

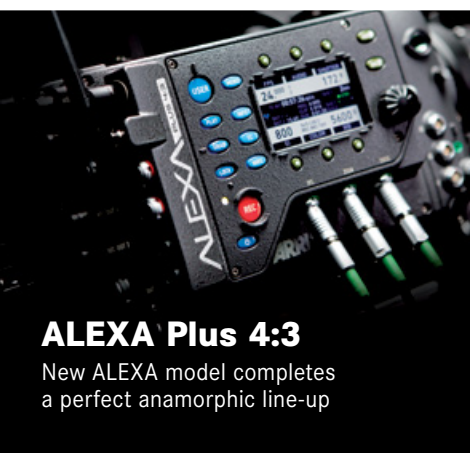
ARRI NEWS

NAB ISSUE 2012



ALEXA: ON THE FRONTIER

Pushing boundaries from Hollywood to the Arabian wilds



ALEXA Plus 4:3

New ALEXA model completes a perfect anamorphic line-up



ARRI L-7

L-Series LED lights installed at Munich Film School



ARCHIVE TECHNOLOGY

ARRISCAN archive tools restore classic British TV show

EDITORIAL

DEAR FRIENDS AND COLLEAGUES

Our industry is one of the most demanding in the world and we are proud, celebrating our 95th birthday this year, to have been part of it for so long. ARRI's success is built upon innovative technology and the reliability, durability and high value of our products. We truly believe that keeping our promises has been - and remains - a pillar of our success in creating professional tools for professionals.



Robert Richardson, ASC, when he won the Best Cinematography Oscar® for *Hugo*, shot on ALEXA. This came just after Johannes Steurer, Wolfgang Riedel and Franz Kraus were honored with the Academy

Award of Merit for the development of the ARRILASER, so it's already been a great year. In other news our L-7 LED Fresnels and MAX Technology lights are making a big impression in both the feature film and broadcast markets, while our ARRISCAN archive tools are preserving historic movies and TV shows.

We are thrilled that the ALEXA system continues to go from strength to strength. Here at NAB we are announcing a new member of the family – the ALEXA Plus 4:3. Like the Studio and M models it features a 4:3 sensor that makes it ideal for anamorphic widescreen productions. Nothing says 'truly cinematic' like a full-frame anamorphic image, which is why we've made ALEXA the most anamorphic-friendly digital camera system available today.

Whether you've made it to NAB or not, our new show page at arri.com/nab2012 is the place to find videos, photos, news stories and press releases about our products and activities at the show. If you can't join us in Las Vegas, be sure to join us online.

Just a few weeks ago we celebrated the opening of our new office in Beijing; not long before that, we were congratulating our friend

Dr. Martin Prillmann

Franz Kraus

CONTENTS

CAMERA

- 4 Seamus McGarvey, BSC, ASC, on *The Avengers*
- 6 Lightweight Alura Zooms and other lens news
- 8 The new ALEXA Plus 4:3 and shooting anamorphic
- 12 Latest ALEXA developments
- 14 ALEXA software updates coming in 2012
- 18 Rolf Steinmann takes ALEXA into the wild
- 22 David Mullen, ASC, on NBC's hit TV show *Smash*
- 24 Pro Camera Accessories
- 26 2012: a year at the movies with ALEXA
- 28 ProRes for the big screen
- 35 ALEXA Pocket Guide WebApp





LIGHTING

- 10** Gaffer Jeff Ferrero lights with the ARRI M40/25
- 20** ARRI L-7 LED Fresnels at Munich Film School
- 32** New lighting suspension solutions in Kazakhstan
- 34** Photometric Calculator web tool

DI SYSTEMS

- 16** ARRISCAN archive tools restore classic TV show
- 30** ARRI's 10-year pledge to support film

34 CONTACTS

AVENGERS ASSEMBLE!

*Seamus McGarvey, BSC, ASC,
assembles ALEXA on The Avengers*

Oscar®-nominated cinematographer Seamus McGarvey, BSC, ASC, is known for an elegantly naturalistic approach to films that include *Atonement* and *Nowhere Boy*. His latest effort, *The Avengers*, is a superhero summer blockbuster that represents a departure from his previous work. Directed by Joss Whedon, *Avengers* unites the revered Marvel comic book characters Iron Man, Captain America, Hulk, Thor, Black Widow and Hawkeye. Although character-driven, the film is a spectacular showdown of heroic egos, adrenaline-pumping fight sequences, visual effects and slick sets.

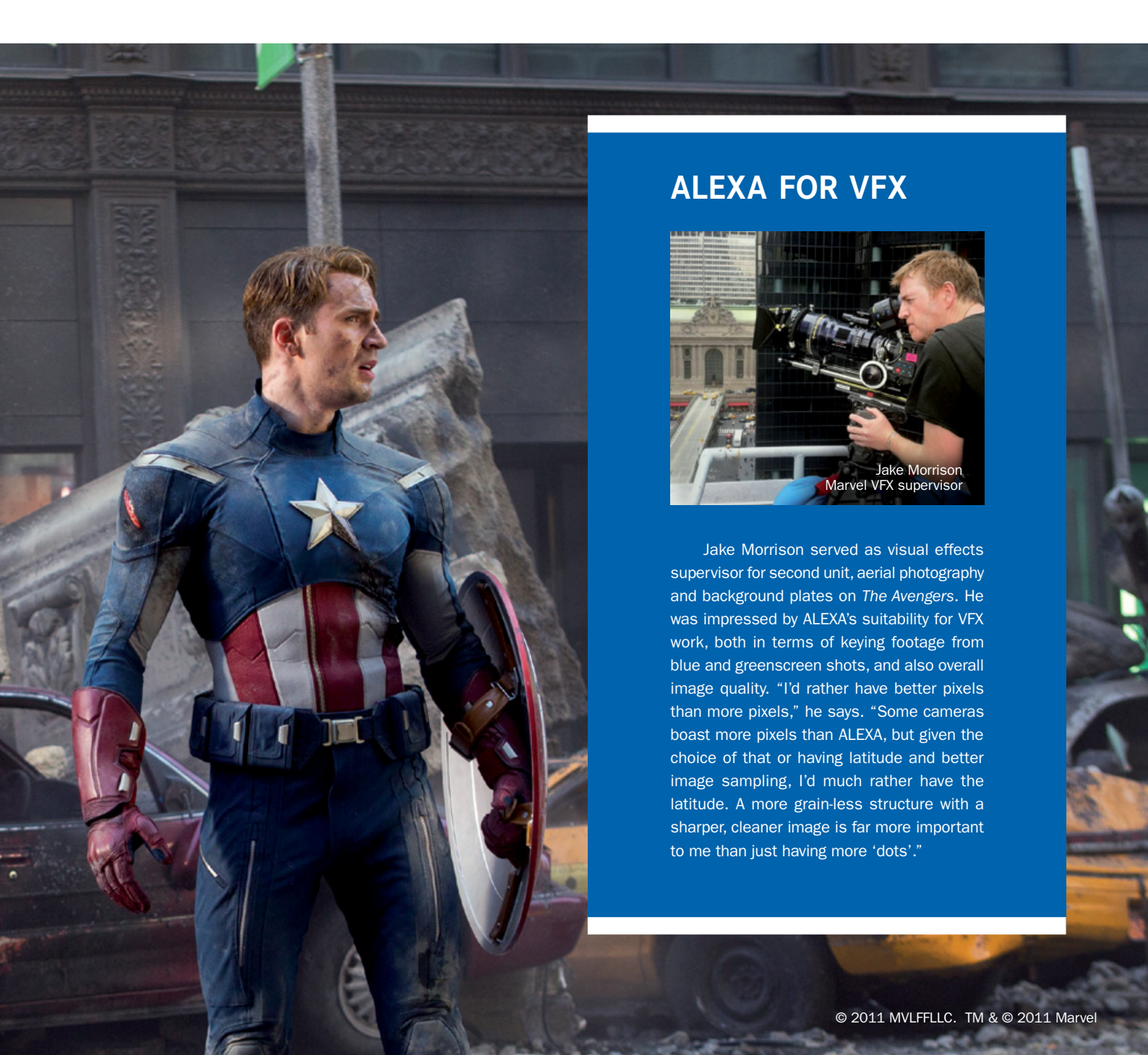
Says the Irish native, "I was quite excited by the prospect of doing a film that would expand my horizons in terms of learning about visual effects on such a grand scale. I knew I would be employing a different cinematographic approach to a film like this."

