

RADIO FREE ALBEMUTH

WHEN DP JON FELIX WANTED INSTANT OFFLINE FILES FROM A VIPER SHOOT, TECHNICOLOR CAME UP WITH A CUSTOMISED SOLUTION



XDCAM HD DECK

RED BUTTON

SRW DECK

SRW CONTROLLER

LUTHER BOX

'DP LIGHTS' CONSOLE

WAVEFORM/ VECTORSCOPE

The digital workflow requirements for the recent feature 'Radio Free Albemuth', starring Alanis Morissette required some careful thought. This was a film adaptation of the Philip K. Dick novel. One of the most intriguing of Dick's works – this posthumously published novel is set in an alternate United States and tells the story of two friends and their involvement with an extraterrestrial entity named VALIS. They also become involved in the resistance movement against a fascist style government. Philip K. Dick included himself in the novel as a main character and indeed the story is based on real events.

Of course many of Philip K. Dick's books have been filmed - examples include: Blade Runner, Total Recall, Minority Report, A Scanner Darkly, Next .. to name but a few.

It was decided that this film would be shot digitally and having extensively researched the various options (and the associated rental prices), I chose the Thomson Viper camera – shooting 4:4:4 RGB 'filmstream' mode and recording onto SRW tape.

UNIQUE OFFLINE WORKFLOW

The Viper's Filmstream picture is roughly analogous to a film negative in that it contains much information to allow extensive colour correction later on. There is little in-camera processing of the image. The picture recorded is consequently low in contrast and has a green bias.

For off-line transfers – one could apply some kind of universal LUT (look-up table) to increase contrast and produce a more user-friendly picture for editing with. Rather like the 'one-light' timing applied to 35mm dailies at telecine. I decided that we could do better than that.

The shooting of the film was to include day-for-night sequences and all manner of unusual lighting set-ups for the dream sequences. I wanted to be able to produce an approximation of the look I was aiming for on-set. Of course the raw Viper picture remains untouched on the master tapes – this was a process to be applied to the transfer to an offline format only. Since the film was low-budget I wondered if we could combine several processes together whilst giving me a much greater control over the look of the dailies. I even wondered if I could create a LUT for each sequence on-set and make a second copy of the recording with that LUT applied at the same time. I looked into various solutions using software colour correction programs running on a laptop.

HIGH QUALITY DAILIES

There were some options to achieve this. Iridas makes a very neat program called Speedgrade On Set. You run this on a laptop which will network with a Cine-tal monitor. You create a LUT on a freeze frame of the shot and then apply it directly to the live picture on the Cine-tal. You then record that picture onto a second deck and 'bob's your uncle' – as we say in England – you have colour corrected dailies.

I'm sure that this would have worked well but as a result of my discussions with colleagues about the details of this proposal – I started talking with Technicolor's Creative Bridge www.creativebridgeinc.com who had an even neater solution.

the lab hits
the road



Technicolor developed a real-time colour correction system to support DoPs who are shooting digitally. When we shoot film, we have a lab in between the production and the post production side and the Technicolor lab takes care of setting the looks with the DoP for both the dailies and what the final DI should look like.

In the digital domain, well, the lab is missing.

Enter DP Lights.

DP Lights works with printer timing lights or a full on primary only colour correction system. We have a process to exchange the metadata from set to post using the new published ASC CDL exchange.

We have done about 14 features to date. Shows such as Next, Superbad, Walk Hard, Get Smart, I know what Boys Like, Georgia Rules, Quarantined and others have used the system very successfully.

In Jon's case, he had a very limited budget and had to play the role of DoP, Editor, On set colourist and Digital Imaging Technician.

We package a workflow around our system so that he could capture the RAW Viper output to HDCAM SR with no colour correction applied. This looped out and through DP Lights and this was fed to a display, a set of waveform vector scopes and also to an XDCAM deck. The XDCAM had the color correction "baked in". We also combined the audio from the audio mixer into this workflow and recorded audio on the both sources, in sync with the picture.

They used the XDCAM for FCP ingest and were cutting colour corrected pictures the same day they were shot.

