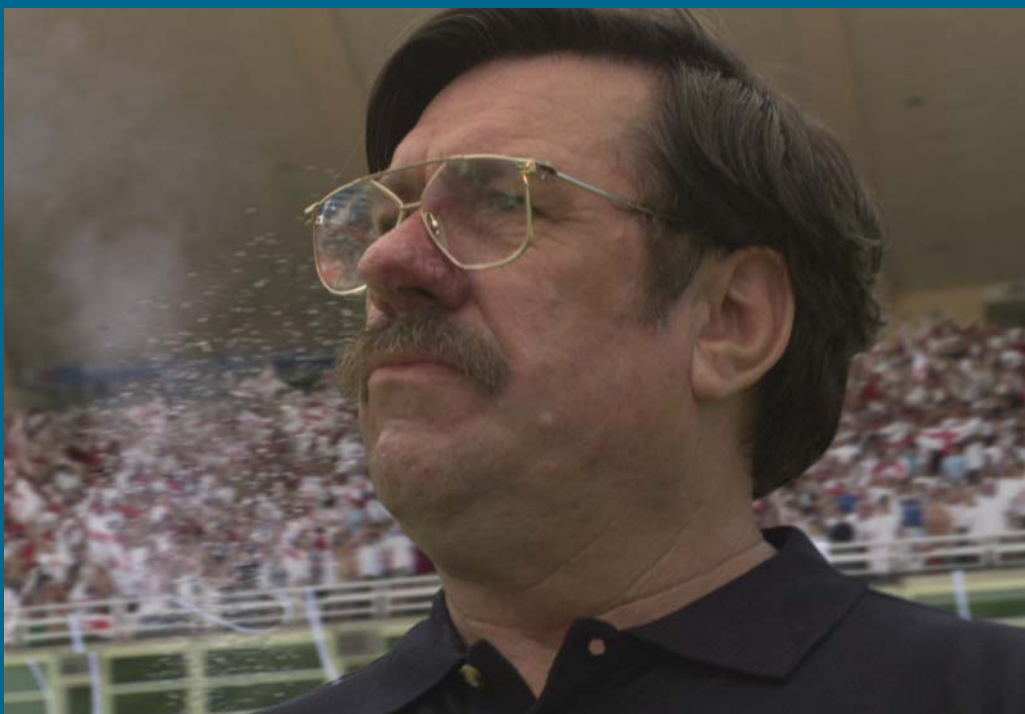




iQ Scores at MPC

iQ with Pandora provides HD colour correction for soccer feature film

MPC and Quantel



One of London's leading post production facilities, The Moving Picture Company (MPC), has already established a considerable name for itself in film visual effects and post, alongside its well-established video post operations. For example, MPC carried out much of the effects work in the recent 'Tomb Raider' movie and is currently in production on the new Harry Potter feature. MPC has just finished work on 'Mike Bassett: England Manager' with the help of iQ.

When MPC moved into its state of the art facility two years ago, it became one of the first facilities in the world to build its operations around a SAN-based data network, so blurring the definitions of what was undertaken in each suite. Work could be distributed according to available resources and appropriateness to the particular task. The recent arrival of a Quantel iQ in Telecine 1 has added enormous power to the facility's hi-res capabilities – and given both its network and storage capacity a major boost. However, adding nearly two terabytes to MPC's existing 10 is only part of the story. So much so that the room's title is now open to question, as iQ helps to further break down the old sequential post process into a new parallel, interactive, co-operative production model.

The film

The iQ arrived as a result of a particular project MPC was undertaking – a 90 minute feature film for theatrical release on celluloid, but shot entirely on HD. Directed by Steve Barron (well known for his ground-breaking TV and film work, particularly for the youth market – eg. 'Teenage Mutant Ninja Turtles'), 'Mike Bassett: England Manager' is a documentary-style drama for Hallmark Productions starring Ricky Tomlinson. The story follows the trials and tribulations of Mike Bassett, when he is rather suddenly given the role of England Manager at a crucial stage in the World Cup.

