

in the trenches

If You Want Something Done Right...

New York-based spot director/DP Dayton Taylor is the pioneering operator of the Timetrack camera system. That's because he invented it. Time-track—and the patented process known as Virtual Camera—is actually a system of several cameras arranged together. The cameras fire sequentially around (or past) a subject; each shot's slightly different placement cre-



Dayton Taylor's 40-lens, curved Timetrack rig (above); Virtual Camera was used in this spot for Samsung cellular phones (right).

ates the illusion of a perfectly smooth tracking shot, a "frozen in time" effect.

"I've been developing the technology since 1993," says Taylor. "The prototype consisted of a Mitchell magazine cut in half; I inserted an array of 60 hand-made, interconnecting camera modules between the two halves. I'd been playing around with two still cameras synchronized to fire at the same time. I was shooting pairs of photographs with this system and printing them together to show an instant in time from two different points of view."

Building on that idea the way Taylor first envisioned quickly presented too hefty a price tag. He recalls: "My first thought was to purchase and synchro-

nize off-the-shelf still cameras, but I was in college at the time, and to do so would have been prohibitively expensive for me. I ended up building the system from scratch. Ironically, my approach turned out to be much more expensive, but I was able to keep my startup costs low, which allowed me to research, design, and patent the most efficient system I could conceive of."

Timetrack has been featured in spots for clients like Blockbuster, Charles Schwab, and Samsung. Last year's Miller Genuine Draft spot called for an entirely frozen shot of beer shooting from a bottle into a mug. Taylor used his 40-lens curved camera; all 40 opened and closed simultaneously. But a current Miller spot required a shot of a can being opened, the beer exploding out of it, then freezing in mid-shot.

"I used my 40-lens curved camera again," says Taylor, "but this time the



first 20 shutters were programmed to fire sequentially, with a 10-millisecond delay from frame to frame. After that, the last 20 shutters fired simultaneously. We used Unilux lights synched to the shutter system to ensure a fluid-freezing flash for each frame of film." To transport the images from film to video, Taylor digitally scanned the negative, then rerecorded the frames sequentially to tape.

While the look of virtual camera is

becoming a hot commodity among agencies, Taylor concedes the concept is sometimes difficult to translate. "If you want a shot with a 10-foot move in it, the camera has to physically be 10 feet long. Even though that should be fairly obvious, very few people are used to thinking that way about camera movement. To complicate things, the fact that the shutter can run sequentially or simultaneously adds another dimension to understanding it."

Although he's spent the last few years modifying the Timetrack concept, Taylor still has yet to incorporate a playback system he's happy with. "Right now all we have are unattached video cameras with which we record the entire event from one or two points of view so that we can see a few video stills of the action at the instant the camera exposes the film. This doesn't tell us what was in a particular frame, and what wasn't, which is determined by a parallax viewfinder."

Still, the darkest cloud over Taylor's inventive head is still a financial one. "I'd hoped that after my patent was granted I'd get outside financing for future systems. I never did find a financial backer, and as a result I've had to keep my fees embarrassingly high and my overhead frighteningly low, and yet I'm still broke all the time because everything I make goes back into the system. It continues to be a struggle, but it's afforded me the opportunity both to build new systems and to work with some of the world's best directors on some incredibly interesting projects."

Taylor is currently developing larger systems with Zeiss optics and nonlinear shutter systems, as well as a digital version of the camera. His Web site is: www.virtualcamera.com.

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