

INSIDE eQ

YOUR GUIDE TO HD AND MULTI-RESOLUTION EDITING, EFFECTS, COLOR GRADING AND DELIVERABLES

ISSUE 1

WORKFLOW

THE RECIPE FOR SUCCESS

PAY AS YOU GO HD

BROADCAST POWERHOUSE

RESOLUTION CO-EXISTENCE

... AND MORE



ONE POST MACHINE FOUR REVENUE STREAMS

EDITING, EFFECTS, COLOR GRADING AND DELIVERABLES
NOW WITH TIMEMAGIC
PLUS: TECHNOLOGY UPDATES AND LATEST NEWS


Quantel

TimeMagic because waiting is for wimps



TimeMagic is an extraordinary technological leap from Quantel. It delivers faster than realtime workflow for eQ, iQ and Pablo on anything from SD to 4K. This massive processing power and intelligent software literally lets you work faster than you can think.

TimeMagic – intelligent rendering without the wait™



Steve Owen

**“eQ IS THE ONE
ROOM POST
PRODUCTION
POWERHOUSE
THAT DOES IT
ALL”**

STEVE OWEN ON THE RECIPE FOR SUCCESS IN POST PRODUCTION

FOUR REVENUE STREAMS ONE GREAT MACHINE

eQ IS THE COMPLETE ANSWER FOR ALL TODAY'S MAINSTREAM POST PRODUCTION NEEDS FOR BROADCAST AND FACILITIES USERS AT SD, HD AND MIXED RESOLUTIONS.

eQ's enormous power, open workflow and extraordinarily broad toolset will dramatically increase efficiency and throughput on every job, whether it's commercials, longform, promotions or high-end corporate.

eQ works at lightning speed and at the best quality there is – it's the perfect machine for client attended work. And eQ gets the whole job done by combining best-of-breed capabilities in each of four previously separate operations – which means with eQ, you get four revenue streams in a single box:

Editing

next-generation gestural timeline interface and comprehensive editing toolset

Effects

the whole box of tricks, including the world's first multi-view compositor

Color correction

powerful in-context grading with the QColor option

Deliverables

the world's only realtime multi-format versioning system with pan and scan

REAP THE REWARDS

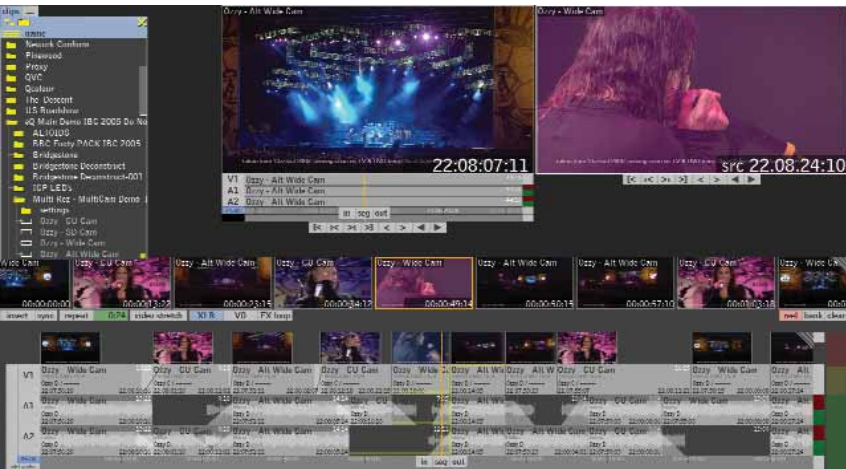
eQ has the power and versatility to open up new workflows, markets and opportunities with creative color correction tools, productive realtime versioning capabilities and an HD-RGB option to open the door to Digital Intermediate work.

The challenges in post production have never been greater – nor have the potential rewards. For the posthouse eQ has everything needed to reap those rewards; the power to slice through bread and butter work highly profitably, and the tools and capabilities to open up new markets and new business opportunities.

For the broadcaster, eQ is the one-room post production powerhouse that does it all.



GREAT BUSINESS FOR POST



WITH ITS COMPREHENSIVE EDITING, EFFECTS, COLOR GRADING AND VERSIONING CAPABILITIES, eQ IS THE ULTIMATE ALL-ROUNDER FOR THE POST HOUSE – A GREAT ADDITION TO THE RATE CARD THAT CAN PULL IN A VAST RANGE OF WORK WHICH WOULD OTHERWISE REQUIRE AN ARRAY OF INDIVIDUAL SPECIALIST SYSTEMS TO HANDLE.

Profitable new business

eQ’s enormous power means that mainstream editing and effects work can be completed more quickly and so more profitably, while eQ’s powerful QColor option can open up a whole new profitable strand of business in color correction.

The HD future

For post houses which are already established in HD, eQ brings the power and tools to do more work, more quickly and at the highest possible quality. For those looking to offer HD as a new service for their clients, the innovative Pay as you Go HD option for eQ gives them the perfect soft start without compromising on quality or productivity.

Great bottom line

In summary, eQ is quite simply one of the most powerful, capable and future-proof investments a post house can make; four revenue streams in a single machine; great for clients, great for business.

“GREAT FOR CLIENTS, GREAT FOR BUSINESS”

A QUANTUM LEAP WITH eQ

Luciano Beretta, founder and owner of the Italian production and post production facility Green Movie, has a bold proposition: “Forget what you’ve seen up to now and come for an amazing test drive of Quantel’s eQ at the heart of our totally HD workflow.”

“The new Quantel systems are totally open, scalable, based on a new workflow, and can work with materials in different formats, color spaces and resolutions all on the same timeline,” Beretta continues. “This quantum leap is based on unique features which are a big thing for us, like Resolution Co-existence, the ability to work contemporaneously in HD and SD and the possibility to expand and grow by means of simple software upgrades.