MPC Managing Director David Jeffers explains how the arrival of iQ came about: 'In order to support the whole post production process for HD-shot movies, we knew that we would need

to be able to grade at HD resolution to give a convincing result when the job was put back out onto film. With 'Mike Bassett' in the pipeline, our Technical Operations Director Roland Brown came back from NAB this year with the solution following a lengthy visit to Quantel at the show. This basically involved slaving our Pandora Pogle and PixiHD with iQ to provide real-time HD source and record for the colour correction process.'

The edit

The first edit of the raw HDCAM footage was carried out in a conventional linear HD suite, broken down into five, 18 minute segments to reflect the contents of each of the five film rolls that would eventually make up the finished print. The decision as to exactly where to start and end each roll has historically been a significant consideration. The overlap points have to be carefully chosen to provide colour continuity to combat the inevitable differences in colour timing between the five rolls.

The penultimate stage in the editing process is the final colour correction prior to output onto film via MPC's ARRI laser recorder. At SD, this is an area where MPC already has many years of expertise through its Filmtel process; iQ was the missing link needed to take this into the HD realm.

Enter iQ

So, for the final colour correction, each edited 18 minute segment was loaded (with its EDL) into the iQ in Telecine 1 from an HDCAM VTR. With close-on two terabytes of on-board storage, usable at any image resolution, the iQ complements MPC's in-house data storage with both additional capacity and highly flexible storage. Rather than using video connections, it would also be possible to input via the MPC

network. Since iQ's network operations can be background tasks, work on the piece can begin as soon as the first frames arrive.

However, the linear suite had not been able to supply a fully finished edit because some shots were still being worked on elsewhere within MPC. For example, one sequence had to look as if it were shot from a security camera. The original footage was just too good, so softening, grain, tears etc needed to be added. This was undertaken in one of MPC's Henry Infinity systems. iQ then simply fetched the missing shots from the Henry Infinity over MPC's network and dropped them into the edit under EDL control.

All resolutions

MPC uprezzed the Henry Infinity SD shot to HD as part of its network transfer process, so it arrived in the iQ in the correct format required for the output. Equally, because iQ has a Resolution Co-existent store, the SD shot could have been sent and stored in iQ in its native format and uprezzed within the iQ on-the-fly at any time in the colour correction process.

Colour correction...

At first glance, the colour correction process between iQ and the Pandora would seem typical of thousands of such operations that are carried out every day around the world – except of course, it is HD. However, this is where the magic begins. First of all, the colorist has already undertaken some editing work on the iQ by dropping shots into the timeline. This is not something that usually happens in a colour correction suite because the tools are not available there. This does not, of course, require the colorist to become an editor, but it does offer a real benefit in the whole production process. It breaks down

the boundaries between what was previously a very sequential process, and makes much more economical and appropriate use of resources.

MPC colorist Max Horton, who carried out the work on 'Mike Bassett', was clearly not daunted by the experience: 'I'm quite excited by pen and tablet editing systems – it was a great new experience to do a bit of editing on the iQ. You don't want to have to book an online suite just to drop in a couple of shots, so it makes great sense to me.' In fact, Max seems to have enjoyed the whole process: 'This way of working has one great advantage to me – I can go to shots instantly and do what the director wants there and then. It keeps the director interested and involved. I was also able to complete a rough grade on my own before the director arrived, which gave him a much better starting point when we sat down together. Given the documentary style of the film, we were able to complete each 20 minute roll in about two to three hours.'

...and more...

More magic – the 1920 x 1080 HD material to be corrected was looped out of iQ into Pandora with the corrected result recorded back to iQ – all in realtime. The on-screen display is full resolution HDTV, appropriately calibrated to reflect the eventual result on film. As this was not just a proxy image, the director can interact and be confident that the result will perfectly reflect decisions made in the suite. This can be particularly helpful when reviewing the final print segments referred to earlier – ensuring a smooth transition between film reels. Once again, MPC's extensive film experience then came into play – in-house look-up tables (or 'filters'), developed for the ARRI, ensured that what was on screen was accurately put out onto film.



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...and more...

And yet more magic is possible here too. All of iQ's toolset is available throughout the process, so that, for example, if a glitch is found, the on-board Paintbox can quickly be brought to bear on the problem. In this room, different skills will clearly be called on from time to time. Because iQ has totally new, simple 'progressive' timeline editing ergonomics, colorists may well feel confident to undertake many such processes themselves – just as Max Horton did on 'Mike Bassett'.