The Avengers also marks McGarvey's first venture into digital capture - a step he

took with the ARRI ALEXA camera system. He says, "I had never tried to shoot or test a digital camera before, so for me it was a leap into the dark." It was in darkness where McGarvey first undertook comparison tests with ALEXA. "We shot under candlelight, bracketing the exposures," continues the cinematographer. "It was incredible how far we could go with the ALEXA before the image would start to break up."

ALEXA's base sensitivity of EI 800 and latitude of 14 stops were useful in low light and for night shooting. "The camera came into its own in those conditions, working in sets that were low key and shooting in large areas of night photography or just on the cusp of daylight and into night, where I was





ALEXA FOR VFX



Jake Morrison
Marvel VFX supervisor

Jake Morrison served as visual effects supervisor for second unit, aerial photography and background plates on *The Avengers*. He was impressed by ALEXA's suitability for VFX work, both in terms of keying footage from blue and greenscreen shots, and also overall image quality. "I'd rather have better pixels than more pixels," he says. "Some cameras boast more pixels than ALEXA, but given the choice of that or having latitude and better image sampling, I'd much rather have the latitude. A more grain-less structure with a sharper, cleaner image is far more important to me than just having more 'dots'."

© 2011 MVLFFLLC. TM & © 2011 Marvel

dependent on ambient lighting as well as conventional lighting," notes McGarvey. Shooting in ARRIRAW to Codex ARRIRAW recorders also allowed greater flexibility in post with uncompressed 12 bit logarithmic files.

Because of the high number of both interior and exterior visual effects shots, McGarvey undertook extensive testing. "We were going to shoot sometimes on a very large scale in situations where I couldn't control the ambient spill of daylight," he says. "I would have greenscreen lit with hard sun and shade at the same time, within the same shot. One of the first tests I did was to see the tolerance of various camera systems in terms of latitude and ability to extract a key

from blue and greenscreen in those ambient lighting conditions. The ALEXA had more range and produced a cleaner key in all conditions."

McGarvey was convinced the camera would render the images he wanted, so much so that he purchased one of the first ALEXA Plus models in time for production and named it *Schatzi de Bayer*. He notes, "She's doing really well, I recently upgraded her to do slow motion. I love the camera."

In all, the camera package on *Avengers* consisted of four ALEXAS and an ARRIFLEX 435 for high speed shooting (higher frame rates were not available on ALEXA at the time of the shoot). The film originated in 2D and was then converted to 3D in postproduction; color timing took place at EFILM in Los

Angeles with Steve Scott. Says McGarvey, "There is so much information we have to work with and it's really great how clean the image looks when it comes in. I'm looking forward to doing another film with ALEXA."

***The Avengers* opens in theaters internationally beginning April 25 and in the US on May 4.**



Watch a trailer for *The Avengers*:
www.arri.com/goto/1204/avengersvid



Read full length interviews online:
www.arri.com/goto/1204/avengers

LATEST ON LENSES

Lightweight Alura Zooms offer great quality for a great price



ARRI is unique in offering filmmakers a modern range of matched, high-performance prime, zoom and specialty cinematography optics. A particular strength is the wide end of the range, where ARRI offers unparalleled lenses such as the Ultra Prime 8R/T2.8. This lens, along with the rest of the Ultra Prime series and also the prestigious Master Prime range, is the result of an on-going collaboration with Carl Zeiss that has brought about some of the most high-performing and user-friendly cine lenses ever manufactured.

In recent years ARRI has developed a collaborative partnership with another world-renowned optics company – Fujinon. The ARRI/FUJINON Alura Zooms have been developed to accompany the ARRI ALEXA digital camera system; they are optimized for digital sensors, but also work perfectly on film. Initially launching with two studio zooms, the 18-80/T2.6 and 45-250/T2.6, the Alura Zoom family now includes two new lightweight zooms, the 15.5-45/T2.8 and 30-80/T2.8.

The new Alura Zooms offer the exceptional optical quality of high-end zoom lenses, but at an affordable price. Lightweight and mobile, they are ideal for handheld, Steadicam, 3D and action photography, and their compatibility with the ARRI Lens Data System allows valuable metadata to be utilized both on set and in post.

Deliveries of the lightweight Alura Zooms began in April, although several cinematographers had previously tested the lenses during the development process. One of these was Stijn Van der Veken, SBC, who noted, “I shot tests comparing the lightweight Aluras with my Master Primes and my first impression was that they’re wonderful! I aim to use them on a big WWI feature film project that starts shooting this summer.”



ACADEMY AWARD FOR MASTER PRIME ENGINEERS



The Master Prime series, comprising 16 lenses that cover a focal range of 12 mm to 150 mm, has set new standards in cinematography, combining an extremely high speed with outstanding image sharpness, high contrast, attractive bokeh and stunning color fidelity. In February 2012, the Academy of Motion Picture Arts and Sciences (©A.M.P.A.S.®) honored Carl Zeiss design engineer Uwe Weber and his late colleague Dr. Jürgen Noffke with a Scientific and Engineering Award® for the mechanical and optical design of the Master Prime cine lenses. Technical and marketing specifications of the lenses are based on ARRI's unrivalled market experience and close relationship with filmmakers.



©A.M.P.A.S.®



ALEXA PLUS 4:3 FOR ANAMORPHIC



True CinemaScope® with the ALEXA family of cameras

Shooting with anamorphic lenses for 2.39:1 widescreen distribution, a process often referred to as CinemaScope (trademark 20th Century Fox), results in unique images that have long been appreciated by cinematographers, directors and the viewing public alike. The fundamentals of the process apply to digital acquisition in exactly the same way as they always have done to film, so long as one has a sensor that is about the same size and shape as a film frame, and a viewfinder that can de-squeeze the compressed image. The ALEXA system ticks both of these boxes.

At NAB 2012 ARRI is announcing the ALEXA Plus 4:3, a new ALEXA model that has similar functionality to the ALEXA Plus but features a 4:3 Super 35 sensor, the ability to switch from 16:9 sensor mode to 4:3 sensor mode, and built-in licenses for high speed shooting, DNxHD recording and anamorphic de-squeeze.

The ALEXA Plus 4:3 joins the ALEXA Studio and ALEXA M, which already have 4:3 sensors, rounding out a line-up that now represents the perfect solution for anamorphic productions. The Studio might typically function as an A-camera, the Plus 4:3 as a B-camera and the M as a compact, versatile C-camera.

Anamorphic lenses squeeze the image by a factor of two, thus projecting a 1.195:1 aspect ratio image onto the sensor. When using sensors that are natively 16:9 or even wider, it is necessary to crop the sides, resulting in a much smaller used sensor area and a different angle of view for the lens.

With the ALEXA 4:3 cameras, the full area of the sensor is used and a much higher image quality retained. In addition, the unique optical characteristics of anamorphic lenses – the magic at the heart of anamorphic cinematography – are rendered faithfully and fully in the digital image.





ALEXA PLUS 4:3 MAIN FEATURES



- 4:3 Super 35 sensor
- Switch between 16:9 and 4:3 sensor modes
- Anamorphic de-squeeze license included
- High speed license included
- DNxHD license included





LIGHTING WITH THE ARRI M40/25 AND M18

Spotlight on gaffer Jeff Ferrero



As a gaffer, Jeff Ferrero must constantly assess the quality of lighting fixtures to perform his craft. As owner of Nova Lite, a Los Angeles-based rental facility, he must evaluate his investment in equipment and how it performs long term. Recently Ferrero welcomed ARRI M40/25s and M18s to his inventory – two versatile additions he is thrilled to include in Nova’s arsenal. “They put out a much better quality of light and provide a lot more options on how you would use that light,” he says.

The 1800W M18 combines the award-winning lens-less MAX Technology of the ARRIMAX with ARRI’s innovative True Blue design. The result is a powerful HMI that is as small as a 1200W PAR but with a 70% higher light output. Similarly, the M40/25 also utilizes MAX Technology; the unit is open face and very bright, yet focusable over a range of 18-52° HPA, casting a crisp shadow.