“The eQ has given us a very powerful workflow, in which the operators work easily and quickly, speeding up the whole process,” Beretta concludes. “The eQ has the power and tools to create complex images quickly and at the highest quality, and its ability to do in-context color grading is another great advantage.”

CLASSIC ARTISTS ROCK WITH eQ

LONDON BASED IMPACT FILM SALES LTD IS USING ITS eQ TO POST ITS FORTHCOMING ‘CLASSIC ARTISTS’ TELEVISION SERIES. THE SERIES WILL INCLUDE HOUSEHOLD NAMES SUCH AS CREAM, THE MOODY BLUES, YES, BLACK SABBATH AND DEEP PURPLE, DAVID BOWIE, JIMI HENDRIX, PINK FLOYD, MOTORHEAD AND ZZ TOP.

One box does it all

Impact CEO Jon Brewer says, “Our aim is to make the ultimate music series of all time. The classic rock years were magic times that really did change many young people’s lives forever, and they are looked back on with real fondness by millions of people. The stories need to be re-told accurately; if we don’t do this soon, the opportunity will be lost forever.”

The eQ proved to be the perfect tool for the job. Each programme freely mixes material that ranges from 8, 16 and 35mm film to digital Betacam and a plethora of current formats, including HD.

“I doubt you could find a more perfect project for the eQ,” says Brewer. “Not only does its resolution co-existence allow us to mix different formats on the same timeline, but also its enormous range of facilities gives us all the tools we need to quickly homogenise the look and feel of the very different material into a coherent whole. This really is a one box does it all application.”



Above: Sixties rock legends, Cream

BROADCAST POWERHOUSE



INVESTING IN eQ GIVES THE BROADCASTER ACCESS TO A MASSIVE RANGE OF CAPABILITIES IN A SINGLE ROOM. eQ HAS ALL THE EDITING AND EFFECTS POWER YOU NEED TO PUT TOGETHER SPARKLING PROMOTIONS AT BREATHTAKING SPEED. AND eQ’S REALTIME MULTI-FORMAT DELIVERABLES CAPABILITY MEANS YOU CAN PRODUCE THE HOST OF DIFFERENT VERSIONS THAT ARE SO OFTEN REQUIRED IN NEXT TO NO TIME.

Bring jobs in-house

eQ’s unique one-box combination of state-of-the-art editing, effects, color grading and deliverables tools will also enable you to complete jobs in-house that previously had to be outsourced, saving you money and precious time, while guaranteeing that the results will be of the highest possible quality. eQ also has the power to carry out the most sophisticated color correction work with its QColor in-context grading option, so even highly specialist work can now stay in-house.

Step up to eQ

Because all Quantel’s editing products share the same interface and ergonomics, editors who have trained on Quantel sQ server-based systems can easily make the step up to the awesome all round power and capabilities of eQ. It adds up to happier, more fulfilled people and less staff turnover. Of course, this shared knowledge also dramatically increases the talent-pool available to help you get the most out of your investment in eQ.

HD now – or later

For broadcasters already working in HD, eQ brings the power and tools to do more work, more quickly and at the highest possible quality. For those looking to futureproof themselves, the innovative Pay as you Go HD option for eQ means that you only pay now for SD capability while knowing that at any time you can upgrade your system to a full HD power for a week, a month or all time – at a stroke.

Web connectivity

Websites are also important shop windows for broadcasters, and keeping their content up to date and looking tip-top is a vital tool in building and retaining viewer loyalty. eQ’s editing and versioning tools are perfect for tailoring material for compelling web viewing – yet another powerful weapon in this versatile machine’s armoury.

Above: Edit 1 (eQ Suite) at The Leeds Studios, UK, an ITV Productions company

PAY AS YOU GO HD

PAY AS YOU GO HD IS A FANTASTIC COMMERCIAL INNOVATION FROM QUANTEL THAT’S DESIGNED TO GIVE POST HOUSES AND BROADCASTERS A RISK-FREE PATH TO HD. IT GIVES YOU ALL THE POWER, QUALITY AND PERFORMANCE OF eQ, BUT YOU ONLY PAY FOR HD CAPABILITY AS YOU NEED IT.

Reduced entry price

A Pay as you Go HD eQ costs just 60% of the price of the ‘always-on’ system, and you pay for HD input and output as required by purchasing weekly or monthly passwords. Better still, as your HD usage climbs and you decide to upgrade to always-on HD, Quantel will offset a proportion of your pay as you go payments against this.

Great business

For the aspiring broadcaster or facilities house, Pay as you Go HD makes compelling financial and business sense; Quantel takes the risk while you grow your business around the most powerful, productive and versatile post production system available today.

No need to compromise

Pay as you Go HD on eQ also eliminates the temptation to put up with cheap, low performance HD systems that will ultimately disappoint clients, potentially putting them off HD altogether.

“PAY FOR HD CAPABILITY AS AND WHEN YOU NEED IT”

PAY AS YOU GO HD MEANS:

- You can afford the best HD system around
- No need for compromise on quality, performance or toolset
- You only pay for HD capability as you need it
- Reduced business risk and increased ROI
- You can buy the best HD system for the future even if you only want SD today
- You don’t pay extra for HD capability you won’t use
- eQ’s four revenue streams (editing, effects, grading, mastering) are now great for SD too

IN-CONTEXT COLOR CORRECTION

AS WELL AS ITS SOPHISTICATED ON-BOARD COLOR CORRECTION TOOLSET, WHICH INCLUDES QUANTEL’S HIGHLY-REGARDED FETTLE, THE eQ OWNER CAN ALSO ADD THE QCOLOR OPTION. THIS GIVES THE COLORIST AND DIRECTOR POWERFUL IN-CONTEXT CONTROL OVER EVERY ASPECT OF COLOR WITHIN THE EDIT SUITE, AND ADDS A FURTHER PROFITABLE REVENUE STREAM FOR THE eQ-OWNING POST HOUSE.

