

SCREEN HOUSE

iQ and Pablo at LipSync Post

'DI at the coalface' mines a rich seam for leading London post house



iQ and Pablo at LipSync Post

In 2002, the London post house LipSync was one of the first to install iQ. Since then its two iQs have graded many film projects and the company is well established in the digital intermediate business. But LipSync has a somewhat different approach to both DI and post by offering a one-stop shop for its customers, with a growing number using them all the way from scanning to film output and deliverables – and including sound. In 2006, LipSync became the first company in London to install the new Pablo, Quantel’s next generation color correction system.

The choice for the equipment was led by a couple of self-proclaimed film nuts, each with years of experience in DI - head of post Kevin Phelan and senior producer Alasdair MacCuish. One vital requirement for grading was that it should run in real-time at 2k resolution. This played a big part in singling out iQ from all the other possible solutions. There were also on-site trials and visits to Quantel’s Newbury headquarters to check the equipment. “We didn’t rush into this, at all,” Phelan explains. “It was very important to work with the right system. iQ was in here for evaluation and we wrote a large report on what we liked, and what we didn’t. Quantel took note of virtually everything and up popped a new revised iQ that was usable and friendly to work with.

DI at the coalface

“This was going to be up against the coal face; which is us and our clients chipping away doing a grade or a conform, using some of the excellent compositing

tools as well, and also doing title sequences and end rollers. It means you can’t have a machine that is running on three wheels rather than four.

Functionality, real-time and the video-friendly user interface are important to us. We are mad about film here but we are also heavily conversant with all types of video.” Phelan adds, “Putting different resolutions on the same timeline is highly exciting and saves a lot of time and expense.”

LipSync’s innovative approach and building wide ranging post services has resulted in the company scoring many firsts. Having two NorthLight scanners and the 16mm scanning head scored were two; a third was being the first with the 4k iQ. UK firsts include installing large projection screens for grading and running two Arrilaser film recorders working with all available film stocks, including the very durable Estar/Polyestar. The Arrilasers also handle a large variety of shoot formats including 1920 x 1080, 2K

Cover: LipSync Post’s Wardour Street, Soho, London headquarters – right in the heart of the capital’s ‘film country’.

Right: Kevin Phelan, LipSync Post’s Head of Post Production.

Second Right: One of the Quantel suites at LipSync Post, complete with large screen projection.



Right and below: LipSync carried out the DI on iQ for Christopher Smith's latest film, *Severance*, which was shot HD.



and 4K academy, placing 220 or 440 more pixels per line into the academy frame for sharper results.

Deliverables

With its one-stop-shop ethos, LipSync decided from the start that the work for film and HD clients would not end with the completion of conforming and grading. Going one step further and producing the deliverables as well makes a lot of sense both technically and financially. Phelan says, "It works well for us. We've used the iQ for making the deliverables for other facilities. For example, this has involved taking data from Framestore CFC for 'Thunderbirds', and that conversion to HD was deemed to be so good it was used for the world premier in London and Los Angeles. There have been quite a few other such jobs including *Chromophobia*, *Shaun of the Dead*, *Mickybo and Me* – a lot of Universal Pictures films have gone through."

Besides the outside work, there is the need to provide deliverables for LipSync's own DI and HD post customers. So, for every feature, the LipSync DI quote includes providing video deliverables of three HD masters and at least six Digibetas: three in PAL and three NTSC. Then there are also all the aspect ratios demanded by international television and future sales including 2.35:1 or 1.85:1, 16:9, 4:3/pan-and-scan. Having the in-house sound department helps here as the M&E (music and effects) track for the world market or complete mix tracks can be laid back as required. Only one feature in the last two-and-a-half years has not taken up this offer.

The absolute best quality

Phelan goes over the logic. "If you think about it, you've spent all that time doing a 2k or 4k grade and you have this fantastic piece of data that comes out



Right and below: Director Vincent Ward's latest film River Queen 'literally drips off the screen', courtesy of inspired iQ DI at LipSync.
© Silverscreen/ Twentieth Century Fox



as film and looking the same. If you then take that away to another facility, you go down a generation from the negative to an interpositive that's then scanned, and re-graded! So why not avoid all that and do it while the project is still hot and the client is still around. Get the absolute best quality."

There are further technical reasons why generating the deliverables at the DI house makes a lot of sense. Throughout the DI process, from scanning to film out, colour management is used to ensure the images retain the correct colour. Knowing the exact calibration means that precisely the correct settings for the chosen deliverable medium can be used, applying them directly to the 2k or 4k master DI data for optimum results.

What you see is...

LipSync has placed great emphasis on ensuring that there are no surprises for their customers as they move along the DI route. Although there can be

technical differences between the DI data and the projection of film at the local cinema, they have made every effort to place their clients in an accurate what-you-see-is-what-you-get environment. This touches on many areas and has involved innovation and investment.

...exactly what you get

LipSync was the first in the UK to use projection in a DI suite so customers can see their footage on a 10-foot screen as they grade, adding a sense of scale akin to the target viewing audience. This makes use of a JVC D-ILA 2K projector and a special highly reflective screen was used to ensure the SMPTE's requisite foot-lamberts. Colour management ensures the footage appears as it would when projected with the customer's chosen stock.

