

At the intersection of action adventure storytelling and cutting-edge video processing technology, a new breed of filmmaker is materializing. These artists are producing adrenaline-soaked movies, commercials and branded entertainment with an immediacy that engages viewers at a visceral level.

To craft their visual stories, these professionals need tools as nimble and fast-paced as they are. Lugging around huge cameras or waiting for video editing equipment to process shots are not options.

Bandito Brothers, a full-service media company and filmmaking collective based in Los Angeles, specializes in harnessing technology to create authentic action/adventure content. With a range of workstations running the Adobe Creative Suite 5 software, and IRIDAS SpeedGrade—all powered by the NVIDIA Quadro professional graphics solutions—Bandito Brothers is able to edit its work in



real-time and at full-scale resolution.

Bandito Brothers is known for its high-octane in-camera action seen in commercials for cars, soft drinks and branches of the US armed forces, as well as on the silver screen. Scenes used in the studio's work often integrate adventure sports such as motorcycle racing, surfing, snowboarding and skateboarding, or actual military exercises with live ammunition.

"Quadro enables us to watch a full broadcast monitor to see scenes with pixel-for-pixel accuracy."



"We are fearless directors and cameramen who are willing to immerse ourselves in pretty much anything to get great footage – and we are also technologists who push technology in post-production to achieve our desired results," said Jacob Rosenberg, Chief Technology Officer and Director at Bandito Brothers. "For us, the Adobe and NVIDIA tools are like a Swiss army knife, allowing you to create essentially anything you want right on your desktop."

The right technology for the job

"We create 'cinematic non-fiction,'" said Rosenberg. "We architect a story with real people, shoot it, edit it and tell that authentic experience."

Whether it's a skateboarder dragged behind a subway train for a Mountain Dew commercial, or films such as Dust to Glory (about the Baja 100 road race) and Step Into Liquid (about extreme surfing), Bandito Brothers makes sure it conveys an immersive, "being-there" quality.

Bandito Brothers uses Quadro-equipped workstations running Adobe Premiere Pro and IRIDAS SpeedGrade software. Their post-production technology works with any camera format, so the filmmakers need not rely on large, unwieldy cameras to capture their action footage. Recently they have been using the new Canon 5D Mark II Digital SLR, making it very easy to get high quality footage while hanging out of speeding vehicles or parachuting out of planes.

"NVIDIA Quadro allows us to have an immediate immersive experience, doing things in real-time at the highest possible quality."

"We need to work in a WYSIWYG environment," said Rosenberg. "Quadro enables us to watch a full broadcast monitor to see scenes with pixel-for-pixel accuracy. We create a color profile correction, throw it on the timeline, and it looks much better than just the raw video."

When editing and applying effects, the CUDA parallel computing architecture of NVIDIA Quadro GPUs dramatically accelerates Adobe Premiere Pro CS5. As a result, Bandito Brothers artists enjoy an amazingly fluid, real-time video editing experience at full resolution, without expensive, custom hardware or additional third-party products.

In addition, deploying the NVIDIA Quadro Digital Video Pipeline solutions, Bandito Brothers utilizes HD-SDI output options, and routes the video feeds to various review stations in the studio, or their plush screening room. "Right now we are using single channel HD-SDI output, but when we move to 3D, we know Quadro's built-in dual channel support is waiting for us and ready to go," said Rosenberg.

Better efficiency allows more time for creativity

With Adobe CS5 and the Quadro GPU, Bandito Brothers can now take footage from a shoot, import it directly into Premiere Pro CS5 and begin editing right away. The Mercury Playback Engine in CS5 enables editing of RAW footage taken directly from the Canon 5D and placed in the timeline.

"With Quadro, we see our work in real-time, at the right resolution, without having to go through proxies or temporary files," said Rosenberg. "NVIDIA enables us to reduce the number of steps in the editing process and shortens the remaining steps – so the whole post-production process is more efficient."

By streamlining the production process, the combination of Adobe and NVIDIA technologies free Bandito Brothers to reach their full creative potential.

"It's important for us to create work that not only our clients appreciate, but also that we believe in," said Rosenberg. "NVIDIA Quadro allows us to have an immediate immersive experience, doing things in real-time at the highest possible quality.

"We have high expectations for what we do," he said.
"Because we trust the solutions from Adobe and NVIDIA, we are able to produce authentic video content that exceeds our expectations."