Non-linear access

The QColor package turns eQ into a sophisticated color correction system with instant non-linear access to allow any shot to be color corrected in-context right in the edit – all this at a fraction of the cost of dedicated systems. QColor is completely integrated into the editing and effects toolset of eQ.

By combining the flexibility of software with the power of eQ, QColor brings real creative color control to high resolution or SD projects together with a business model that works.

Best of both worlds

The familiar three ball control interface enables both video and film colorists to do their work with creative ease. The jog/shuttle unit combines with the new panel to deliver fast control and total precision.

Advanced compositing tools such as tracker-linked masked correction and the ability to keyframe every part of the QColor interface allow for the creation of complex effects easily and quickly. Layers in a composite can be color corrected in context, allowing for the seamless addition of CG and other special effects. Full integration with effects, repair, editing and graphics tools add to the awesome capability of the system and saves time moving jobs between suites.



PABLO – THE NEXT GENERATION

FOR THE ULTIMATE IN COLOR CONTROL, QUANTEL HAS DEVELOPED PABLO – A DEDICATED MULTI-RESOLUTION COLOR CORRECTION SUITE THAT HAS BEEN DESIGNED BY COLORISTS FOR COLORISTS.

Pablo is a complete, state-of-the-art color correction suite. It combines the most powerful image processing hardware on the planet with the enormous flexibility of the world’s most versatile color correction software – all perfectly blended with the Quantel heritage of quality, performance and interactivity.

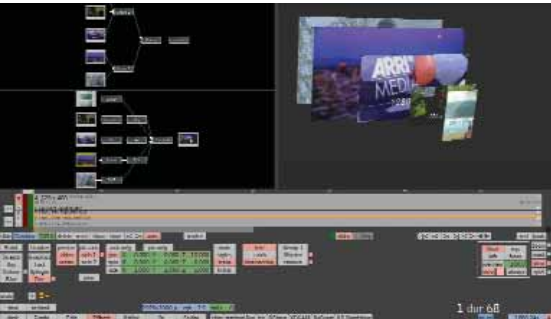
The Pablo user interface comprises three ergonomic control surfaces that provide heads-up ergonomics, allowing the colorist to concentrate totally on the pictures. In addition to the full QColor and Fettle toolsets, Pablo also benefits from many additional color tools.

Pablo also taps the enormous extra power and creative tools of the new Eiger hardware and software, and Quantel’s brilliant new TimeMagic™ technology, which entirely takes the waiting out of rendering. Ask your local office for full details of the revolutionary Pablo, or visit quantel.com.



MULTI-VIEW COMPOSITOR

WITH eQ, YOU DECIDE HOW YOU VIEW YOUR COMPOSITE – NOT THE SYSTEM; eQ OFFERS THE INDUSTRY’S ONLY MULTI-VIEW COMPOSITOR SO YOU CAN CHOOSE THE VIEW THAT PERFECTLY SUITS THE TASK OR YOUR WAY OF WORKING.



Effects toolset

- Unlimited layers
- Unlimited processes per layer
- Integrated plug-ins
- Clip history for fast changes
- Composite any resolution
- Vector-based text

Enjoy the views!

The timeline or ‘blender’ view will be instantly familiar to Editbox and Henry operators and is a great place to start work on an effect. The scene tree view gives unlimited hierarchical control over DVE axis and layers so that you can see at a glance exactly what’s where. The process tree view gives instant visual control and reference over the order of processes and allows unlimited processes on each layer. Finally, the camera view provides a virtual view of the composite in true 3D space and gives full control over 3D camera animation.



DON’T TRY THIS AT HOME

IN 1986 AUDI DROVE ITS FIRST FOUR WHEEL DRIVE QUATTRO UP A SKI JUMP FOR A DAZZLING ADVERTISING CAMPAIGN. THE SAME STUNT WAS REPEATED WITH AUDI’S LATEST MODEL, THE A6 QUATTRO. POST PRODUCTION OF THIS REMAKE WAS DONE BY EGI SEIPLER, SENIOR DIGITAL ARTIST AT TV WERK, MUNICH, GERMANY, ON eQ.

The ad opens with the Audi Quattro sitting at the bottom of the ski jump in Kaipola. Facing the 37.5 degree incline the car accelerates up the snow-covered slope with the message “Don’t Try This At Home”. The commercial first aired in Germany and was such a success Audi went on to use it globally.

The creative tools of eQ proved more than a match for this challenging project. The results are brilliant quality TV and cinema ads with 30 and 45 seconds versions, in both 4:3 and 16:9 formats, in German and English as well as a ‘Making of’ version.

TV WERK chose the eQ system for its combination of classic Henry tools plus new levels of openness, speed and new creative possibilities, especially the integration of third party plug-ins. Its HD/SD multi-resolution capability was also a vital consideration.

FULL-ON AUDIO

eQ OFFERS THE FULL RANGE OF AUDIO FACILITIES THAT YOU NEED IN THE VIDEO EDIT SUITE.

Audio handling is naturally AES/EBU 48kHz, with eight channel i/o and mono, stereo or quad tracks with channel mapping. Realtime audio equalisation can be carried out from the timeline, as can compression, also in realtime.

Dedicated audio panel

eQ’s dedicated audio fader panel option provides sophisticated on-the-fly mixing control. Its eight motorised faders can learn and replay level changes in realtime, making it straightforward to achieve complex audio mixes, or these can be handled from the timeline interface with keyframable level changes, cross-fades and rubber-banding.

