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Red Delivers on its Promise

Early adopters finally get their hands on Red One

by Carl Mrozek, November 26, 2007

TORONTO

Customers who showed an enormous leap of faith when they plunked \$1,000 down payments for the first 100 Red One cameras a year and a half ago were finally rewarded when the first 50 cameras began shipping on schedule in early September, followed by an additional 50 shipped last month.

When it was introduced at NAB2006, Red One was little more than a dream being developed by an energetic, enthusiastic team armed with engineering designs and a 4520 x 2540 Bayer sensor. But it also had the personal commitment of Jim Jannard, the founder of Oakley, who became rich convincing millions to buy his unique but pricey sunglasses.

Red promised more than a glare-free view of the world; it was more like a camera for all seasons—at a price which threatened the market share of established camera manufacturers. However, NAB veterans had seen enough smoke and mirrors to not dive in with checkbooks in hand. Not only did the concept seem ambitious, so did the timetable, with a shipping date in less than two years, starting from scratch.

Yet, with the delivery of more than 100 4K Red cameras 18 months later, at the very least, Jannard, Red’s founder, disproved cynics who said they would never deliver an operational 4K camera at the advertised price of \$17,500. But, as Ted Schilowitz, “leader of the (Red) Rebellion” explained, “We’re not like other camera manufacturers. We use engineering targets, not the calendar, as benchmarks.”

FEATURES & FUNCTIONS

The question for early adopters was whether Red One met their expectations from NAB2006 or came close. The answer depends on whether customers believed that all the key features promised would be available when delivered, or over a period of time via software downloads. During a workshop and teleconference at PS Production Services in Toronto last month, some early adopters asked Schilowitz when several key features would be available. While he was unable to give specific dates, he did announce a new daughter board on the sensor board which increases dynamic range and further reduces noise (especially below 25 fps)—a free upgrade to all early adopters.

“We had the first Red Ones in Toronto and it’s been non-stop ever since, on jobs and doing demos,” said Nick Sorbara of Magnet Film & Digital in Toronto, who received Red camera #0050 last month. “We’ve turned down long-term rentals to meet the demand here for commercials, music videos, drama and Web projects. The interest here has been phenomenal. Clients love the quality and cine look. Many can’t tell it apart from 35mm.



(click thumbnail)

Vinit Borrison from Magnet Film & Digital in Toronto checks out Red One #0050.

"They also love the lower cost. With no filmstock to buy, process or print, you can save thousands on a job and can use it to boost production values with things like cranes, dollies, helicopters, special lenses, name talent etc. Clients love that because there's never enough money in the budget to do it all."

But, as with all early adoptions there are challenges aplenty. "The Red team did an amazing job delivering a camera so quickly," Sorbara said. "They could have waited another half year to add more functions, but instead they got them to us sooner and let us figure out how to use them as is until more features are ready. We're working closely with the Red team to make a better camera, to realize the dream we had when we first heard about it."

Vinit Borrison, Sorbara's partner and D.P., has helped solve many of the technical challenges Red has faced, including monitoring. Since the Red viewfinder isn't yet released, Borrison mounts another 7-inch HD LCD to a top rail and feeds its HD SDI output to a larger LCD monitor, mounted off-camera for client viewing. Currently, only one of Red's several HD SDI ports can be used at a time. "I can't wait for Red's 720p color viewfinder," Borrison said.

Another challenge is the limited storage capacity of the high speed Red Flash, the only portable media now available for recording Red raw footage. Each 8 GB card sells for \$300 and holds only 4 1/2 minutes of 4K Red raw. For many, this means offloading 4K footage, in the field, to a laptop or other storage device so that the cards can be reused. Just in case, Borrison and Sorbara have stocked up on Red flash. "We have 15 cards per camera, enough for 65 minutes worth of 4K," Borrison said.

For those shooting hours of footage per day, or who can't muster enough cards in order to do their offloading later, after shooting, offloading Red flash in the field (to a laptop) is a viable option, according to Sobara.

"Our camera assistant downloads and logs each card to a Mac Book, using Red Alert," he said. "A straight offload can be done in better than real time. But, until the Red Cine codec is released, color settings can only be applied one clip at a time, too time consuming for the field. With Red Cine, color settings can be applied to batches of clips, in real time or better."

Another option is shooting 2K versus 4K. "Our 2K has been activated for a few weeks now and it looks almost as great as 4K when downconverted for [NTSC] TV or DVD projects," Borrison said. "Each card stores 20 minutes of 2K footage, so we've been shooting it whenever it makes sense." In fact, PS Production Services, which hosted the Red event, has developed a streamlined 2K-based workflow for its Red clients.

Nevertheless, some like Gregor Hagey, whose brother bought Red One #0098, chose Red especially for its 4K capacity.

"Our first project will be output in 4K so we're shooting it in 4K," he said. "We'll downconvert to Digibeta to edit on a non-HD Avid and we're working closely with Technicolor, our post house, to manage the workflow for filmout in 4K. As DP, I'll work closely with them to be sure they apply the right look to all the clips."

For Hagey, working with a Red camera is definitely a team sport. "When fully rigged, Red is pretty hefty and complex," he said. "To work effectively with it you really want a film-style crew with one or two camera assistants, a soundperson, gaffer and a DIT [digital imaging technician] to manage the footage from acquisition through output, plus a digitally savvy DP/operator. Working with Red is much different than shooting with a Varicam, especially with all the workarounds now."

AUDIO WORKAROUND

Currently, audio also requires a workaround as audio functions had not been enabled with the first 100 Red Ones shipped. Eventually, Red will record 4 channels of 48 KHz audio via mini XLR audio inputs.

In Toronto, this didn't bother early adopters "We're used to slating, for dual system audio

recording with film," Borrison said. "With Red we handle audio just like when shooting film. Even though it's all digital, to me, Red is a lot [more] like a film camera [than video], but without the film. Its menu interface, at the back end, is unique, but video style. Its front end is more like a film camera, but you need to master both ends for good results."

Pros in both the film and video camps will have to start doing exactly that if they want to join the "4K Revolution." In Toronto, veterans like Alan Lennox at PS, see the handwriting on the wall.

"It's not a question of whether digital will replace film, but when," he said. "We've ordered 40 Red cameras for rental to meet the anticipated demand and many of our film cameras are up for sale. We're now at the threshold of a new production paradigm so we're developing new workflows to make it easier for our clients to work in 2K and 4K, starting with Red One."

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