Of course, this doesn't make colorists into editors, but it can offer a very pragmatic approach to finishing. iQ has effectively become a local hub in the finishing area, with an on-board toolset capable of handling all finishing processes. With iQ editing becomes part of the final approval process – with the director strongly in control.

So what's the suite called now?

'The implications of this are hugely exciting,' says David Jeffers. 'This HD production looks fabulous – we've managed to imbue 'Mike Bassett' with the 'precious' quality so prized in 35mm film. This is the real stuff – the first 'grown up' HD/film project here in the UK. With what has been achieved for Steve Barron on 'Mike Bassett', I think it will be the first of many such productions. And MPC – with the world's first iQ/Pandora suite – will be right at the centre of the HD/film revolution.'

Cover

Ricky Tomlinson plays the title role in 'Mike Bassett: England Manager'

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Shots from 'Mike Bassett: England Manager' colour corrected in the iQ/Pandora Suite at MPC



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Thinking Together



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About The Moving Picture Company

The Moving Picture Company (MPC) was founded in London in April 1970 as a video production company specialising in television commercials production and post production for the advertising industry. Today, MPC is one of Europe's leading digital post production companies situated in a state-of-the-art facility in the heart of Soho.

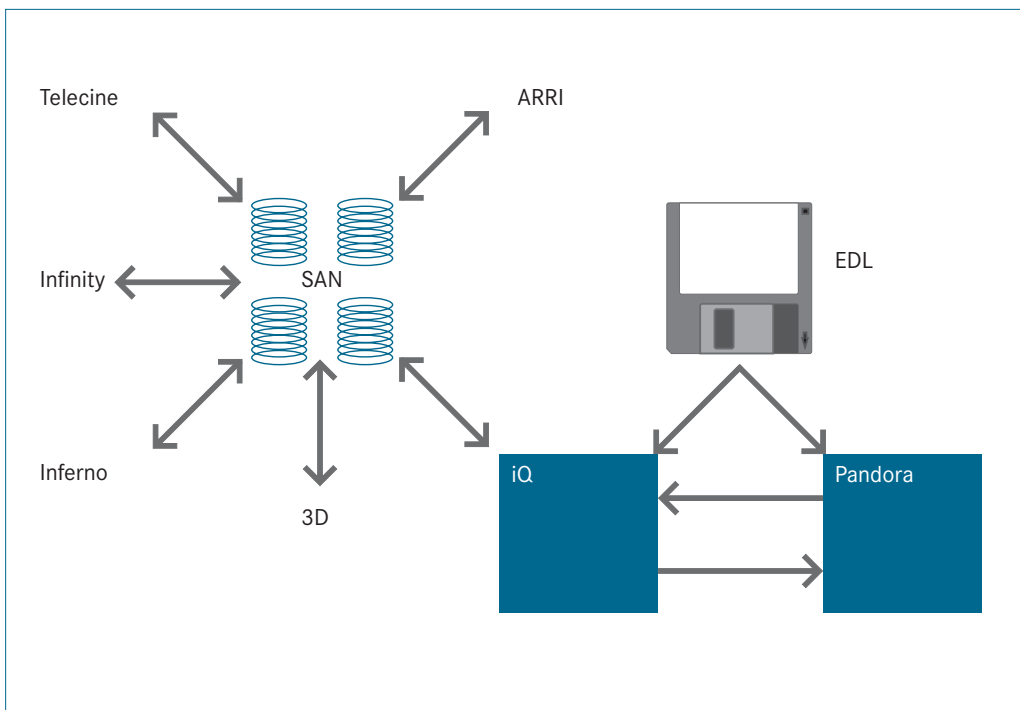
MPC specialises in providing telecine, editing and compositing facilities to the advertising, broadcast and music industries. The company also designs and creates computer generated animation and digital visual effects for the television and feature film industries worldwide.

MPC is a wholly owned subsidiary of Carlton Communications plc and is part of the Carlton Media Group.

www.moving-picture.com

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MPC colorist Max Horton at work in the iQ/Pandora suite

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With its 1.7 terabyte on-board multi-resolution disk store, iQ effectively becomes an extension of MPC's SAN. Note that both Pandora and iQ share the EDL



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