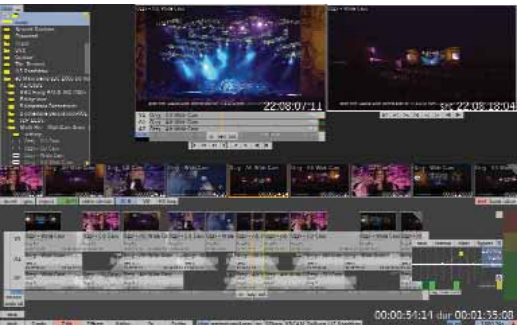
Complete connectivity

eQ also imports and exports AIFF, as well as AAF, providing full connectivity with the audio post production suite.



“ONE POST MACHINE, FOUR REVENUE STREAMS”

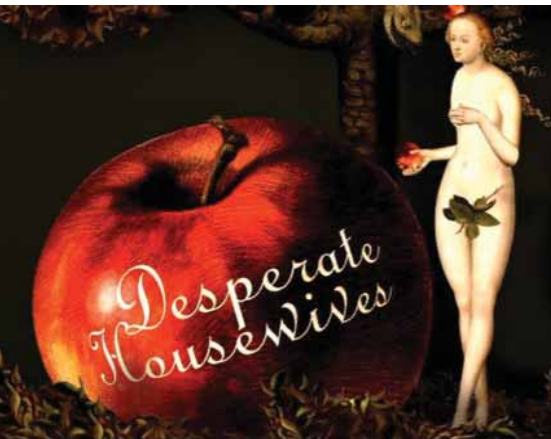
THE NEXT GENERATION TIMELINE EDITOR



Quantel has taken the concept of timeline editing to a new level in eQ. It is designed and built entirely for the job; the whole editing toolset is just a gesture away, not hidden under layers of set-up menus. Better still, editors can use the interface they feel most at home with as many of the functions can be accessed from any of the pen/tablet, keyboard, jog/shuttle or hand unit interfaces.

Freeform working

eQ’s freeform desk means every editor can work just the way they like, with many sources open at the same time or in the common player/recorder mode. Support for three-point editing, complex trims, matchframe and edit from library deliver total editing control.



“eQ ALLOWS US TO BE THE BEST AT WHAT WE DO”

TITLING: THE FULL STORY

WITH eQ, YOU’VE GOT EVERY CONCEIVABLE TITLING AND TEXT REQUIREMENT COVERED. FOR CREATIVE TEXT BASED GRAPHICS, eQ’S BUILT-IN PAINTBOX OFFERS HUNDREDS OF VECTOR-BASED FONTS, ALL OF WHICH CAN BE GIVEN THE FULL GRAPHICS TREATMENT.

Rolls, crawls and more

eQ’s built-in QScribe facility is perfect for credits and titles. It includes the full array of rolls, crawls and other title animation tools to enable you to bring titles to life. In addition, there is a number of popular titling plug-ins available for eQ – such as the exciting Text Anarchy text animation and effects package.

Subtitling too

eQ’s QScribe software also includes a sophisticated caption compositor, enabling automatic subtitling. In addition, Screen Subtitling Systems software is also available as an integrated plug-in for eQ.

eQ FOR DESPERATE HOUSEWIVES

SANTA MONICA, CALIFORNIA-BASED POST BOUTIQUE STEELE HAS INSTALLED A SECOND QUANTEL eQ EDITING/EFFECTS/GRADING/DELIVERABLES SYSTEM TO COPE WITH THE EVER-INCREASING DEMAND FOR STEELE’S SPECIAL BRAND OF CREATIVITY. THE eQ IS EQUIPPED WITH THE QCOLOR IN-CONTEXT GRADING OPTION.

“The eQ has given us unprecedented flexibility,” says president and lead creative, Jerry Steele. “Video is no longer just video – there are seemingly endless forms of media, and eQ allows us to work with all of them; any format, any resolution, any deliverable. It’s a genius machine.”

Visual Effects Artist Monique Eissing is the additional eQ’s primary artist. “Two eQs allow us to work collaboratively on more projects. Most of our work, at present, is commercials and music videos, and while the majority of it is still SD, almost every job has at least one HD element, so eQ’s Resolution Co-existence is vital. Also, nearly all our sessions are client attended, so the eQ’s speed is essential, and our clients benefit from the results.”

“We can confidently see ten years into the future with eQ,” says Jerry Steele. “Its editing, compositing, finishing, versioning and multi-resolution capability give us a plethora of options for working with virtually any kind of material. In short, eQ allows us to be the best at what we do.”

Jerry Steele has had a long and fruitful relationship with Quantel. “I’ve been a user of Quantel systems for 18 years now. Quantel has a very caring attitude to its customers, whereas many other manufacturers seem rather transactional. Our business is not like that; it is a very interactive process, and we like that Quantel is the same. We’ve been through the development of new products with them and they’ve incorporated our feedback into their technology. With other companies, that sort of openness often doesn’t exist.”

The STEELE client list includes many household names – Coke, Pepsi, Pringles, Audi, Lexus, Honda, Sony, Nike, Oracle and L’Oreal to name but a selection. STEELE also recently completed director Matthew Rolston’s memorable promo for ABC’s Desperate Housewives.



PAINTBOX INSIDE

Every eQ comes pre-fitted with the gold-standard graphics power of Paintbox as a fully integrated part of its toolset. With the benefit of over 20 years’ experience gained at the sharp end of post and broadcast production in thousands of installations around the world, the Paintbox toolset is quite simply peerless, and the ergonomics totally intuitive.

eQ’s Paintbox boasts a massive range of brushes – including the best airbrush in the business, brilliant cut/paste and graphics tools and hundreds of vector fonts, which are invisibly melded with eQ’s compositing, DVE, keying and editing tools. So whether it’s a complex graphic, a quick title, an instant retouch, a complex mask or keyframed garbage matte, eQ’s built-in Paintbox has all the graphics tools you could ever need in the edit suite.

