

The Arizona Diamondbacks Go HD

Some television screens are just bigger than others. Consider the stadium screen at Phoenix-based Chase Field, home to major league baseball's Arizona Diamondbacks. The gigantic HD LED board, dubbed DBTV, measures 136 feet wide by 46 feet high and hovers above center field, displaying everything from live video and animated opening sequences to player statistics, instant replays, and short features.



A huge hit with fans, the DBTV screen entertains the crowd before, during, and after each home game with information about the plays, the players, and the team. The screen is also a hit with the D-backs production team, who acquired a new HD workflow to produce sophisticated content more efficiently than ever before.

"We are able to do things in 16 x 9, even filling the entire board," says managing producer Jon Magnuson. "And we are using a lot of green screen [elements for visual effects]. On opening day, we made the board look like the old one in terms of size, so people would think, 'Hey, I thought this was supposed to be big...' Then seconds later we blew the screen wide open [with graphics and effects] to show the entire screen. People roared."

"Fan reaction [to the new stadium screen] has been really fantastic, which helps our senior management see that decisions they've made to go to the new HD production have been worth it."

Scott Geyer, Vice President of Broadcasting, Arizona Diamondbacks

A Great Rookie Year

It was a little less than a year ago during the 2007-2008 post-season that the D-backs production group made the leap to HD. While an upgraded setup was implemented with the new HD stadium screen in mind, the new workflow also had to handle a variety of other content, including a half-hour weekly show (*D-backs Playin' Hardball*), commercial spots, corporate videos, and Web content—all of which are now produced in HD.

The production team settled on a workflow that currently includes three Windows-based Media Composer v3.0.1 software setups and two Media Composer Nitris DX systems. All are connected to an Avid Unity MediaNetwork system with 16 terabytes of shared storage, so staff members can simultaneously access projects and media to meet tight deadlines.

"We are definitely producing content a lot faster with these five Media Composer setups on an Avid Unity [system]," says Magnuson, who works with an eight-person staff. "I can say to an assistant, 'Go ahead and start laying out the shots ... just do a rough cut.' They can sort of act like a prep cook to get the project started. While they are doing the rough layout I can be writing the script for a feature, doing interviews, and handling the other day-to-day duties of setting up the show. If I need to add whiz-bang effects later, I can call in an editor. This setup helps me delegate tasks to those who can handle certain skill sets and we get everything done a whole lot faster."



Time savings are also realized by the real-time playback of HD media using Media Composer Nitris DX systems. Editor Steven Miller explains, “When you are working with six or seven streams of HD layers, it makes a huge difference. You don’t have to sit there and wait for adjustments, go back, and render again. You can see all your changes right away. It really increases creativity. Especially in sports ... there’s always another shot, always

something else you want to try. Now you can.”

All HD media is edited and delivered for play out using the Avid DNxHD 145 codec, which significantly reduces storage and bandwidth requirements while retaining all the visual richness of the HD images. Locked cuts are translated to 720p for play out on the stadium screen and to 1080i, as needed, for broadcast.

Miller, a long-time Avid user, is impressed with the latest Avid products, citing the efficient HD workflows and ability to integrate seamlessly with third-party products such as EVS servers, which the D-backs use for real-time HD capture and playback. “From a broadcast professional’s standpoint, Avid [systems] always give you more options than any other system. The quality of Avid systems is getting better every day, especially with their focus on HD. The future of HD coincides with where Avid’s products are heading,” he says.

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Jon Magnuson, Managing Producer, Arizona Diamondbacks

Double the Play

Other D-backs productions have also transitioned to HD to take advantage of the streamlined workflow and top-quality images. For *D-backs Playin’ Hardball*, which airs on the local Fox affiliate following every Sunday game, Magnuson incorporates the latest highlight clips and player interviews easier than ever before, adding graphics and visual effects to produce more eye-catching content using the fully integrated Boris Red and Boris Continuum effects tools. He relies on the same product features to produce sophisticated commercial spots for local broadcast as well as corporate videos for prospects and the press. All of this content, which is stored on the Avid Unity system, becomes a valuable asset that can be quickly repurposed on the stadium screen. For example, portions of *D-backs Playin’ Hardball* are shown before each home game.

The HD workflow even helps the production team create edited nightly recaps for fans while they are still at the ballpark. “We can edit highlights from that night’s game—during the game—and turn it around quickly to show fans on the DBTV screen,” says Magnuson.

This content expansion and flexibility is expected to quickly contribute to a healthy return on investment in the Avid systems. “We used to send hundreds of thousands of dollars out of house over the last few years [to a third-party post facility],” says Magnuson. “Now, we can pay for our systems quickly, keep the savings in-house, and do even more programming.”

What’s more, the rich and colorful HD images have become an attention-getting crowd pleaser. Vice



president of broadcasting Scott Geyer explains, “Fan reaction [to the new stadium screen] has been really fantastic, which helps our senior management see that the decisions they’ve made to go to the new HD production have been worth it. It’s all part of competing for entertainment dollars—you have to entertain all aspects of your fan base. You’ve got to take some chances and invest in new technologies even though there can be some uncertainty. Going from analog to digital, SD to HD, sometime feels like going from the Flintstones to the Jetsons. [Our senior management] has really put their money where their mouth is. And it’s definitely been worth it.”

CREDIT: Courtesy of Arizona Diamondbacks