

Frequently Asked Questions About Time Travel

A report from DoP John Pardue about his experiences shooting with the ARRIFLEX D-20

Frequently Asked Questions About Time Travel, a co-production between HBO and BBC Films, is both a comedy and science fiction film. It's a very English take on time travel, referencing films such as *Groundhog Day* and *Back to the Future*. The comedy concentrates on ordinary male related issues so that throughout the fantastic journey our guys are still arguing about mundane issues from their previous real world.



The story follows three ordinary mates who go into a pub and get embroiled in a series of trips back and forth through time. Our heroes frantically avoid multiple earlier versions of themselves whilst being chased by a giant radioactive ant. They need to find out who is trying to kill them and get back to normal time – that's if the notion of 'normal time' exists in this film! Along the way, Ray (Chriss O'Dowd) falls in love with Cassie (Anna Farris) a woman from the future who has come to warn the guys of an impending disaster. Toby (Marc Wootton) is a serious film geek, and on hearing Ray's story of the woman from the future naturally assumes he is pitching him a film plot. Pete (Dean Lennox-Kelly) does not believe any of it until he discovers a time leak in the gents whilst singing Bonnie Tyler's *Total Eclipse of the Heart*. He walks out of the gents to find a pub full of dead bodies.

Style of the Film

Such an extraordinary situation lends itself to a visual style that also goes to extraordinary places. Director Gareth Carravich encouraged me to adopt a very visual approach while still retaining the ordinariness of our character's world. The film has a kind of heightened naturalism. Gregory Crewdson's photography book *Twilight* was a strong influence, especially for the lighting. There was a general feeling of wanting to avoid making a drab film with flat lighting and tentative design.

The look of the film was established by Designer Kave Quinn. Much of the film takes place in a Victorian pub over the course of one night. The layout of the pub had to work so that the three versions of the main characters could inhabit the same place without seeing each other. Many of the different areas within the pub are crucial to parts of the story and the design and lighting had to make each part feel separate and distinct. The audience then gets a sense of the geography of the place.

We shot the pub interiors at Pinewood Studios and matched these to exteriors on location. The lighting for the pub interior was a very warm palette and top lit. There was a hint of blue light in the windows mixed with some sodium streetlight filtering through. I tried to keep this slightly stylised warm and blue mix when it felt right. We used practicals inside as much as possible and gave a warm glow to complement the colours of the wall. ▶

In the future, the derelict pub is covered in ash. I lit everything with large cold soft sources with some warm winter sun creeping through the gaps in the roof. Luckily the ambient daylight was very low when we shot the matching exteriors on location. My lights had a lot more spread and I could replicate a low winter sun so that the studio and location are pretty seamless.

Choice of Camera – ARRIFLEX D-20

When the decision was taken to shoot high definition instead of 35mm for, essentially, economic reasons we looked at the Viper and the D-20 and made a choice from these. We liked both cameras in different ways but felt that the D-20 was the right camera for this picture.

We tested the D-20 on the pub set and tried to work out how far we could push it. I lit a very dark scene with hard lights pointing down on the bar, which were about three stops over the key. In some of the background, there was no light at all and very little fall off from other lights. I placed a 100w light bulb in front of the lens, which was not dimmed. A negative was made and the test was printed and projected.

The results were very pleasing at the brighter end. The D-20 handles highlights in a similar way to film with no bleeding or nasty video whites. The light bulb had a crisp edge and clean whites, while overexposed flesh tones were not as ugly as I've seen on other high definition cameras. When we started principal photography, I tried to get bright practicals in frame and exploit this aspect of the camera. In the gents toilet set, I created a top light made up of fluorescents and diffusion



▲ DoP JOHN PARDUE hand-holds the D-20 as 1st AC Jake Marcuson pulls focus

frames. We were able to shoot into the source without it ever bleeding out and ruining the shot.

Highlights look great on the D-20, but it's a different story at the bottom end. Underexposure is more difficult. Blacks are denser than with film and dark wall surfaces fall off quicker than film. It's a case of lighting up the blacks and having some control over the brightness of the backgrounds. (Since making FAQ, the camera has been improved greatly in the shadow areas and now has a lot more latitude at the bottom end)

With proper exposure, the colour rendition of the D-20 is very accurate and worked well with the careful colour co-ordination of costume and design. We tested all wall colours and wallpaper, as well as costumes, as to how they would handle with the camera. The darker colours fell to black very quickly and as a result, dark maroons and browns were made a little brighter. We avoided black in clothes altogether. By lightening some of the darker colours and working closely with the designer Kave Quinn, I saved some of the struggle of having to independently light up the backgrounds. This can be awkward when using large ceiling pieces.