REALTIME MULTI-FORMAT VERSIONING

WITH TODAY’S PLETHORA OF SD AND HD BROADCAST AND NEW MEDIA FORMATS, VERSIONING HAS BECOME AN EXTREMELY IMPORTANT PART OF THE TOTAL POST PRODUCTION PROCESS.

Efficient versioning power is vital not only for giving clients everything they need in the shortest possible time after creative work is completed, it also acts as a powerful new business magnet for post houses looking to differentiate themselves in an increasingly commoditized market.

Just press and play!
eQ is quite simply the king of the deliverables business. Quantel’s unique Resolution Co-existence technology means that eQ can version from one format to another in realtime, without rendering or filling the workspace with different format copies of the same clip.

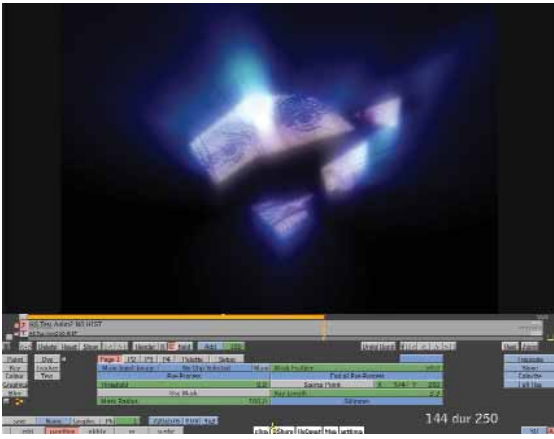
So for example, 24fps HD masters can easily be played out in 625/50 or 525/60 in anamorphic 16:9, letterbox or centre-cropped. eQ handles everything automatically; all you need to do is simply choose the destination format and press Play! It’s even possible to pan and scan in realtime as part of the payout.

SERIOUSLY INTEGRATED PLUG-INS

There are hundreds of plug-ins from all the top developers available for eQ. Plug-ins on eQ are just another tool, accessed and integrated into the creative process in the same way as every other facility of the system.

Multiple effects

Want to apply several plug-ins? No problem with eQ. With the multi-view compositor, any number of plug-ins can be applied in any sequence at the same time.



IT’S ALL ABOUT WORKFLOW

AS WELL AS BEING A SUPREMELY CAPABLE EDITING, EFFECTS, COLOR GRADING AND VERSIONING SUITE, eQ IS ALSO A NATURAL HUB FOR THE FACILITIES HOUSE OR BROADCASTER’S POST PRODUCTION WORKFLOW.

eQ’s gigabit network connectivity, AAF compliance and HD and SD video i/o are complemented by the ability to support all new formats as they emerge. For example, eQ already handles Varicam, HDCAM, HDCAM-SR, Viper and the Arri Tornado super slo-mo camera outputs.

As well as frame accurate VTR control at HD and SD, eQ can emulate a VTR for RS422 control from external devices such as telecines or color correctors, and QXML lets other devices work with material in eQ’s workspace.

The perfect partner

Workflow is also about production efficiency, and eQ has a perfect workflow partner in QEffects. QEffects is a software application that extends the compositing toolset of eQ out of the suite and onto the desktop. It shares eQ’s user interface, toolset and project format, so simplifying teamwork.

Jobs that would tie up the main suite such as rotoscoping, restoration/retouching, matte painting or preparing complex garbage mattes can be handed over to QEffects to boost overall productivity, and then passed back over the network to eQ to be dropped back into the timeline.

QEffects boasts the complete effects toolset of eQ, so it is also an ideal environment for storyboarding, effects planning and pre-visualisation.



AAF

With Quantel being one of the founder members of the AAF Association, it is no surprise that eQ is fully AAF compliant, enabling the system to exchange AAF metadata and content with compliant systems from many other manufacturers, including Avid. AAF metadata can be much more than just an EDL. For example, using a plug-in from Automatic Duck, eQ can import a multi-layer timeline from Final Cut Pro as an AAF file, and can then conform all the video tracks in a single session.

“MUCH MORE THAN JUST AN EDL”

CENTRO BOOSTS HD WITH eQ

CENTRO DIGITAL PICTURES, HONG KONG’S FLAGSHIP DIGITAL POST PRODUCTION HOUSE, HAS PURCHASED AN eQ TO REINFORCE ITS HD COMMERCIALS PRODUCTION CAPABILITIES AT ITS CAUSEWAY BAY FACILITY. THE eQ IS EQUIPPED FOR FULL QUALITY 4:4:4 HD-RGB OPERATION.

Great all-rounder

Centro Chief Executive, John Chu, said, “With its all-round capabilities, the eQ provides the perfect environment to bring all our HD production strands together to create the finished piece. eQ’s enormous speed means that it is the ideal system to meet the tight deadlines and stringent quality requirements of client-attended commercials post sessions.”

