

## CASE STUDY

# Discovery Channel, *Smash Lab* Downey, CA, USA

TV shows can take months of planning, preparation and labor to produce a top-quality, innovative and entertaining program for viewers. Darlow Smithson, a leading production company, was charged with the development and production of a brand-new television program for Discovery Channel called *Smash Lab*, which began airing at the end of December 2007.

The show, which is described by Discovery Channel as “the next generation in destruction instruction,” features a team of maverick engineers as they take on everyday technology and apply it in new ways. First they analyze the technology to see how it works, then they apply their know-how to see how it could be used in a different way. Initial episodes included the engineers testing whether bulletproof Kevlar could protect a large airplane from an explosion and using torpedo technology for a mid-ocean rescue attempt. After performing their tests, they review their taped video for the TV audience to see, making use of the Panasonic PT-DW10000U projector.

The result is an action-driven show with vivid colors and intense pyrotechnics that are all created in-camera, with no special effects. Due to the reality-type format, the reproduction of these images for the audience is one of the most important aspects of the program.

“To make sure we could see our test results in clear, crisp images on a large screen, we were adamant about using a dynamic HD projector for the show,” said Peter Coogan, research producer for *Smash Lab*.

Because the filming and production site was located in a large production area of air hangars and huge outdoor



Due to the real-time production nature of *Smash Lab*, the production team needed the extremely lifelike image of the DW10000 so they could reference an image at any part of the show.

facilities, the producers turned to Panasonic Projector Systems Company to get its cutting-edge 10,000-lumen projector to take on the task.

Made for large venues and stadium-like environments, the Panasonic DW10000U projector displays high-definition 1080p images through a four-lamp system that delivers 10,000 lumens, while Dynamic Iris technology achieves an outstanding 5,000:1 contrast ratio. A *Rental & Staging*

**Discovery Channel, *Smash Lab***  
**Research Producer**  
—Peter Coogan

“The projector truly exceeded our expectations.”

### PT-DW10000U

**APPLICATION** – Television production.

**SOLUTION** – The Panasonic PT-DW10000U projector was used to greatly enhance the production process of the show.

**RESULTS** – The 10,000-lumen DW10000U projector with 1080p images and a 5,000:1 contrast ratio played a vital role in the development of the series, serving as a valuable tool in the testing-result review process.



magazine award winner, the Panasonic DW10000U has also been used in race and sports books, rental & staging applications, commercial theaters and amusement parks.

Coogan was thrilled with the picture quality of the projector and said, "The Panasonic DW10000U projector was superb, and the details we could see in the images being displayed on the screen were great when we viewed ultra-slow explosions and other events we taped."

In a venue that covers 40,000 square feet, the producers projected images in two areas and in each case had a throw distance of 16 feet. During the weeks of production, filming and reshoots, the crew used the projector for up to eight hours. One of the key benefits for the staging crew was their ability to easily get access to and communicate with customer service and engineering representatives at Panasonic who streamlined the setup and projector operation.

"Once we got familiar with how to operate the projector, we loved the ease of use," said Coogan. "The projector truly exceeded our expectations."

The introduction of Panasonic technology, particularly the DW10000U projection solution, to the staging and broadcast crews has not only greatly enhanced the success of *Smash Lab*, but has also provided a new set of tools and processes for which all types of television programming can be produced



*The DW10000, with Dynamic Iris technology and a 5,000:1 contrast ratio, proved to be a vital collaboration tool, making it possible to refine and reinvent the show during production.*

in the future. It is safe to say that the projection system has enabled the team to find new ways to engage audiences and deliver high-impact programming.



*The Dynamic Iris technology of the DW10000 offered such amazing detail that the Smash Lab crew actually used it as a guide to sketch out the different stages of the show.*

VISIT [PANASONIC.COM/PROJECTORS/CASESTUDY](http://PANASONIC.COM/PROJECTORS/CASESTUDY) FOR MORE INFORMATION.

**Panasonic**  
ideas for life

888.411.1996  
[PANASONIC.COM/PROJECTORS](http://PANASONIC.COM/PROJECTORS)