Although it is a comedy, we did want to create some very dark and menacing scenes. We wanted to create a mood without losing the shadows to complete black. There is a "massacre" in the pub and Director Garath Carravich wanted a more threatening atmosphere – something like a Caravaggio painting in mood. I gave the "massacre" a painterly feel where the highlights are very bright and warm, and we kept some detail in the shadows by adding just the right amount of fill.

D-20 – Studio and Location

The main bar set was a relatively dark environment and I was able to use bigger sources above the set and achieve the correct amount of fill light to a higher level than I would use on film. I would not have been able to do this as easily in a location.



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When we shot on location, the loom with all the various cables tended to be time consuming to re-route through different parts of the set, as well as the occasional repair. ARRI Media made sure we had lots of spares and their backup was terrific. The camera is pretty much the same as a film camera in many ways: it has a great viewfinder and the same control panel as a 435. It's also wonderfully simple to operate: you only need to set the ASA and colour balance – and the stop, of course, but that was usually wide open. I ended up shooting on 320 ASA, and 200 ASA when we did some green screen.

Another impressive aspect is the shallow depth of field, which is similar to 35mm. At times it felt like there was less depth of field than 35mm or perhaps the focus drops off more quickly. Focus Puller Jake Marcuson thought it was more noticeable when trying to do a focus split on two people in the same shot (using depth of field charts for Cooke S4 and working to 1/1000 of an inch circle of confusion). We often squeezed actors together a bit to help some close splits that looked wrong.

The Astro monitor on the camera is a great help both for exposure and to look at the lighting with contrast. I used the bigger CRT monitor when I wanted to check the detail in the blacks and to really see what was happening in terms of colour balance. The CRT monitor is very low in contrast so the lighting often looked better on the Astro. There is the clever addition of an exposure graph on the Astro so that the exposure can be worked out with that rather than looking at monitors which can be deceptive.

We did not get a chance to use the FlashMags for the Steadicam work as they were not quite ready. I think they would have made a huge difference to the flexibility of this camera on location. As it was, we had to have a whole load of people carrying cables and recorders – this was a bit of a performance but it worked out fine and did not slow the shoot down.

Night and Day Exteriors

The D-20 is very good at handling the exposure in exterior day situations and I would immediately choose this high definition camera for a film with a lot of day exteriors or shooting in the desert. It copes with bright skies and allows you to open up for the shadow areas without the worry of blowing things out. I found that a sunny day did not look over-harsh and whites were very clean. In the past high def on a flat overcast day

has always looked like video, but the D-20 responds to flat light in a similar way to film and the results were very good.

One night street scene, with a limited number of lighting options, is a good illustration of what we did. The shot was a Steadicam walk and talk lasting a good 60 yards; it was on a busy street and no overhead lighting or backlighting was possible. I put a number of bright shop signs in the back of the shot, which gave me depth. We added Kinos of various colours from the shop windows, and a tracking balloon light on a western dolly to give us the fill. The scene looks great and all the additional lighting really made a difference. The DoP has to do a good lighting job for night exteriors and a documentary available light approach would, I imagine, be less successful.



▲ JOHN PARDUE lines the D-20 up for an exterior shot

The D-20 and Postproduction

The D-20 has remarkable keying ability down to a fine hair on the back of someone's head. Shots can be rendered quickly and comps made on set for everyone to see. We graded the film at Dragon DI and the setup there is very good. Colourist Geoffrey Case really impressed me with his precision to detail and matching. I found the D-20 has a certain 'look' which I like; it suited this project and has almost become a part of the style of the film. On an artistic level, I have photographed this picture in a different way than I would have done if it had been on 35mm film and I like the result which is a little different and suites the rather stylized nature of the photography. I've always been a film guy from the first time I loaded up a magazine as a camera assistant. However, my experiences with the D-20 have been my best experiences on high definition so far - mainly because it has solved the problem of burning highlights and losing detail in bright surfaces which is still a problem of many high definition cameras. I'm fond of this camera and will use it again. ■

John Pardue