Below: Centro’s John Chu



Do the Hustle

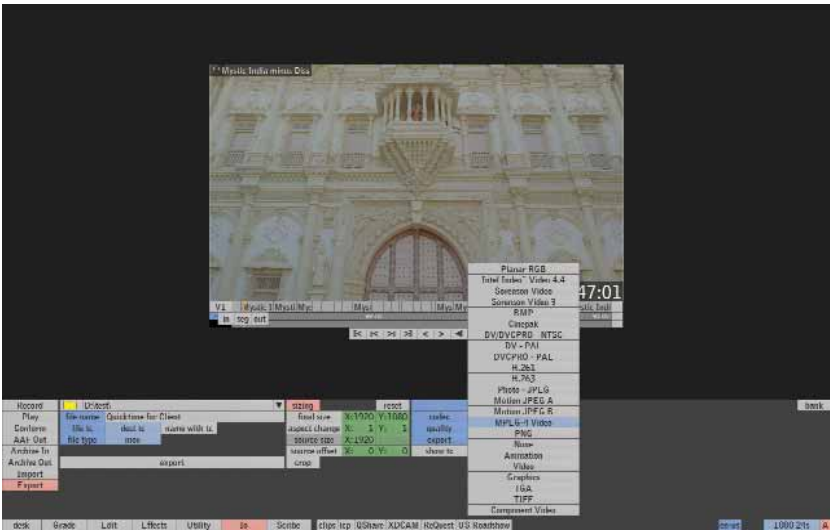
As well as its leading edge work in bringing HD post production to mainstream commercials work, Centro has also established itself as a world leader in Digital Intermediate. The internationally successful movie Kung Fu Hustle was completed on Centro’s Quantel iQ DI system, and the company is currently completing DI on leading Chinese film director Chen Kaige’s new movie, The Promise.

BACKGROUND NETWORKING

eQ has the power to exploit the post house or broadcaster’s standard IT network infrastructure fully with background data import and export while productive work continues unhindered. It means optimum production efficiency that eliminates workflow bottlenecks.

All flavors

eQ’s networking interfaces are fully compatible with cross-platform NAS and SANs, and eQ will import and export many common file formats, including dpx, MPEG2, QuickTime and Windows Media 9.



REMOTE CLIENT APPROVAL AND MORE

eQ is the industry’s most powerful post production system, which makes it ideal for client-attended sessions. But sometimes clients can’t be there, and it’s then that eQ’s ability to output to multiple versions comes into its own even before the final edit decisions are confirmed. eQ can version to QuickTime and Windows Media 9 formats in the background so that even the remotest client can quickly review the job and respond interactively over the internet.

Websites and virals too

Of course, the internet is itself increasingly important as a loyalty-building tool for broadcasters with their dynamic news and events websites and advertisers with virals etc. Here, eQ’s powerful toolset enables web-optimized versions to be quickly generated then output in the required format.



QUALITY MATTERS

In keeping with Quantel’s lifelong dedication to giving our customers the highest quality engineering and signal handling, eQ is designed and built from the ground up to store, process and maintain your valuable imagery in pristine condition throughout the post production process.

None better

eQ supports 16 bit and higher processing with Quantel’s patented Dynamic Rounding technology, guaranteeing that material remains at the highest possible quality no matter how many processes are applied. All material is held in eQ in its original, uncompressed form in YCrCb or RGB, which eliminates any quality losses due to unnecessary format conversions.

TIMEMAGIC – INTELLIGENT RENDERING WITHOUT THE WAIT

TIMEMAGIC IS A BREAKTHROUGH INNOVATION FROM QUANTEL THAT DELIVERS MASSIVE WORKFLOW AND PRODUCTIVITY BENEFITS IN A VAST RANGE OF APPLICATIONS FROM PROMOS TO LONGFORM GRADING ACROSS POST PRODUCTION AND DI. TIMEMAGIC TAKES THE WAITING OUT OF RENDERING.

No compromises, no waiting

Post and DI have long since moved beyond the limits of realtime; creative demands and high resolution working mean that rendering is a fact of life today. But waiting for rendering is far from an ideal workflow for the competitive post environment.

While compromises such as proxies can reduce preview rendering time, they add an unwelcome uncertainty into the post process, and a time-consuming final render is still needed for quality control and second stage client approval. TimeMagic eliminates the wait for rendering without the compromises that come with proxies. TimeMagic does this by adding a second enormously powerful media engine right into the heart of eQ.

The technology

Every eQ comes with the awesome Eiger Media Engine at its heart. Its power provides not only the blistering rendering speed that characterises Quantel systems, but also the fluidity and interactivity that make Quantel systems a joy to work on.

TimeMagic adds a second Eiger Media Engine right into the heart of the system, along with some sophisticated resource control software to enable Integrated Concurrent Processing (ICP). The second Media Engine does not need to be told to render, it intelligently watches what the operator is doing and automatically kicks in whenever media needs to be rendered. Of course if the operator wants to control things manually then an ICP bin lets them set the order of jobs to be rendered.

Faster than realtime

With TimeMagic, anything that needs rendering is processed in the background without interrupting the operator’s workflow. Better still, TimeMagic appears intelligently predictive – it is so smart, the system seems instantaneous in response.

In the background

For example, a colorist using an TimeMagic-equipped eQ can adjust the settings on one shot and then instantly start work on another. The first shot processes in the background while the second is set up.

Your choice

Alternatively, the operator can set up a render bin and choose which jobs TimeMagic goes to work on, which then carries on in the background while you get on uninterrupted with the job in hand.

“TIMEMAGIC – BECAUSE WAITING IS FOR WIMPS”

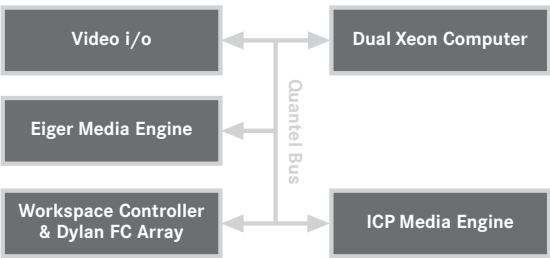
FEATURES AND BENEFITS

TimeMagic features

- No waiting for rendering
- Material is automatically rendered in the background without operator involvement
- Render bin for manual control
- Option on eQ, eQ HD-RGB and eQ Pay as you Go HD

TimeMagic benefits

- Create multiple versions of broadcast promos in little more than the time required to drop new material into templates
- Interactively color correct on real media without proxies
- Boost workflow by background rendering titles and other QEffects jobs while other work continues in the foreground
- Render one job while working on another



No artificial limits

As the second Eiger Media Engine is totally integrated into the system, it has none of the disadvantages of traditional external render farms, which can quickly become i/o limited when used in on-line situations.

