TANGERINE

Shooting a Cinematic Feature Film with an iPhone



ndie filmmaker Sean Baker's *Tangerine* made waves at this year's Sundance Film Festival with a couple of big surprises. The film, shot entirely with the Apple iPhone 5S, stars two transgender women of color with no previous acting experience. A Christmas Eve "odyssey" through various Los Angeles subcultures with a decidedly gritty look and feel, the micro-budget feature was made for less than half the cost of Baker's previous film, the Independent Spirit Award-winning *Starlet*, produced in 2012 for a mere \$250,000. Picked up for distribution by Magnolia Pictures, *Tangerine* is also the first film shot on a smartphone to secure a theatrical run, opening in lim-

ited release on July 10.

Exploring fidelity and betrayal, the film follows Sin-Dee Rella (played by Kitana Kiki Rodriguez), a transgender sex worker who has just been released from a 28-day stint in jail. Furious about a rumor that her boyfriend Chester (James Ransone) has been cheating on her with a biological female, Sin-Dee sets off across the city to find her rival and stage a confrontation. Meanwhile, Sin-Dee's best friend and co-worker, aspiring singer Alexandra (Mya Taylor), prepares for her big show, hooking up along the way with one of Sin-Dee's more devoted patrons, an Armenian family man and taxi driver named Ramzik (Karren Karagulian).

The action culminates in an iconic Hollywood Donut Time doughnut shop, with unexpected and shattering results.

Baker opted to shoot with iPhones primarily because of budget concerns, but he found during production that the small form factor was also an asset. "Being able to be inconspicuous was one of the benefits that came from shooting on the iPhone, but it really started off because of budgetary constraints," Baker explains. "We had a budget that would really only allow for either a DSLR or a smartphone, but when we started weighing the options, we found that even the DSLR setup would have been cost-prohibitive. We would



have needed three additional crew members and—because we knew we were doing something special and wanted to make the best movie we could—it would have required us to purchase what would have likely been very expensive glass lenses."

One of the most visually striking components of the film is its look, which is grainy and highly saturated, creating a sense of tension within the images. Baker and director of photography Radium Cheung (*The Americans*) achieved that look in part by outfitting their iPhones with anamorphic lenses. A company called Moondog Labs provided the film with prototypes of their Kickstarter-funded 1.33x anamorphic adapters for the iPhone. As well, the cameras were operated with Steadicam Smoothee handheld stabilizers manufactured by Tiffen.

The cinematographer captured anamorphic footage on the smartphones with the help of the FiLMiC Pro app from Cinegenix, which enables

manual control over focus, exposure, ISO, shutter speed, tint and color temperature, turning an iOS camera into what the company calls a "broadcastworthy 2K HD video camera." Most importantly, the FiLMiC app allowed the team to shoot at a bit rate of 50 Mb/s, much higher than the iPhone typically allows.

"We still made a real movie here," Baker insists. "We made a movie with permits and insurance and locations and extras and SAG actor minimums, BGA, WGA, all those union minimums applied. We were making a real movie. We just saved all of our money on the equipment."

Working with a small but experienced crew—director, AD, DP, and Baker's frequent collaborator Shih-Ching Tsou, who wore multiple hats as costume designer, props, AC, graphic designer and producer—production took place over the course of 23 days. Baker and his team shot sporadically, working primarily in the afternoons in order to take advantage of the "magic hour" just before sunset. Audio was recorded separately by sound mixer Irin Strauss on a Sound Devices 664 field production mixer using both lavalier and boom mics.

"You simply cannot skimp on sound." Bad sound, Baker stresses, "is the first indication that you are an amateur and that you are low-budget."

At first, Baker covered the actors using steady tracking shots, then he tried maneuvers like riding alongside the action on his bicycle. Eventually he became more experimental, using dramatic swooping shots that mirrored the script's material. Several dynamic "crane shots" were achieved by mounting the iPhone to the end of a \$35 painter's pole purchased from Home Depot.

The postproduction workflow for *Tangerine* was straightforward. Material was downloaded from the iPhones to an Apple MacBook Pro using iTunes. Following backup, the native H.264 files were transcoded overnight to ProRes 422 format using Apple's Compressor utility. Baker performed the offline edit using Apple Final Cut Pro 7, applying filters as he went to help create the final look he wanted for the film.

The ProRes files were then handed off to Los Angeles post facility Different by Design for online editing, color correction and finishing for DCP (digital cinema package) distribution. Colorist Luke Cahill handled color correction using Blackmagic Design's DaVinci Resolve, refining the look Baker

had originally created. For the film's opening scene, a long dialogue between the two leads, Different by Design also created a matte of the view outside the window for continuity purposes.

"I treated it heavily in post," Baker recounts, "adding filters, adding grain and upping the saturation." The resulting look is unmistakably digital yet still filmic, combining intimate, wideangle photography with a colorful, saturated palette. Audiences would be hard-pressed to find evidence that the project was shot using a lowly smartphone. dv