Ferrero appreciates the M40/25 for its intensity and compact size. “It seems to me the M40/25 is lighter than anything else on the market,” he says. “I love that you can plug it into a Honda 6500

generator and get almost as much output as a 6K. The 6500 is the biggest ‘putt-putt’ generator on the market that I’ve seen, and you can run the M40/25 on it all day, which is great. Before, you were limited to a 4K, but a 4K PAR doesn’t put out as much light as the M40/25.”

Having learnt to expect the unexpected on commercial, music video and feature film shoots abroad, Ferrero devised a special ‘road kit’ for the M18 and hopes to do the same with the M40/25. “I think other gaffers and DPs would agree that it’s nice to know you have the lights you need when traveling to distant locations,” he notes.



Ferrero was one of the first to receive the ARRI M40/25



ARRI HMIs at work on a commercial shoot



All photos courtesy of Jeff Ferrero

“...a 4K PAR doesn’t put out as much light as the M40/25.”

“I’ve flown all over the world with the two M18 kits. Each M18 goes in a case with a medium Chimera and egg crate; the case weighs under 100 pounds and is within 100 square inches, which is fine for most oversized and media airline requirements.”

The M18 road kits recently traveled with Ferrero to Indonesia for additional photography on Oliver Stone’s film *Savages*, with second unit DP Matt Lloyd (Dan Mindel, BSC, ASC, was on first unit). “The ARRI ballasts read the amount of power coming in, which is great because it means you can plug them in anywhere in the world,” says the gaffer. “Whether it’s 110v or 220v – it doesn’t matter. We accomplished a lot with those two M18s.”

Commercials allow Ferrero to light in a myriad of styles and work with scores of different cinematographers. “Being a gaffer is like going on 50 first dates a year,” he says. “I meet so many DPs and they all have their different style. For me, I like to figure out each person and try to accomplish their vision.”

He has often collaborated on commercials with DP Matthew Libatique, ASC. Last year the two were reunited on the ALEXA-shot feature *He Loves Me*, a romantic comedy starring Paul Dano as a novelist struggling with writer’s block. “Small movie, small crew, small trucks; I think it was about as minimal as you could go with crews and pre-rigs, but it worked well for this type of film,” notes

Ferrero, who describes the look of *He Loves Me* as moody and dark. “We really worked at some very low light levels, shooting a lot in natural light around Hollywood.”

The gaffer appreciates being able to create looks that serve the story and having the right tools at his disposal to accomplish this. “I love what I do,” he says. “I know I can do my job with ARRI HMIs on the set. With other companies’ products there can be problems, but I’m at ease when I have ARRI around.”





ALEXA TODAY

*A round-up of the latest
ALEXA developments*

ALEXA OUTPUT FORMATS:

- **ARRIRAW** – external recorder required
- **HD-SDI video** – external recorder required
- **Apple QuickTime/ProRes files** – internal recording to SxS PRO cards
- **Avid MXF/DNxHD files** – internal recording to SxS PRO cards

A number of new ALEXA cameras, capabilities and documents have become available in 2012 that combine to make the ALEXA family of cameras the most versatile digital camera system yet.

ALEXA STUDIO

ARRI ended 2011 by proudly shipping the first ALEXA Studios, and has been building and shipping many more Studios since then. Operators are happy about the optical viewfinder, while cinematographers and directors alike appreciate the 4:3 sensor, which allows the best use of anamorphic lenses for widescreen projects. Upcoming ALEXA Studio movies include *World War Z*, shot by Robert Richardson, ASC, and *Skyfall*, shot by Roger Deakins, ASC, BSC.

DNxHD

Software Update Packet (SUP) 6.0 was released in February 2012, enabling DNxHD recording with the purchase of a license from the ARRI Webshop. In addition, there were a number of new features, including color bars, new user button abilities (de-squeeze on/off and Auto White Balance) and new icons in the electronic viewfinder and on MON OUT to indicate an ARRI Look File being active. Smooth Mode is also now indicated in the electronic viewfinder.

DNxHD further increases the amazing flexibility of ALEXA cameras, which feel at home in any production environment. ALEXA cameras are unique in that they are not tied to one proprietary recording format, but support four different output formats, each with various flavors (for example five ProRes codecs with different compression ratios). Thus any production need can be met, from high-end feature film to soap opera.



ALEXA M

In May ARRI will start shipping the ALEXA M, which shines with its ability to fit into places a regular ALEXA could not go. ALEXA M is the ideal camera for 3D rigs, helicopter shots, underwater rigs, car interiors, action photography, Steadicam and handheld.



“*World War Z* required really fast moves and intense running shots of various kinds, and I have to say that the M was amazing. When I kept the sled very light, with a single battery and a prime lens, it moved faster than anything I have ever seen, including handheld - and with control! Cabling, which is always an issue with Steadicam, was improved immensely with the M because of the tiny little fiber cable. I couldn't have been happier; I was able to do moves that I didn't actually think you could do with a Steadicam.”

Larry McConkey
Steadicam operator on *World War Z*



“The M worked very well in a 3D rig and very well on a Steadicam, but the setup that really showed its benefits was the car. With the M we suddenly had a lot of space in the car, which made rigging easier, especially with the cage that surrounds the camera – you can put it wherever you want. Essentially the M allows elegant solutions in difficult situations and enables new perspectives with no sacrifice in quality. You could use other small cameras for these kinds of shots, but none of them offer this level of quality. You can trust the M because it is an ALEXA; when I take this camera into the fight I know I will win!”

Tom Faehrmann
DP and ALEXA M test shooter

DOCUMENTATION

To make all the new ALEXA cameras and features easier to understand, the ALEXA workflow pages on the ARRI website have been updated and new web pages created. In addition, various new data sheets and white papers, which summarize and illustrate their sometimes complex subjects in a simple

manner, can be accessed from the ARRI website [DOWNLOAD](#) page:



www.arri.com/alexa/downloads



ALEXA TOMORROW

*A road map of software updates
to come in 2012*



ARRI firmly believes that long product life-cycles are the basis of a sustainable business relationship with its customers. At its launch, ARRI promised that ALEXA would be a long-lived camera platform; keeping with that promise, new features are continually being worked on to protect the investment of customers.

The new features planned for 2012 are designed to improve ALEXA's already stellar overall image quality with new Debayer algorithms; to make better image quality available for less money with exciting new recording formats; and to offer a number of features requested by users. These features will be delivered in the form of Software Update Packets (SUPs) throughout 2012, though exact details and dates may alter as the year unfolds.

SOFTWARE UPDATE PACKET (SUP) 6.1 Q2 2012

SUP 6.1 consolidates various updates for different ALEXA models into one SUP for all ALEXA cameras. It reduces the amount of time it takes to switch from 16:9 to 4:3 mode on ALEXA Studio, ALEXA M and ALEXA Plus 4:3 to around one minute, and allows for the creation of a Lens Data Archive lens profile with the ALEXA Studio, ALEXA Plus and ALEXA Plus 4:3. SUP 6.1 also adds extra status information to the Lens Data Display for Focus Pullers,

allows the display of a large camera unit letter on MON OUT and provides an icon for Peaking in the electronic viewfinder and on MON OUT.

SOFTWARE UPDATE PACKET (SUP) 7.0 Q3 2012

SUP 7.0 provides a number of features that will enhance image quality and improve feature film production onto in-camera SxS PRO cards. The current Regular Speed Debayer algorithm inside ALEXA will be replaced with a new algorithm that provides even cleaner, sharper-looking images than ALEXA does today, especially on high contrast edges and in areas with fine detail. The new Regular Speed Debayer algorithm applies to all HD-SDI outputs, as well as ProRes and DNxHD images in Regular Speed mode (0.75 to 60 fps). At the same time the High Speed Debayer algorithm (for 60 to 120 fps) will be replaced with an even better version.

Two exciting new recording options are enabled by SUP 7.0. The first is ProRes 4:3, which facilitates the shooting of anamorphic feature films onto in-camera SxS PRO cards. It will work with all ALEXA cameras that are 4:3 capable (ALEXA Studio, ALEXA M and ALEXA Plus 4:3). On spherical lens shoots, ProRes 4:3 gives extra room for vertical repositioning in post, while on ARRIRAW shoots it

THE LCC ARRI LOOK FILE

Low Contrast Curve (LCC) is a regular ARRI Look File that is designed for those who do not want to shoot in Log C, but want a bit more dynamic range than given in the ALEXA standard Rec 709 setting. The LCC contains a custom tone map curve for a video image with lower contrast than the standard Rec 709 output. This means the image can be viewed on a regular Rec 709 monitor without additional LUTs, but at the same time it holds more dynamic range information than Rec 709; highlight definition and some black detail that would be lost in the typical Rec 709 tone mapping



can still be accessed. Not using Log C encoding means that there is no need for a Log C-to-Video dailies conversion. For a final image, the footage only needs minor color correction adjustments to restore a visually appealing contrast.