In contrast, TimeMagic is win-win technology – it doesn’t eat into network i/o bandwidth available, nor does it reduce operator interactivity – it just renders anything that needs rendering in the background ready for when the operator needs it.



HD-RGB

The HD-RGB option for eQ adds realtime dual link HDSDI input and output capabilities. eQ is the only post system that can handle both 4:2:2 and 4:4:4 in their native formats – without unnecessary colorspace conversions that compromise quality. The HD-RGB option powers up the eQ to work in realtime with HDCAM-SR, Viper and other new digital capture formats; it also enables RGB data recording from telecines.

Digital intermediate

The HD-RGB option can also give the eQ owner an entry into the world of film digital intermediate; a number of movies has now been successfully completed with HD-RGB DI, including the box office blockbuster Sin City (above) at 501 Post in Austin, Texas.

eQ HITS THE ROAD

Breda, Holland-based digital film house Pentamagik has put an eQ at the heart of its visionary integrated HD production workflow. The eQ includes the QColor in-context grading package and is configured to handle full 4:4:4 HD-RGB with 240 minutes of workspace and the full bundle of plug-ins. Pentamagik has also purchased 5 QEffects software licenses to handle offline compositing and effects work.

Concurrent editing

Pentamagik’s eQ is permanently housed in a bespoke Mercedes OB vehicle. All shooting is done with Thomson Viper FilmStream and other 4:4:4 cameras. The output is recorded directly into the eQ so that playback, shot selection and even editing can happen concurrently with shooting on location. When shooting is complete the van is ‘docked’ back at Pentamagik’s 30,000 sq ft home base in Breda, which includes state of the art audio and screening facilities alongside the eQ and QEffects suites.

The best HD system

Pentamagik’s CEO, John de Haas, says, “I just wanted to make movies and I ended up creating a company! Seriously, I am an artist primarily, rather than a technician, and so the machine has to make my work easy. The eQ allows creativity to come first, while getting the job done fast and on budget. HD is a fact and eQ is by far the best HD system around. I can’t understand how people think you can do HD on a standard PC – it would be like using a kitchen knife to kill a dinosaur!”

RESOLUTION CO-EXISTENCE

RESOLUTION CO-EXISTENCE IS A UNIQUE QUANTEL TECHNOLOGY THAT OPENS UP MANY NEW WORKFLOW POSSIBILITIES IN POST PRODUCTION, AND ALSO MAINTAINS MATERIAL AT THE HIGHEST POSSIBLE QUALITY RIGHT THROUGH THE POST PROCESS.

Total freedom

Material of any resolution, color space and bit depth can be loaded and edited on the same timeline without the need to re-start or partition the workspace. Work in progress is displayed at full resolution in any chosen format at all times – with no preparation, pre-conversion or pre-planning required. Any conversions happen in realtime as the edit is played out.

Highest quality

Resolution Co-existence guarantees the highest quality output whatever the material, since conversion only happens once. It also simplifies versioning in different formats as the edit is merely replayed requesting a different output format.

Accept no substitutes

Resolution Co-existence should not be confused with ‘Resolution Independence’, which describes a system’s ability to work with material at differing resolutions, but only with one at a time, depending on the operating resolution chosen. This clearly limits operational freedom in requiring the selection of target format before work can commence, restricting workflow, limiting output flexibility and leading to quality losses.



eQ SPECIFICATIONS

eQ SOFTWARE KEY FEATURES

- Multi-format timeline editing – mix formats in a single timeline without rendering
- Unlimited layer compositing on multiple formats integrated right into the timeline
- Realtime versioning tools including format conversion, crop and pan and scan
- Advanced conform tools for AAF/EDLs including multi-layer AAF conform
- Integrated Paintbox for the best graphics and retouch capabilities
- Flexible title tools including rolls and crawls
- Multi-channel audio editing with live adjustment
- Network integration including background archiving with index
- Project-based or flat library for clips, edits, effects and settings
- Modular structure with Edit, Effects, Scribe, i/o, Utilities and Ddr software modules



eQ PLATFORM KEY FEATURES

- Realtime Resolution Co-existence™ up to 1920 x 1080 (4:2:2) 30 Fps, 4:4:4 on eQ HD-RGB
- Realtime aspect ratio conversion
- Realtime crop, pan and scan on output
- Freely mix resolutions on the timeline without rendering
- Eiger Media Engine for high speed media processing
- Composite any resolution up to 4K in Effects
- Store and process YCrCb and RGB media without unnecessary colorspace conversions
- 10 bit video input/output
- 10 bit non-compressed native storage on disk
- 16 bit per color component processing
- Background data networking
- Full-quality no-proxy SD/HD workflow and monitoring
- Hotswap video disks with single disk fail protection and auto-rebuild
- TimeMagic™ Integrated Concurrent Processing option
- FrameMagic™ disk management
- Single channel SD/HD DDR emulation
- HDSDI, SDI, Embedded audio, AES/EBU audio interfaces
- Professional broadcast-standard video and audio interface connectors

eQ OPTIONS

QColor

Non-linear in-context color correction system for eQ

QColor Panel with three trackballs and 8 rotary controls for tactile color adjustment

Primary control of lift, gamma and gain with master and individual channel controls

Trackballs for differential low, mid and high control

Unlimited secondary corrections with HSL or mask selection

Automatically apply color corrections across groups of shots

Split screen reference frame comparisons

Transfer settings quickly between shots

Visual Storyboard for color correction settings

Defocus

Visual display of color settings in the library

In-context multi-layer grading

Automatic rebuild of transitions after grade changes

TimeMagic™

Intelligent rendering without the wait

The TimeMagic option adds a second Eiger Media Engine to eQ which enables background rendering to boost productivity and workflow in color correction and effects editing applications

