V Phantom power and preamps. This had to be one of the simplest interior and exterior performance setups ever for the H2-PRO. I could detect a bit of noise from the mic capsules in these circumstances, but this shouldn’t be a commonplace problem considering uncontrolled “practical locations” are rare when recording for films, etc. Any self-generated noise would invariably be masked. Also, soloing and muting (especially the rear L/R) revealed creative solutions.

My main interest was surround ambiances, and so I set the H2-PRO in the middle of the 39-foot x 18-foot room where we sit on the sofa in front of the fireplace. I lit the fire, put our wall-powered speakers on low and just waited for things—including children, their sound-laden costumes, best friends and pets—to leave their imprint. I then moved outside to a little reflective sitting area. Scampering squirrels, ravens, scrub jays, helicopters, garbage trucks in the distance and another pass or two of frenzied kids occurred, ending with the sprinkler cycling on in the lower yard. All seemingly mild stuff, I thought, until I took the Deva upstairs to my edit room/home studio.

Talk about an out-of-body experience! I was enthralled as I listened to these everyday activities played back with my modest Yamaha 01v96i2 and Mackie 824/624 5.1 system. It was a stunning recreation of the actual space. I could easily close my eyes and re-experience the earlier events, validating the name "Holophone" in spades. Using the H2-PRO was a totally informal and intuitive process, yet the end result was so coherent, so fully integrated. The H2-PRO got the space really right, proving a great widget for recreating true acoustic environments in playback.

| SURVEYING THE SCENE(S) |

I feel the H2-PRO could grow as a tool for supplemental sync ambience source recordings in tandem with traditional film dialogue recordings. Additionally, it could become a great solution for quick “down and dirty” music recordings without sacrificing quality.

— Mark Ulano