Brian Gaffney
Vice President/GM
Technicolor Creative Bridge



Shooting Radio Free Albemuth digitally was a first for the crew apart from DP Jon Felix

Technicolor's Creative Bridge have this huge truck which has everything in it including Sony 4K projection, we couldn't afford that so went with their smaller, cheaper option. They offered to build a console for me which would include decks for the master recording and off-line copies and Technicolor's 'DP Lights' grading panel. It would also include a Luther box, a waveform/vectorscope, an HD monitor and a red button. With a push of the red button – the SRW and the XDCAM HD deck would start simultaneously. The 4:4:4 picture from the Viper was recorded onto the SRW tapes then re-outputted as 4:2:2, fed to the XDCAM deck via the Luther box and DP lights. I was able to create a colour corrected picture on the DP Lights controller, store the LUT in the Luther and produce colour corrected XDCAM HD dailies. The SRW master was of course untouched.

The whole thing was on wheels and was easily moveable as a unit.

The XDCAM disks were sent to the edit suite – the files transferred onto the Final Cut Pro system – and then returned to us.

Contrary to the dire predictions of the UPM and various colleagues – I found the process of creating the right look for each shot very easy and fast – often taking less than two minutes to create a new look, or a matter of seconds to pull up one of my earlier looks. If we were really rushed we didn't use the system but just used the raw footage and didn't worry about any colour correction.

I would set a look for each shot which was really quick, generally under a minute. So by the time I was half way through I had something like 40 or 50 very good looks which I could just dial up. However I found it quicker to start from scratch, as I got very, very fast with it. I come from an editing background, I used to be a BBC editor, I have an FCP and Avid system so I'd done a lot of colour correction in the past which helps hugely.

My advice is that if you are a DP looking at a route like this you definitely need to get some training, yes you could create a look without looking at the scopes very much but it may not be remotely legal. While it might produce you a decent offline picture it may not be of much use later on.

With *Radio Free* we were working with a team who had never shot digitally before and were very nervous about the whole thing and also they wanted very high quality offline. They didn't want anything green or even a 'generic look'. We could have worked out a sort of 'one light' correction as applied to film rushes but pushed for something better.

POST ROUTE

Technicolor would like us to go and do the conform there and I would be happy to do that because they've got some great colourists. But it'll come down to cost and the distributor and everything else.

But the post route is already defined. If you look at the clapperboard you'll see that the LUT number is simply written on there and you really could go into the final suite and dial up that LUT, which is readable by most colour correction software. That will form the basis of the grade, but having said that one colourist said to me "For goodness sake I'm not going to do all that nonsense just bring me a high quality copy of the offline and I'll look at it and do something better by eye which is going to be just as quick".

So it's down to the colourist but we do have that available so we can put the original tapes in and call up the shot and apply the LUT and it'll theoretically look exactly like it did on the set and the colourist can then improve on that.

The truth is with low budgets movies and people without much experience you get very nervous about your ability to see the photography all the way through. The DP should be the author of the image and with digital cinematography there is a lot of work to do at the back end. You can end up with situations where you don't have enough time to start from scratch. They certainly never pay you to go to colour grading! If I have managed to create a look that I specifically wanted at the beginning of it then I can call that look up but still have the option to do something totally different - it's the best of all possible worlds.

This is the first time we've done a movie this way and we haven't got to the conform yet so I don't know how smooth it will be, but I suspect it will be very smooth.

I should also say that this method is very 'DP friendly' in another way. By this I mean that no-one should underestimate the value of being able to produce lovely high quality images on set, which although they do not necessarily represent the final look, do invite appreciative comments from cast and crew. These people are used to seeing a poor video assist picture from a film camera!

I don't work for Technicolor and I am not being paid by them but I really did find this process an effortless solution to producing high quality colour graded dailies on-set.

www.jonfelix.com



Stills from Radio Free Albemuth: ABOVE: 'Nick' played by Jonathan Scarfe and 'Rachel Brady' played by Kathryn Winnick on sofa and 'Phil' on floor; FAR RIGHT: 'Phil' being interviewed by a policeman; NEAR RIGHT: 'Nick' and 'Phil'; BELOW: Shea Whigham as Philip K. Dick

