

# Silence Becomes You

These are halcyon days for digital cinematography. As well as *Silence Becomes You* shooting uncompressed 4:4:4, *Stars Wars III* and *Sin City* are also experiencing shades of the three 4s. News also of Panavision's Genesis camera on the set of *Superman*. Here STEVE SHAW describes the SBY workflow



The production workflow used two Viper cameras, in uncompressed Log RGB 4:4:4 FilmStream mode, capturing a 2.37 image direct to their respective S.two Digital Film Recorders.

Being able to capture a 2.37 anamorphic image using spherical Zeiss DigiPrime lenses, while using the full resolution of the CCD sensor, is a real benefit of the Viper camera, producing stunning anamorphic images.

The S.two's were housed in MotionFX developed wheeled rigs for ease of mobility when required, complete with batteries and chargers for non-mains powered operation - especially useful for roving shots. A number of different Viper camera looms were used depending on camera requirement. 10m to 40m multi-core for main set work, providing power and image paths, while a longer Dual HD SDI cable was provided for steady-cam and

longer roving shots, with the Viper running local battery packs.

A number of shots also required high speed capture, and we approached this in two ways. For dance and dream sequences we shot with Viper set to capture 60fps progressive, which when played back at 24fps gives a 2.5 times slowdown. For true high speed requirements we used the CineSpeed camera from Weinberger.

Each evening the days rushes were viewed as dailies via the JVC HD digital projector, providing immediate feedback on the day's shooting, with the playback also being used to feed images to the off-line system, being loaded in real-time via its HD compression codecs.

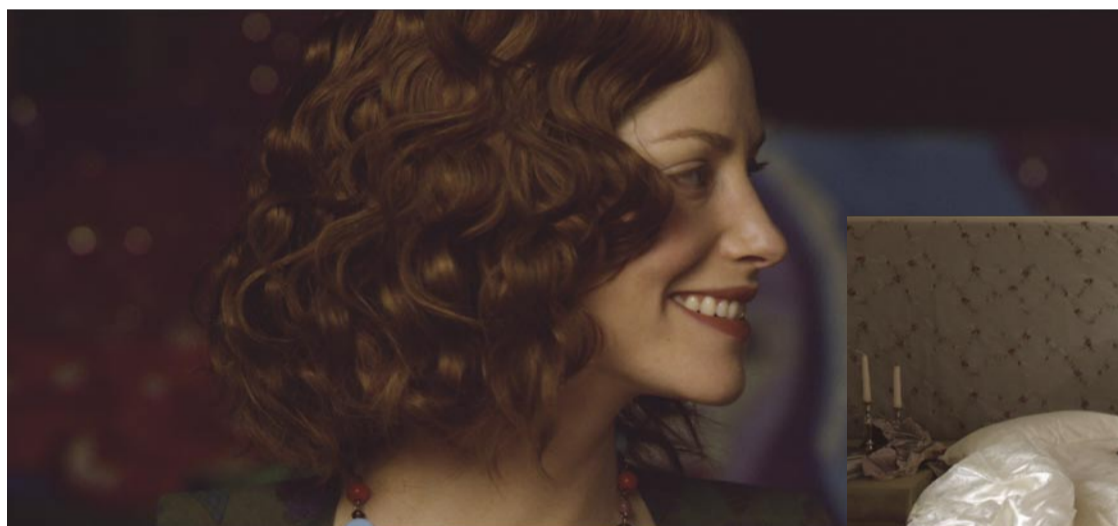
After data capture into the off-line system uncompressed feeds were backed-up to the Adic LTO2 tape archive Jukebox via S.two's A.Dock backup system. The D.mags were then

available for re-use for the next day's shooting.

The use of daily 'dailies' review via digital projection is a major benefit as well, allowing the full production operation to see the progression of the film, while making sure all material is as expected and needed.

Having said that, due to the length of days being worked the dailies review process became intermittent at best, also partly due to the confidence the production team gained with the quality of the images being captured. A very positive endorsement for digital cinematography.

And, combined with on-set monitoring, it enables material selection to be made via informed judgement, reducing the variables for off-line. We can happily delete those takes that are never going to be considered for on-line, such as fluffed lines, missed cues, bad focus pull, etc.



The production phase of the project has shown the validity of digital cinematography, without serious problems being encountered.

The equipment, including Viper cameras, S.two D.mags and operators, worked at minus 14°C without problem, got bounced around in the back of some very rickety old cars for 2nd unit work, was set-up in the middle of a wood in two feet of snow, got hooked to the back of a low-loader for through-the-windscreen two shots, and in all cases performed flawlessly. We ran on 12v & 24v dc, local mains and production generator power, even suffering floating earth problems when on local power, but all without failure or error.

The immediacy of the production workflow was praised by all involved, while the images generated, even before post-production colour correction and viewed via basic LUTs, were classed as stunning by all who saw them.

In total there will be in the order of 25TB of footage recorded, amounting to over 60 D.mags filled throughout the production phase, adding up to a total of over 33 hours of material. A shooting ratio of about 18:1, and the equivalent of 180,000 feet of 35mm. All backed up onto 240 individual LTO2 tapes, 120 per copy.

This is a very good example of the cost benefits of shooting digital cinematography. For any independent film production running a relatively small budget, as with *Silence Becomes You*, it would be impossible to shoot such an amount of 35mm film. Even with a relatively good lab deal the cost

is going to be around 80 pence a foot for the negative film stock, processing and telecine to beta tape for off-line. Film dailies, transportation, risk in transit insurance, etc..., being extra. The likely total makes the traditional approach cost a minimum of £150K to the production company.

Going the digital cinematography route costs an average of £35 per minute of material to match the same result, making a total of £70K. For independent film making this is a significant difference.

And that doesn't take into account the benefits of

immediacy, interactivity, short decision-making time scales, full quality dailies, etc, etc.

Our conclusions are that digital cinematography works, and works well. We expected far more problems than we encountered and were amazed by the ease of the production process.

Post-Production began during the production phase, with LTO2 tapes being send back to MotionFX's UK operation for vfx and 3D work to begin, and with the off-line editorial being performed on location as described above.



The plan for post-production was very straight forward, with a digital intermediate workflow approach as used for 35mm shot material, scanned into digital. But, with a digital cinematography approach the workflow is even simpler as the transfer of image data throughout the pipeline is very straightforward.

SILENCE BECOMES YOU HOPES TO BE ENTERED INTO THE CANNES FILM FESTIVAL THIS YEAR