Q2

SUP 6.1

Q3

SUP 7.0

Q4

SUP 8.0

2013

provides the option for an extra in-camera backup. ProRes 4:3 records 2048 x 1536 pixels into a QuickTime/ProRes file, supports all ProRes codecs, and works from 0.75 to 48 fps.

The second new recording option, ProRes 2K is great for shooting feature films onto in-camera SxS PRO cards without rescaling, as would be needed with ProRes HD. ProRes 2K provides a high quality 2048 x 1152 ProRes file that is ideal for feature film productions; it will initially only be available for Regular Speed (0.75 to 60 fps).

In addition, SUP 7.0 includes the LCC (Low Contrast Curve) ARRI Look File in each ALEXA by default and simplifies how the Studio's MIRROR PARK button works.

SOFTWARE UPDATE PACKET 8.0

Q4 2012

For DNxHD license owners, SUP 8.0 will add the DNxHD 444 (10 bit 4:4:4) codec, providing high quality in-camera DNxHD mastering. For those who own a High Speed license, ProRes 2K recording will be possible from 60 to 120 fps. Three frequently requested features will be implemented in SUP 8.0: vertical image mirroring allows quick low mode Steadicam shots by flipping the Steadicam upside down; a new post trigger for all ProRes recording

modes makes capturing that elusive moment easier for nature photographers; and card spanning will automatically switch from one SxS PRO card to the next when the first one is filled.

Compatibility with the Cooke /i system implemented with SUP 8.0 lets ALEXAs collect lens metadata from Cooke and Angenieux lenses, making ALEXA the only camera that automatically records an enormous amount of user, camera and lens metadata into all output formats. Meanwhile compatibility with the ARRI Ultrasonic Distance Measure (UDM-1) and the Cinematography Electronics Cine Tape Measure will make assistants' lives easier.

User interface improvements made by SUP 8.0 include a new user button option for Studio MIRROR PARK, a countdown for the switch from Regular to High Speed mode and metadata in DPX frame grabs for the ARRI Look Creator. The ALEXA Studio will automatically park the mirror shutter in VIEW mode when powered down, so the next time it is taken out of the case the cinematographer can immediately look through the optical viewfinder, even before power is available.



LITTLE GREY CELLS

London post facility JCA uses the ARRISCAN to restore Poirot, the British TV detective series based on Agatha Christie's classic stories



First broadcast on ITV in 1989, *Poirot* is an enduringly popular mainstay of British television, faithfully relating Agatha Christie's novels and short stories about Hercule Poirot, the mannered, irritating, but brilliant Belgian private detective. Originally filmed on 16 mm and broadcast from standard definition masters, the first six series of the program were ripe for digital restoration and HD remastering, a task that ITV Studios Global Entertainment assigned to JCA in London. Matt Bowman, Commercial Director at JCA, spoke with ARRI News about the role the ARRISCAN and ARRI Wet Gate played in that process.

ARRI News: Did you specifically buy your ARRISCAN for archive and restoration work?

Matt Bowman: Restoration was definitely the market we were focusing on. We used to service this type of project by doing high definition telecine transfers to HDCAM SR and then converting to a DPX sequence, but clients became more sophisticated and wanted data backup files, which moved us towards a scanning process. When we were negotiating with ITV Studios Global Entertainment about restoring *Poirot* it was clear that we'd be working to a transmission schedule. We had to aggressively pursue a workflow that would let us deliver at least one 50-minute program per week from 16 mm A and B-roll cut neg. The net result was that we decided to invest in a scanner, so we tested literally all of them with the same piece of film from our source material.



AN: Why was the ARRISCAN chosen over other scanners?

MB: By its very nature, 16 mm A and B-roll has stability issues because the joints hop as they go through the gate. We liked the



ARRISCAN for a lot of reasons: we liked the way it was engineered and the way it looked, the kudos of being best-of-breed and we were intrigued by the ARRI Wet Gate. But the ARRISCAN's particular strength, for our needs, was the way it handled the registration of the joints, because it dealt with them uniformly. With all the other scanners we tested we had to fix each of the thousand hopping joints per program manually, but with the ARRISCAN we created a fix plate and applied that to every single cut, saving a great deal of time.

AN: Were you using your ARRI Wet Gate on this job, or other dust-busting tools?

MB: There was an instance where we had to use the Wet Gate because there was some severe scratching down the right-hand

side of the film, going right across skin tones; the Wet Gate proved invaluable for getting rid of those scratches. We also have the infrared option with our ARRISCAN [Kodak Digital ICE Technology] and we use it all the time. We slow the scan down a bit to get the dirt maps, which we import directly into the digital restoration area. Through experience we're now very competent at knowing what we can and cannot remove, because with infrared you have to be careful about highlights; like with everything, the kit is only as good as your operator's eye and his ability to manage the asset as well as possible.

AN: What has to be done about film grain when 16 mm material is repurposed for HD transmission?

MB: After all the scanning, assembly, automated passes and highly skilled manual passes, we use the ARRI Relativity [now Dark Energy from Cinnafilm] software as our grain treatment, sitting down with the client to find the best possible settings. Effectively what we do is remove the 16 mm grain and put in 35 mm grain, which makes it gentler on the eye and maintains detail. Some of the *Poirot* Blu-ray reviews have been outstanding in terms of feedback from viewers about how they found the experience compared to other restoration processes.

AN: Do you think the success of this project could see more classic, film-originated TV dramas being restored and repurposed for modern distribution channels?

MB: I certainly hope so. Anything that was captured on tape has limited resolution at source, but anything captured on film retains the resolution to exist in the high definition domain. Revisiting an already popular series is an awful lot cheaper than shooting something new, so we're seeing a wealth of this approach from ITV and other broadcasters. They're all looking back at their catalogues because with the broadcast channels having such a high demand for HD-originated material, you can't make the content quickly enough. Going back and unlocking the value of those historic assets is far more cost effective and of course you know you'll have an audience because of the existing fan base.



Read the full length interview online:
www.arri.com/goto/1204/poirot



SHOOTING WILD

Wildlife cinematographer Rolf Steinmann on working with ALEXA in some of the most beautiful but challenging environments on Earth

Photo: Dave Mothersaw

ARRI News: Why did you get into natural history cinematography?

Rolf Steinmann: Escapism! As a teenager I wanted to get away from the human world and experience wild places where nature was still intact, so I started to travel to Scandinavia. Back in Germany I always watched tons of wildlife films to feed my longing for nature, and soon got addicted to them. Then in my early twenties I came to the irrational idea of working on wildlife films myself.

AN: What made you decide to invest in your own ALEXA?

RS: Wildlife films are traditionally very focused on aesthetic photography and for decades were shot on 16 mm. Recently, wildlife cameramen have tried to imitate the look of 16 mm with digital video cameras, but this never really worked for me. I realized that the magic in the photography of even my favorite cameramen wasn't there anymore when they filmed on 2/3" and I came to the conclusion that this format could never achieve an organic film look.

The ALEXA offered so much that I had dreamed of: the aesthetics of a 35 mm sensor; the dynamic range of film; an easy and non-cryptic camera menu; a super-robust housing; a better viewfinder; high speed frame rates and a PL mount. Moreover, if you have months-long shoots you have to rely on your gear. The ALEXA is totally reliable and can easily cope with even the harshest conditions.

AN: You've been to some very cold environments with your ALEXA; what issues did this present for both yourself and the equipment?

RS: My best test for the ALEXA was a four-day hide shoot where it was -25°C during the day and even colder at night. I left the camera in there the whole time and when I entered the hide before dawn it



Photo: Mandi Stark

had a layer of ice on it, but when I switched it on it worked perfectly, as did the viewfinder. I think the 13-hour sessions in these conditions were much harder for me than for the ALEXA; in fact I doubt there is any temperature where a human can still work that would prove a problem for the ALEXA.

AN: What other challenging shooting conditions have you faced?

