CASE STUDY

Customer:
• Soundmirror, Inc.

Industry:
• Music Recording/Production

Challenges:
• Deliver accurate, uncolored sound reproduction
• Ensure comfort without listener fatigue
• Capture performances under challenging conditions

Solutions:
• Upgrade to the Sony MDR-7520 headphones and all-digital wireless microphone system.

Benefits:
• Good-as-wired audio excellence
• Exceptional comfort, even after long hours of wear
• Simplified setup, thanks to a bi-directional link to control microphone transmitters via management software
• Ability to mute mics, ensuring that off-stage sound doesn’t interfere with on-stage audio quality is excellent. What’s critical for us is how these feel on your ears after several hours. We are able to do our work without the distraction of listener fatigue that usually comes from wearing headphones through a long session.”

While the MDR-7520’s comfort and clarity aided Soundmirror’s team on the backend, the new Sony all-digital wireless microphone solution opened new opportunities for capturing performances under challenging conditions.

The crucial test for the system came as Soundmirror was recording the sound for video of the launch of the Silk Road Ensemble’s summer tour. Part of the Silk Road Project, a not-for-profit arts and education organization founded by cellist Yo-Yo Ma, the ensemble is a collective of internationally known performers and composers based at Harvard University. The session at Harvard’s Sanders Theater was a lively event where musicians moved freely across the stage playing off each other’s performances.

The challenge? Close-mic work was necessary to capture an audio image to match the close-up video shots. As the camera zooms in, the audio imaging has to match the picture, shifting from an overview to front-and-center with the particular instrumentalist.

John Newton is the founder of Soundmirror, Inc., the fully digital recording and post-production company that has received more than 45 Grammy nominations and awards for its orchestral, solo and chamber recordings. Who better to put the new Sony MDR-7520 headphones and all-digital wireless microphone system to the test?

With accurate, uncolored reproduction and comfort as his priorities, Newton found his upgrade to be a sound decision. After an exhaustive series of field testing, according to Newton, the MDR-7520 headphones raise the bar for professionals.

“These headphones mark a significant improvement over the Sony MDR-7506’s that have been the standard for us for over a decade,” he said. “The response is even smoother, with an extended range at both the top and bottom.”

Newton put the MDR-7520s to work on a road trip covering more than 10,000 miles traveling from gig to gig in a recording van. From the Portland Oregon Symphony Orchestra to Heinz Hall in Pittsburgh, the Soundmirror team integrated the new Sony headphones into its work.

“We’ve gotten to learn their characteristics quite well,” he said. “The 7520s create an isolated environment where the sound
“The Sony wireless system offers a new resource to the recording industry that gives us opportunities that were not possible before.”

–John Newton, founder, Soundmirror

The 7520s create an isolated environment where the sound quality is excellent. What’s critical for us is how these feel on your ears after several hours. We are able to do our work without the distraction of listener fatigue that usually comes from wearing headphones through a long session.

Wired mics could deliver the recording quality needed, but would have hampered the dynamic, unchoreographed movements of the ensemble members. And while conventional wireless mics will do for playout through public address systems, they would not deliver the required “no compromise” quality for this application.

“The Sony wireless system proved to be a phenomenally useful tool,” Newton said. “Till now, some wireless audio systems have had less-than-optimal sound due to the companding that had seemed unavoidable. This all-digital system has none of that and sounds as good as wired systems. This is the first I’ve seen that can make that claim. It is a breakthrough product,” he said.

Not surprisingly, the MDR-7520 is a 2012 TEC Award Nominee for outstanding technology. With its liquid crystal polymer (LCP) 50mm diaphragm and wide frequency response (5Hz-80,000 Hz), it delivers unparalleled sound quality with durability. Noise isolation earpad cushions conform to the natural shape of the ear, ensuring comfort and high acoustic isolation while reducing fatigue and preventing unnecessary vibration.

In addition to the good-as-wired audio excellence, Sony simplifies setup with a bi-directional link to control microphone transmitter via management software. Plus, a unique alphanumeric name can be entered into each transmitter and shown on each transmitter’s display. The name of the transmitter is also transmitted (along with digital audio data) so it can be displayed on its corresponding receiver’s OLED display. This enables mics to be labeled for each performer, and configurations saved, eliminating the need to tape labels on mics night after night.

“The real standout is how this wireless system communicates both ways,” Newton said. “You can do everything from a laptop except change batteries. You can change TX RF frequencies remotely, raise and lower TX gain remotely, and put the TX to sleep to save batteries without touching the mics!”

Newton added that the ability to mute mics is especially important when capturing opera performances so as to ensure that off-stage chatter does not interfere with on-stage action.

The stability of the digital signals produced is another bonus. “Analog wireless systems had a sound that was affected by receiving conditions as well,” he said. “The new Sony system remains consistent under all conditions.”

“The Sony wireless system offers a new resource to the recording industry that gives us opportunities not possible before. This proved very easy to work with and can scale to 30-50 channel environments making it ideal for a Broadway theatre setting,” Newton said.

Clearly, the Sony wireless system is delivering encore performances.