Additional TimeMagic hardware maintains full performance foreground operation

Automatic mode automatically renders in the background without operator action

Render bin provides manual control of render queue

Render bin and automatic mode can work simultaneously with priority given to automatic mode renders

Fader Panel

8 Motorised faders

Automated audio track mixing

Track enable buttons

Pan controls

eQ TOOLSET

Editing

Edit multiple resolutions and formats into timeline without rendering

Video guide track for offline comparison with split screen or mix

Realtime, no render, global or segment-based pan and scan on playback

Realtime format, aspect ratio conversion and crop on playback

Aspect, safe area and shadow mask overlays

Timeline shows clips with effects history for fast changes

Open multiple timelines simultaneously

Lock multiple clips together with user defined sync points

Multi-level undo and redo

Fast gestural editing with pictures

Timeline, picture or storyboard editing



Audio Editing

Multi-channel audio editing

Mono, stereo or four audio channels per timeline track

Audio waveform display with sub-frame accurate editing

Up to 8 timeline audio tracks with 32 channel playback

Digital or analogue style audio scrubbing

Graphical insert and manipulation of crossfades

Independent control of out and in fade duration and timing

Track or segment level control with keyframing and dynamic rubber banding

3 band parametric eQ with graphical display

Audio compression

Live audio output during level, eQ or compression adjustment

Library

Project-based or flat file library stores rushes, edits, packs, settings and clip metadata

Fixed or floating library

Technical metadata includes resolution, bit depth, scan, colorspace, law, pixel aspect ratio, reference black/white levels, source timecode, keycode, render state

User metadata includes project, originator, name and owner

User defined library view including any or all fields in any order

Fast search or sort on any field

Unlimited user defined bins based on folders or search results

Display entries as textual, graphical or both

Browse, scroll and play clips directly in the library

Edit from library

Nested folders for easy project organisation

FrameMagic™ allows instant and safe deletion of material to free up disk space without needing to consolidate



Effects Compositing

Multi-view compositor with blender, camera, process tree and scene tree views

Unlimited layers with unlimited processes per layer

Integrated plug-ins used in same way as Quantel effects

Independent control of keying, color correction, plug-ins, blur graphics, text and axis on each layer

Add vector-based text to any layer or onto multiple text layers

Composite any resolution over any other with pre-size mode to match sizes

Clip history can be opened in Effects to allow changes to original media and settings

Color Correction and Keying

Primary color correction control of hue, saturation, gain, gamma and cast

Master and individual channel controls

Nullcast for auto-white balance

Secondary selective color adjustment

RGB or YUV fettle with 9 graphs for precise color control

Colorpoint identifies image colors on graphs

Apply color corrections through multiple soft-edged masks

UniKey universal keyer features Main, chroma, linear, RGB, YUV, and HSL keyers

Difference key

Spill controls and luminance edge control for accurate spill suppression

Shrink and soften key matte

Make key function

Unlimited spline-based or graphic shape keyframable garbage mattes

Rotate, flip and scale garbage mattes, user control of reference point



Painting

Paintbox™ on-board provides paint and graphics tools

Paint on layers in their compositing context

Variable density pressure sensitive brushes for real painting feel

Pressure sensitive variable size brushes

Air, chalk, paint and chair brushes

Wash, shade, smudge, blur and spray functions work with all brush types

Stencils for protecting areas from painting

Create hi-con mattes from stencils

Copy, restore and zip brushes for retouching flexibility

Combine copy with stencil and smudge with stencil

Restore from next, previous frame, clip, cut out or buffer

Titles

Scribe software module adds rolls, crawls and lower thirds

Caption compositor adds multiple titles onto timeline

Mix text and graphics in rolls and crawls

Anti-aliased render of international character set

Use any Windows TrueType font

Style control and character effects including edge color, face, shadow, grading, softness, transparency and angle

Place text on a spline curve

Place text on a spline curve

Import text from txt or rtf files including tabs

Import layouts prepared on Qscribe standalone software

Integrated Quantel color palette

Support for non-left to right, top to bottom languages



Utilities

Manage realtime Display Look Up Tables (LUTs). Select between pre-defined LUTs or load external LUTs from text files. Control 1D and more sophisticated LUTs

Interface, de-interlace

Cinecompress/expand (remove or add 3:2 pulldown)

Entangle, disentangle

Freeze, Reverse, Flip and Average

Separate and combine RGB

Viper and Cineon utilities

I/O and Conform

Frame accurate record from and play to VTR

Multi-format multi-frame rate video interfaces

Support for Panasonic Varicam flags on capture to discard duplicate frames and 'burn-in' over- or under-cranking from camera

Realtime removal of 3:2 on input, realtime addition of 3:2 on output

Auto-conform multi-layer AAF files with cuts, dissolves, SMPTE wipes, M2 commands (freeze and varispeed), split edits and comments

Intelligent conform only loads material not already loaded

Multi-level conform priority control for quick handling of editorial changes with reference clip and reference project functions

Conform from tape or file media on a network. Auto search through network directory structure to find required media

Background conform from network

Publish to audio post with essence, metadata and low res video guide track



Background import/export of file media via windows networking protocols.

Quicktime and Windows Media 9 import/export

MPEG2 import and export

Import and export many popular file formats including TIFF, TARGA, JPEG, BMP, VPB, DPX, CIN, AVI, WAV

XMLnet utilities allow access to and from Quantel Workspace via a scriptable interface

Background archive to/from local data tape or to data network

Format independent, 100% transparent essence archive with no loss of quality

Control as digital disk recorder/player in VTR emulation mode via RS422 interface

Images courtesy of:

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