RS: I worked in desert and mountain environments on two sequences for the BBC's *Wild Arabia* series. One was about the age-old relationship between Oryx antelopes and the Bedouin people; the other was about wolves and goatherds. I loved shooting scenes with the Bedouins and the goatherds, and it was just unbelievable how well the ALEXA dealt with all the different backlight situations – I really think the ALEXA is the perfect tool for available light photography.

On the remote bird colony of Funk Island in the Atlantic Ocean we



Photo: Peter Knamiller

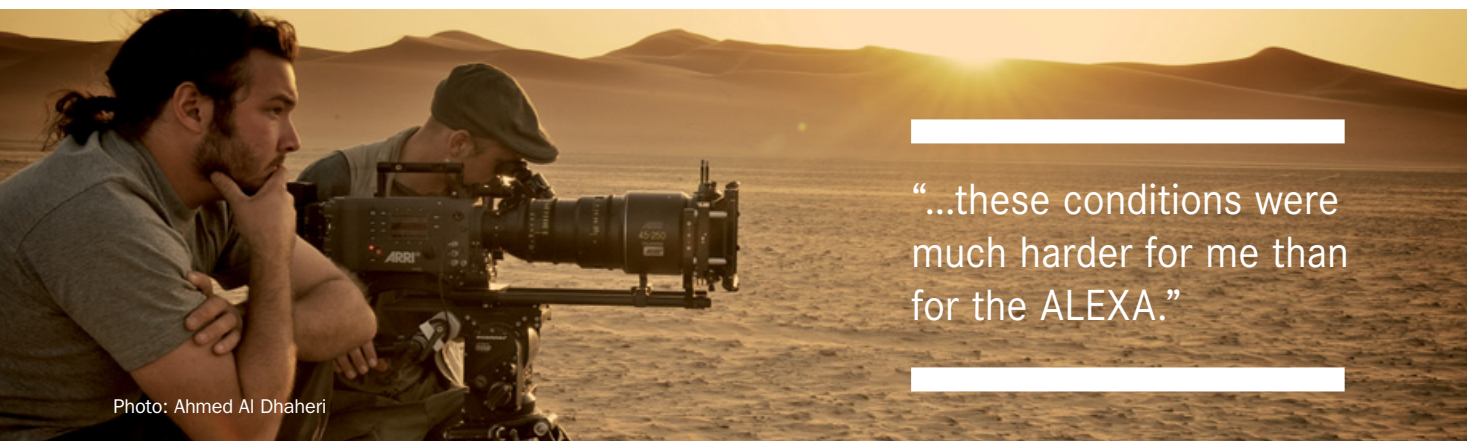


Photo: Ahmed Al Dhaheri

“...these conditions were much harder for me than for the ALEXA.”

did a jib-arm shot while it was raining, moments before having to leave due to heavy swell. There was no time to use a rain cover and the ALEXA got soaked, but it continued to function perfectly. As soon as we finished we had to jump onto the boats from a cliff and it was insanely wet. After this exciting day I still had three non-stop months in the field, and the camera didn't have any problems.

AN: Will the ALEXA 'post trigger' feature be useful in your line of work?

RS: It will be extremely useful - I would say that for wildlife cameramen the pre-record function is a vital and state-of-the-art feature.

Sometimes it's extremely difficult to predict when wild animals will show up or demonstrate behavior. A pre-record function certainly helps avoid losing decisive moments.

AN: What is your perspective on the changes taking place in the natural history industry?

RS: With big 16:9 TV screens now commonplace, the audience's expectations have changed. I think 35 mm, with its shallow depth of field, brings higher production value and is the next logical step on the way to a more cinematic TV experience. For me as a cameraman, the ALEXA captures the magic that I haven't seen in wildlife films since the

days of 16 mm. Now we can create a new aesthetic in wildlife documentaries rather than just imitating and copying. It's a really exciting time!

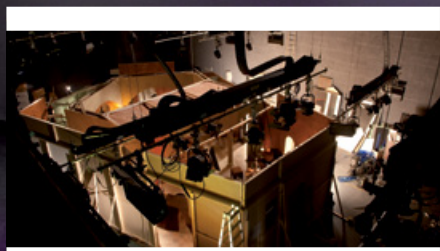


Visit Rolf Steinmann's website:
www.rolfsteinmann.de



EDUCATION AT THE **highest** LEVEL

Latest ARRI LED lights for Munich Film School



The Academy of Television and Film (HFF) in Munich has relocated to a new, state-of-the-art €100 million building in the center of the city, equipped with the latest ARRI lighting and camera technology. Designed by Cologne-based architect Peter Boehm, the new facility is constructed in concrete and glass, and houses teaching resources that include auditoriums and professional studios.

In order to educate its students in current technologies and practices, the Academy has built two film studios and two television studios, which have been equipped with up-to-the-minute ARRI lighting products. In fact, the HFF studios are among the first in the world to be fitted out with ARRI L-Series LED fixtures, reflecting the Academy's position as one of Europe's leading film schools.

Combining the efficiency of LED-based lighting with the versatility of traditional tungsten Fresnels, the L-7 lights from ARRI represent a milestone in the integration of LED technology into the film and television lighting industries. The 36 L-7 fixtures installed by the Academy will facilitate huge energy savings, while giving students the best possible tools with which to learn their craft.

The studios are also equipped with ARRI 1K and 2K tungsten fixtures, ARRI daylight fixtures ranging from 575-watt up to 4K, suspension and lighting control systems, and LED backlights. All of this equipment was supplied by ARRI Lighting Solutions, which was responsible for planning and installing the lighting setup in each of the four studios. In addition to these state-of-the-art lighting installations the HFF has purchased three ARRI ALEXA cameras.

ARRI lights were also evident at the high-profile opening gala of the new building. As well as L-7 fixtures, ARRI Event lights were

used to illuminate the proceedings, alongside the hugely powerful and Academy Award-winning 18K ARRIMAX. For a second event, celebrating the opening of the now fully equipped studios, the foyer and hallways were temporarily equipped with further lighting equipment from ARRI Rental to create a party atmosphere.

The Academy is delighted with the cutting-edge ARRI equipment now residing in its state-of-the-art new building. Peter Slansky, Professor of Technology at the HFF, comments, "With our partners from the lighting industry we are able to offer our students a working environment that you simply won't find at another German university. With this optimum of professional technology we can offer an education at the highest level."

ALEXA A SMASH HIT



Photo: Patrick Harbron/NBC

NBC's new hit musical series *Smash* looks at the mounting of a Broadway show about Marilyn Monroe from the perspectives of the creators, actors and producers. Shot by David Mullen, ASC (Shelly Johnson, ASC, had cinematography duties for the pilot), *Smash* mixes moments of straightforward drama with all-out Broadway-style musical numbers. Shot with ARRI ALEXA cameras on stages and at locations throughout New York, the show is executive produced by Steven Spielberg and packed full of stars, including Katharine McPhee, Debra Messing and Anjelica Huston. ARRI News caught up with Mullen to talk about his use of ALEXA on the show.

ARRI News: Were you involved in choosing ALEXA for *Smash*?

David Mullen: Shelly Johnson shot the pilot with the ALEXA so it was already decided, but that would have been what I proposed anyway - I like the camera. The sensor is very good and the ergonomics of the body helps us keep moving; the ALEXA can go very quickly from handheld mode to Steadicam mode to studio mode.

AN: The camera has a number of recording options. Which configuration do you use?

DM: We record to the internal SxS PRO cards, using Apple ProRes 4444. We also use the ARRI Look Creator software, which allows us to build a look into the Rec 709 output to the monitors without having to carry LUT boxes and all that entails. I've also created a conversion LUT at Technicolor in New York for dailies that matches the look we've created for the cameras.

“I know I'll have enough light to shoot with the ALEXA.”



David Mullen, ASC

AN: How different is shooting a musical from the work you've done before in films and TV?

DM: Each musical number demands its own lighting and photographic style; I'll change filters and colors based on what it needs. The style of the camera coverage is based on what type of musical number it is. I'm helped enormously because my

A-camera/Steadicam operator, Jeff Muhlstock, has a background in shooting live musical events and he's very experienced at it. We see a couple of rehearsals and he memorizes all the choreography, so he can move in there with the Steadicam and he's in the right spot at the right moment.

AN: What's it like lighting for all the musical routines?