Colour management makes the colour correct at every stage of DI. Colour cubes are available as a part of iQ, but it also allows the use of external



Right: Sean Ellis' forthcoming movie Cashback received the full iQ DI treatment at LipSync.
© Ugly Duckling/Gaumont



colour control. At LipSync the colour calibration choice of the two 'film nuts' was for TrueLight from FilmLight. According to Phelan, "It sits hand-in-hand with how we work here and complements iQ." Knowing the exact colour setting allows LipSync to instantly and accurately calibrate the footage for each type of output for SD, HD or film.

Phelan describes how this fits into the HD deliverables workflow. "The footage is converted straight out of the machine (iQ) using the 2k or 4k DI master and played live out to HD. The TrueLight box makes sure that what ends up on HD is exactly the same as the 2k or 4k grade. So we are converting from 10-bit log DPX film files to linear (SMPTE) 709 HD colour space and not having to tweak or fiddle around at all. We do that live with the DoP or representative of the client watching and we've never had to alter anything doing it that way."



Full res all the way

Finally, WYSIWYG means seeing the full resolution images while working. With iQ as the hub of DI workflow the 2k or 4k master material is always used and viewed directly. There are no proxies and the full detail of the images is always visible. iQ colourist Lee Clappison reports that, "This makes a clear path. Clients know they're looking at 2k all the way through. After looking at off-line for six months they can see the real footage in sync and check it directly against their off-line cut."

Clearly all the attention to accurate colour presentation and full resolution replays has paid off. "Although some other DI facilities have had complete re-grades done we have never had that at all!" reports Phelan. Making full use of iQ's conforming, editing and finishing capabilities, whole rolls are output at one light and there is no need for

Right: Dark scenes as a caving expedition goes horribly wrong in Neil Marshall's The Descent - full DI on iQ at LipSync.
© Pathe



neg cutting. Recording onto polyester intermediate stock allows for very fast duplication.

Calibration, calibration, calibration

“More and more clients have got used to DI now. The sceptics are fewer. There were quite a few who rushed into DI and gave it a bad name. It’s essential that you have your whole calibration set up. If we’re pitching for a feature we do a proof of concept on the Pablo. We have the DoP and/or director here for about four hours or so. We ask what they are after, do the grades and they then say, ‘OK now show me that looking the same on film’. So you commit it to the calibrated film recorder and send it to the lab of choice. We work with the labs to make sure we always get the right result.”

Mission creep

The first DI feature was director Christopher Smith’s the cult horror film Creep. This was a three-perf, super 35, 2.39:1 film and involved scanning, grading, film recording and deliverables. LipSync worked on all the shots, numbering approximately 1900. Phelan comments, “It worked a treat. We were only asked to grade three shots at the lab. Two were VFX shots that arrived very late and were a little ‘hot’ so they were printed down a couple of points. The other was the pure black shot where we cut in a piece of unexposed neg to get a darker look than the Arrilaser can achieve. This worked to great effect, making people jump out of their seats at the right point!” Smith’s second film, ‘Severance’ had a different approach as the shoot was in HD and LipSync expects several HD ‘films’ through this year.

DI, and the equipment that supports it, involves meeting all kinds of demands from the technical to the creative. This is certainly the experience at LipSync. Although it has never been asked to re-grade a feature, it has been involved in at least one rescue mission. This involved camera negative that was estimated to have 2.6 million speckles embedded in the film due to a photochemical problem. It took seven weeks working around the

clock on the two iQs to ‘dustbust’ and save the film. The average dustbust takes about eight normal days on one iQ.

No challenge too great

Looking back on three years of iQ experience, Phelan reports, “I cannot recall any look that we have not been able to achieve with the iQ – yet. No one has said ‘you couldn’t achieve the look I wanted’. You name it we’ve done it: sepia, under/over saturation, windows galore, fusion filtration, complete chrominance removal, subtle little elements of chrominance still being in there, little bits of colour gradually coming through, tracking people eyes to put colour on them. Fantastic!

Staying on track

“The tracking tool’s the best I’ve ever seen. We’ve used it on big features such as Jonathan Glazier’s ‘Birth’, the Nicole Kidman film. We did the opening shot on that. It was quite a hard shot to track and using multiple tracking points helped. The shot was going through a park with the camera travelling backwards on a pathway. The picture moved so much because there was no way you could use a dolly or any kind of rig, so the camera was free wheeling and there were bound to be a few bumps in the tarmac here and there.

“Most of DI is a mixture of being incredibly creative and hard work. But working with a creative director makes you be more creative and achieve a required look. Vincent Ward’s River Queen literally drips off the screen and is receiving loads of accolades in its home country, New Zealand. People say, ‘Oh yes, that’s Allan Bollinger’s stunning cinematography – as ever’. I say, yes superb cinematography, then we got to work on it: we had that film in here for six weeks. We graded it and gave it its chocolate, sepia looks amongst many other specialised looks. We did an amazing job on it we should get an award for it. There should be a DI award!”