

Field Focus

Sony Professional Products in Action

Sony XDCAM Professional Disc System Provides Washington State University with Textbook Example of Optical Workflow

Broadcast students at Washington State University are getting an education in the future of broadcast production technology through hands-on experience with Sony's XDCAM™ Professional Disc™ System.

The optical disc technology has been in place since February, used both as a classroom tool and to produce a university-run community affairs show called "Face to Face."

According to Marvin Marcelo, assistant professor at Washington State, "We wanted something that was much more future-facing than just another tape format. We didn't want to step into an existing format. We wanted to move into the next wave of video production and replace all of our tape formats throughout our operations. Clearly the XDCAM system will allow us to do just that."

On the production of "Face to Face," Marcelo noted that both

students and faculty are impressed with the XDCAM system's on-the-set flexibility, as well as its ability to streamline the edit and post-production process. The faculty supervises the students who shoot and edit the video, and write the stories, with an alumnus hosting the show.

A key feature of the XDCAM system is its in-camera editing capabilities, allowing crews to review footage as thumbnails on the camcorder's LCD screen.

"To have the thumbnail and essence marks available to watch video and see what's on the disc in an instant is tremendous," Marcelo said. "We can just jump to a scene and say 'yeah, let's do that one over.' Normally you never want to rewind and fast forward a tape while shooting is in progress; you're so afraid of missing something or, even worse, recording over something. With the use of the optical disc media, we can review footage and then quickly switch back to record mode and automatically start recording on the next free spot on the disc."

Once the discs from the set are handed over to the show's post-production team, the benefits of random access can allow the post team to instantly locate scenes according to timecode breaks, which is a significant time-savings.

"It's making us much more efficient in the edit suites," Marcelo said. "In the past, we had to scroll through the entire tape, look at the timecode, and burn the timecode onto another tape so we could actually see it. Now the timecode is embedded with the thumbnails, so they just write down the number, watch for the good ones and only ingest that footage."

In addition to the show's production, Marcelo says he finds the XDCAM system to be an invaluable educational tool, teaching the students about cutting-edge technologies and the convergence of traditional A/V production with an IT-based workflow. "The students are learning all about optical technology and different compression ratios, as well as the MXF protocol, which is increasing in use at many broadcast organizations," he said. "For them and for the faculty it's a new way of thinking. The stu-



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dents are really excited about it. In fact, when they go out for internships to some of the smaller stations that are still tape-based, they are amazed at the difference.”

At the center of the XDCAM system is Sony's blue-laser based Professional Disc media, which offers unique benefits in terms of split-second random access to footage in the field or during the post process, and multi-format flexibility and flexible record times, DVCAM™ (85 min.) or MPEG IMX® (45 min.). The Professional Disc media has a maximum transfer rate of 144 Mbps when using the PDW-1500 compact deck with two optical heads, and the discs also offer portability and are packaged in specially designed durable cartridges resistant to dust, shock and scratches.

Another benefit to the Sony Professional Disc media is its reusability, a minimum of 1,000 read/write cycles and up to 10,000 read/write cycles in ideal conditions, based on Sony's own testing. The greater number of repeat recordings possible with the XDCAM disc allows a production crew to re-use it more often than a videotape and without experiencing degradation after multiple uses of the media.

“We love the fact the Sony Professional Disc media is so lightweight, durable and portable,” Marcelo said. “We can easily carry them to and from the set, pop them in and out of the camera, the discs also take up less shelf space, making them an ideal archival medium.”