DM: There are different situations depending on the scope of the number. For the big stage numbers they bring in lighting designer Donald Holder, who does *Spiderman* and other big Broadway shows. He has the tools to build elaborate light shows that then can be synched using the SMPTE time code to the playback audio. Then for the smaller numbers my gaffer, Bill Almeida, and I work out lighting cues that can be done with our dimmer boards.

AN: Is there enough light from Holder's stage show fixtures for you to get a good exposure?

DM: Oh yes - if anything some of the high-intensity LED units he uses give off more light than I want. I'm generally shooting

at EI 800 and I usually don't want to close down beyond a T4, which sometimes means I'll use ND filters. I also shoot a lot of the dance numbers with a 90-degree shutter and that costs me some light, but I still have plenty of light to work with and plenty of depth of field.

AN: At the other extreme, do you use ALEXA's EI 800 base sensitivity to work in low light situations?

DM: Yes. It's very useful for location work because we move around to real bars and restaurants a lot and I often don't get to scout these places, as we're shooting all the time. But in most cases I know I'll have enough light to shoot with the ALEXA, using just a minimal amount of lighting to augment the actors' faces. I won't have to light a whole restaurant from front to back; we might add some small table lamps or some Linestra tubes behind bottles at the bar to bring up the level, but I try to use as much of the natural ambience as I can.



Photo: Will Hart/NBC

AR - NEW

PRO CAMERA ACCESSORIES

*Independent accessories
for any professional camera
system on the market*



With a wide range of modular matte boxes, follow focus units and support systems, ARRI is able to offer complete shooting kits for almost all types of digital cameras, from small, handheld units and HD-capable DSLRs, to broadcast HD and high-end digital cameras.

In a rapidly evolving marketplace, ARRI can quickly create adapters for the latest cameras to come out - such as the Canon EOS C300, Red Epic/Scarlet, Nikon D800 and Nikon D4 - and allow users to equip them with dependable ARRI functionality.

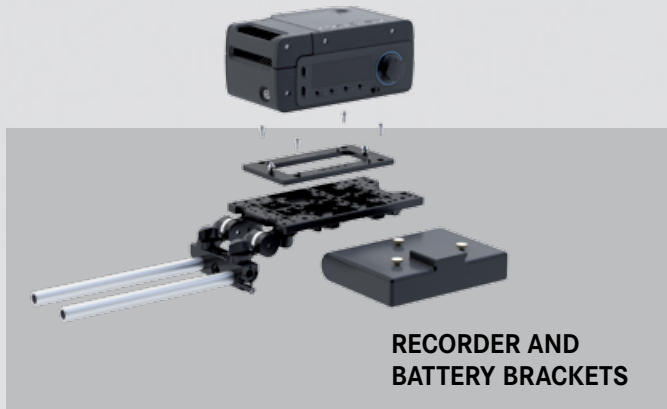


ARRI launches a modular handgrip system that can be precisely adjusted on all axes and attached to any standard 3/8-16 mounting point on base plates, cages and cameras, or directly to lightweight and studio rods by means of new bridge support accessories. The handgrip can also function as a handle and is ideal for shoulder setups, with new rosette adapters making it cross-compatible with existing rosette systems.



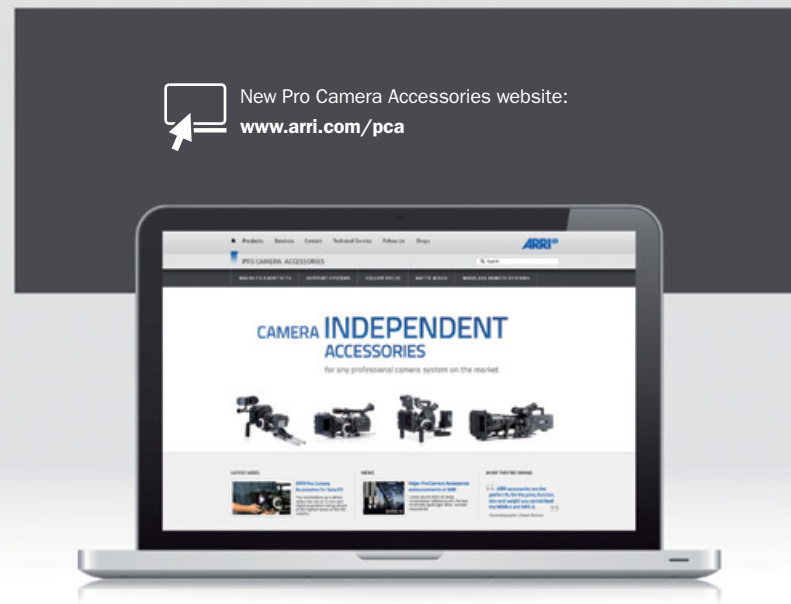
The MBP-3 offers direct compatibility to the Nikon D4 and can be used with the Nikon D800 through a dedicated adapter plate; it will also be adaptable to upcoming DSLRs such as the Canon 5D Mark III. The MBP-3 accepts 15 mm lightweight rods and switches to studio setups via the classic ARRI BP8/9 bridge plate.

A strong, lightweight and ergonomic cage support system can be attached to the MBP-3 (and other base plates) to provide mounting points for arms and accessories, lightweight rod support, top-handle capability and cable protection. ARRI cages are available for the Nikon D4 and D800, with a version for the Canon C300 adapter plate coming soon.



RECORDER AND BATTERY BRACKETS

ARRI's new recorder bracket allows external digital recorders and their batteries to be mounted onto lightweight support and studio rods. The mounting plate is threaded to receive most recorders, as well as Gold Mount or V-Lock battery plates; it can be bolted to the UMB-1 Universal Mounting Bracket or the new UBS-1 and LBS-1 Bridge Supports. The recorder/battery assembly can be angled with the RBH-1, a Rosette-Based Hinge that provides 180° tilt capability and can be doubled to accommodate the heaviest recorders, such as the Codex Onboard.



New Pro Camera Accessories website:
www.arri.com/pca



Full list of latest Pro Camera Accessories:
www.arri.com/goto/1204/pca

SHAWN BANNON



Shawn is an LA-based director, cinematographer and producer, who has been using ARRI products since shooting 16 mm at Cal Arts film school. He now works with a DSLR and is the proud owner of ARRI's MMB-2 mini matte box and MFF-2 mini follow focus.

"I want top quality gear that I can count on and use on every scale of production, from feature films to fashion videos. I want lightweight and affordable kit that I can easily use when I shoot all by myself, but also on a full-scale production. ARRI accessories are the perfect fit; for the price, function, size and weight you cannot beat the MMB-2 and MFF-2."

ADI GEISEGGER



Adi is a filmmaker and owner of the Austrian production company Parafoto. He recently used a selection of Pro Camera Accessories with Nikon's D4 camera on a two-week shoot that involved filming from an airborne tandem paraglider.

"The camera really felt like a single unit when connected to the MMB-2 matte box. The top flags and filter trays held securely in place when flying, while the hood provided useful protection from stray light for contrast control. The lightweight rods slide fully under the body and are adjusted by means of a single locking lever, saving time and avoiding complications."

NINO LEITNER, AAC



Nino is a filmmaker, DP and film producer based in Vienna, Austria. He focuses mainly on commercial work and documentaries, but recently shot a short film on which he combined the ARRI MFF-2 with Canon's new EOS C300 camera.

"The new ARRI MFF-2 mini follow focus is exceptional for use with stills lenses because it offers two hard stops, so you can simply define your limits and off you go. There is no difference between cinema and photo lenses any more when you use this follow focus."

2012

A YEAR AT THE MOVIES WITH ALEXA

Having already conquered the world of television, ALEXA is now also the digital camera system of choice for motion pictures of all scales and types, all over the globe. Here are just a few of the high-end ALEXA movies yet to come out this year, listed by their slated US theatrical release date.

SKYFALL
Photo courtesy of
Columbia pictures

APRIL 27:



THE FIVE-YEAR ENGAGEMENT
ARRIRAW

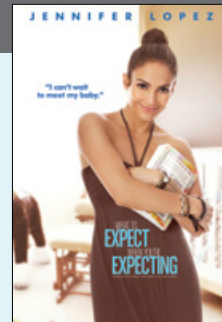
Dir. Nicholas Stoller
DP Javier Aguirresarobe, AEC

MAY

MAY 4:

THE AVENGERS
ARRIRAW

Dir. Joss Whedon
DP Seamus McGarvey, BSC, ASC



MAY 18:

WHAT TO EXPECT WHEN YOU'RE EXPECTING
ARRIRAW

Dir. Kirk Jones
DP Xavier Pérez Grobet, AMC, ASC

APRIL

MAY 11:

THE DICTATOR
ARRIRAW

Dir. Larry Charles
DP Lawrence Sher



JUNE

JUNE 15:

ROCK OF AGES
ARRIRAW

Dir. Adam Shankman
DP Bojan Bazelli
Starring Tom Cruise

JUNE 22:

ABRAHAM LINCOLN: VAMPIRE HUNTER
ARRIRAW

Dir. Timur Bekmambetov
DP Caleb Deschanel, ASC



JUNE 22:



SEEKING A FRIEND FOR THE END OF THE WORLD
ARRIRAW

Dir. Lorene Scafaria
DP Tim Orr

ROCK OF AGES

Photo courtesy of
Warner Bros. Pictures

JULY

JULY 27:



NEIGHBORHOOD WATCH
ARRIRAW

Dir. Akiva Schaffer
DP Barry Peterson

AUGUST

AUGUST 10:

GREAT HOPE SPRINGS
ARRIRAW

Dir. David Frankel
DP Florian Ballhaus
Starring Meryl Streep

AUGUST 17:

SPARKLE
ARRIRAW

Dir. Salim Akil
DP Anastas N. Michos

AUGUST 31:

THE WETTEST COUNTY
ARRIRAW

Dir. John Hillcoat
DP Benoit Delhomme, AFC

OCTOBER



THE GANGSTER SQUAD

Photo courtesy of
Warner Bros. Pictures

OCTOBER 12:

THE GANGSTER SQUAD
ARRIRAW

Dir. Ruben Fleischer
DP Dion Beebe, ACS, ASC
Starring Ryan Gosling & Sean Penn

OCTOBER 19:



THE BIG WEDDING
ARRIRAW

Dir. Justin Zachman
DP Jonathan Brown
Starring Robert DeNiro &
Diane Keaton

OCTOBER 26:

OF MEN AND MAVERICKS
ARRIRAW

Dir. Curtis Hanson
DP Bill Pope, ASC

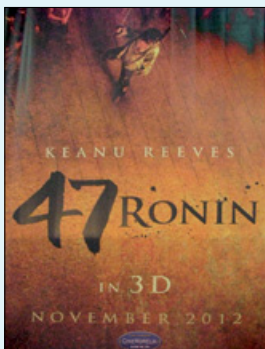
NOVEMBER

NOVEMBER 9:



ARRIRAW

Dir. Sam Mendes
DP Roger Deakins, ASC, BSC
Starring Daniel Craig



NOVEMBER 21:

47 RONIN
3D
ARRIRAW

Dir. Carl Rinsch
DP John Mathieson, BSC
Starring Keanu Reeves

NOVEMBER 21:

GRAVITY
3D
ARRIRAW

Dir. Alfonso Cuarón
DP Emmanuel Lubezki, AMC, ASC, &
Michael Seresin, BSC
Starring Sandra Bullock &
George Clooney

DECEMBER



Claudio Miranda, ASC (l)
and Ang Lee shooting LIFE OF PI

DECEMBER 21:

**CIRQUE DU SOLEIL:
WORLDS AWAY**
3D

Dir. Andrew Adamson
DP Brett Turnbull

DECEMBER 21:

LIFE OF PI
3D
ARRIRAW

Dir. Ang Lee
DP Claudio Miranda, ASC

DECEMBER 21:

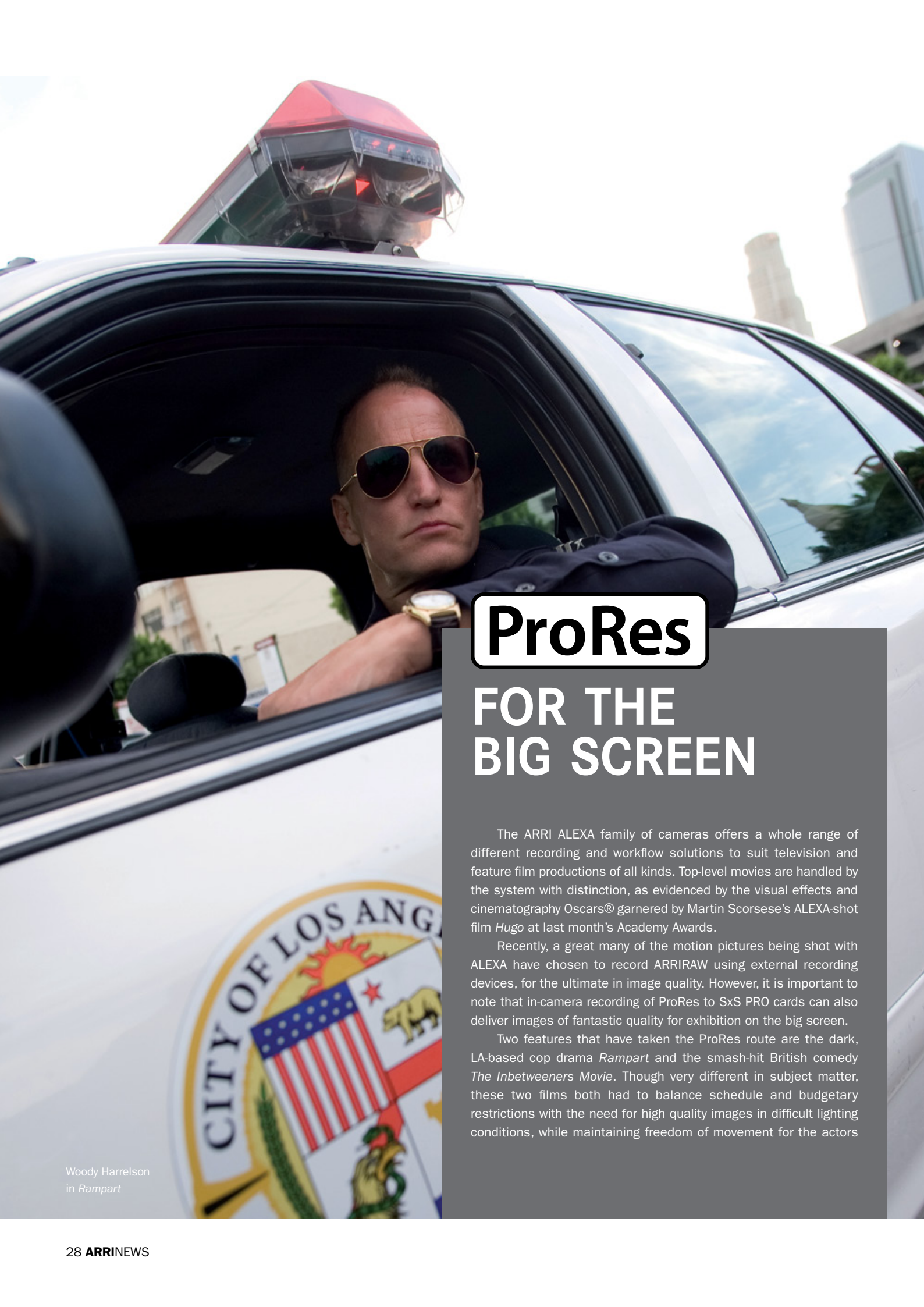
ZERO DARK THIRTY
ARRIRAW

Dir. Kathryn Bigelow
DP Greig Fraser, ACS
Starring Jessica Chastain

DECEMBER 21:

THIS IS FORTY
ARRIRAW

Dir. Judd Apatow
DP Phedon Papamichael, ASC



ProRes

FOR THE BIG SCREEN

The ARRI ALEXA family of cameras offers a whole range of different recording and workflow solutions to suit television and feature film productions of all kinds. Top-level movies are handled by the system with distinction, as evidenced by the visual effects and cinematography Oscars® garnered by Martin Scorsese's ALEXA-shot film *Hugo* at last month's Academy Awards.

Recently, a great many of the motion pictures being shot with ALEXA have chosen to record ARRIRAW using external recording devices, for the ultimate in image quality. However, it is important to note that in-camera recording of ProRes to SxS PRO cards can also deliver images of fantastic quality for exhibition on the big screen.

Two features that have taken the ProRes route are the dark, LA-based cop drama *Rampart* and the smash-hit British comedy *The Inbetweeners Movie*. Though very different in subject matter, these two films both had to balance schedule and budgetary restrictions with the need for high quality images in difficult lighting conditions, while maintaining freedom of movement for the actors

Woody Harrelson
in *Rampart*



“Six stops over and plenty of detail!”

Bobby Bukowski, cinematographer

and camera crews; a tall order, but one that was perfectly catered to by opting for the fast, simple, ProRes workflow.

Rampart was shot with spherical lenses but a 2.39:1 crop was extracted from the 16:9 ProRes 4444 Log C image for a truly cinematic aspect ratio. Cinematographer Bobby Bukowski took advantage of ALEXA's wide dynamic range when he used extremes of light and dark to reflect the troubled psyche of the film's central character, played by Woody Harrelson. Bukowski notes, "The director and I talked about how we could visually represent someone who is 'fading away.' One thing we came up with was to shoot him against windows where it's very bright outside, so the very edges of him start to deteriorate."

The lack of external recording devices or excessive cables kept the camera configuration lightweight and nimble, allowing the actors to go anywhere and do anything they felt was right for each scene. Bukowski

recalls one particular shot that made full use of ALEXA's dynamic range and maneuverability in a ProRes setup. "We were shooting inside a house and the actors decided to go outside, so the two of us operators followed," he says. "I glanced at my monitor and everything looked completely blown out, so when we cut, I went over to the DIT's station to see if any of the shot was salvageable, and it was all there! Six stops over and plenty of detail!"

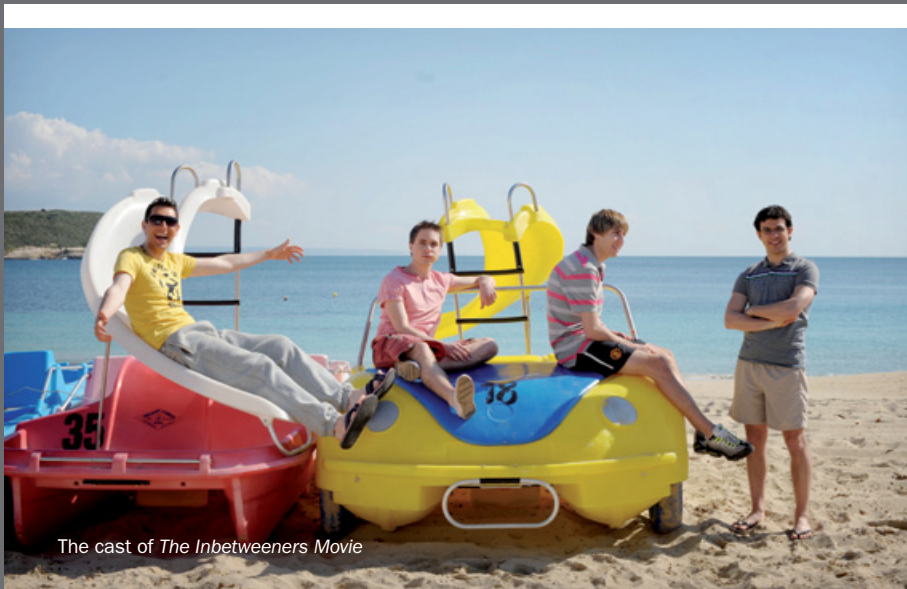
On *The Inbetweeners Movie*, the story of four hapless adolescents on holiday abroad, cinematographer Ben Wheeler knew that the location shoot in Mallorca would test whatever camera equipment he chose. "We were going to be shooting in very bright Spanish sun and moving at an incredibly fast pace," says Wheeler. "We would also be shooting a lot of handheld and I found the ALEXA to be very ergonomic and lightweight."

Again, the preference for handheld shooting made recording ProRes to in-camera

SxS PRO cards the most operator-friendly solution. Even more helpful was the fast and easy access to recorded footage. "Filmed material was synced on set and delivered to editorial, which was on location at our hotel, ready to cut," continues Wheeler. "At the end of each day we would often view an edited sequence of something we had shot that morning. The director returned at the end of the shoot with half of the film rough cut on an iPad – the turnaround was phenomenal."

All in all, Wheeler had no doubts that the advantages of ProRes 4444 Log C recording made it the right choice for *The Inbetweeners Movie*. "I think the cinematic look we were achieving convinced the producers of our choice pretty quickly," concludes the cinematographer. "The speed at which we could move didn't go unnoticed either."

With DNxHD 444, ProRes 2K and ProRes 4:3 coming soon, in-camera recording options for big-screen ALEXA productions will look even better in 2012.



The cast of *The Inbetweeners Movie*



Ben Wheeler, cinematographer



In February this year an event was held in the famous Turbine Hall of London's Tate Modern, the most visited modern art gallery in the world. Presented by the British Society of Cinematographers, the Guild of British Camera Technicians, Directors UK and the Production Guild of Great Britain, the event was a celebration of the medium of film, sponsored by ARRI and a range of other companies in the industry. Demand for tickets was overwhelming and the crowd of 800 attendees included directors, producers, cinematographers, actors, editors, and postproduction professionals.

The Turbine Hall was chosen because it was housing a work of art that not only celebrates film, but also poses questions about the future of film in an increasingly digital age. The Unilever Series: *FILM*, by artist Tacita Dean, is an 11-minute silent 35 mm film projected onto a 13-metre monolith; the piece was produced and postproduced entirely on film. Dean, who regularly works in the medium, spoke publicly at the event and implored manufacturers and filmmakers to take a stand against its demise.

As a subscriber to Dean's belief that the film/digital discussion is too polarized at present and that the co-existence of these two formats means more creative choices for creative people, ARRI is committed to supporting film-based systems for the next ten years at the very least.

ARRI'S 10-YEAR PLEDGE TO SUPPORT FILM



ARRICAM with HD-IVS

The Unilever Series: Tacita Dean *FILM* 2011
11 October 2011 - 11 March 2012, Tate Modern
Photo credit: Lucy Dawkins



Tacita Dean receiving a special award from the President of the British Society of Cinematographers, DP John de Borman, BSC



DP Wolfgang Suschitzky, BSC, talking with ARRI MD Franz Kraus
Photos courtesy of Jeremy Pelzer

What does this mean in practice? It means that ARRI will continue to support and service the ARRI film cameras, ARRISCAN scanners and ARRILASER recorders of its customers. Not only that, but the company will seek new ways to improve film systems as technology emerges; an example of this would be the HD-IVS high definition video assist units that ARRI recently developed for its existing film cameras.

Perhaps most crucially of all, ARRI's commitment to film will help preserve, restore and archive the billions of feet of exposed film materials that exist in collections all over the world. The ARRISCAN and its state-of-the-art archive accessories have an important job to do in this regard - a job that in fact has barely begun. For this reason ARRI is actively developing new technology that will help get the best out of film and preserve as much of our cinematic history as possible. The most recent of these innovations is Hoverscan, an on-the-fly stabilization tool for delicate film materials that has been developed in close collaboration with HS-Art and is being previewed at NAB 2012.

The fact that film remains the most proven and reliable long-term image storage solution is another major reason behind ARRI's ongoing support of the format. This issue of storage, brought to the industry's attention by the AMPAS 'Digital Dilemma' papers, was touched upon by Tacita Dean at the Tate Modern event when she noted, "Even some directors titanically invested in digital are still too afraid to rely 100% on digitally archiving their films." With the ARRILASER, which won its developers an Academy Award of Merit® earlier this year, ARRI allows valuable image-based assets to continue being stored on the only medium to boast longevity that can be measured in centuries.



Read a full article about the new ARRISCAN Hoverscan tool:
www.arri.com/goto/1204/ASHS

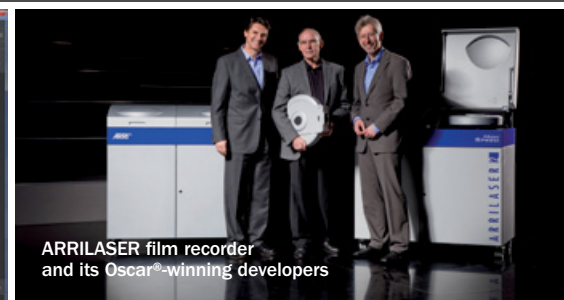
FILM CAMERAS - FILM SCANNERS - FILM RECORDERS



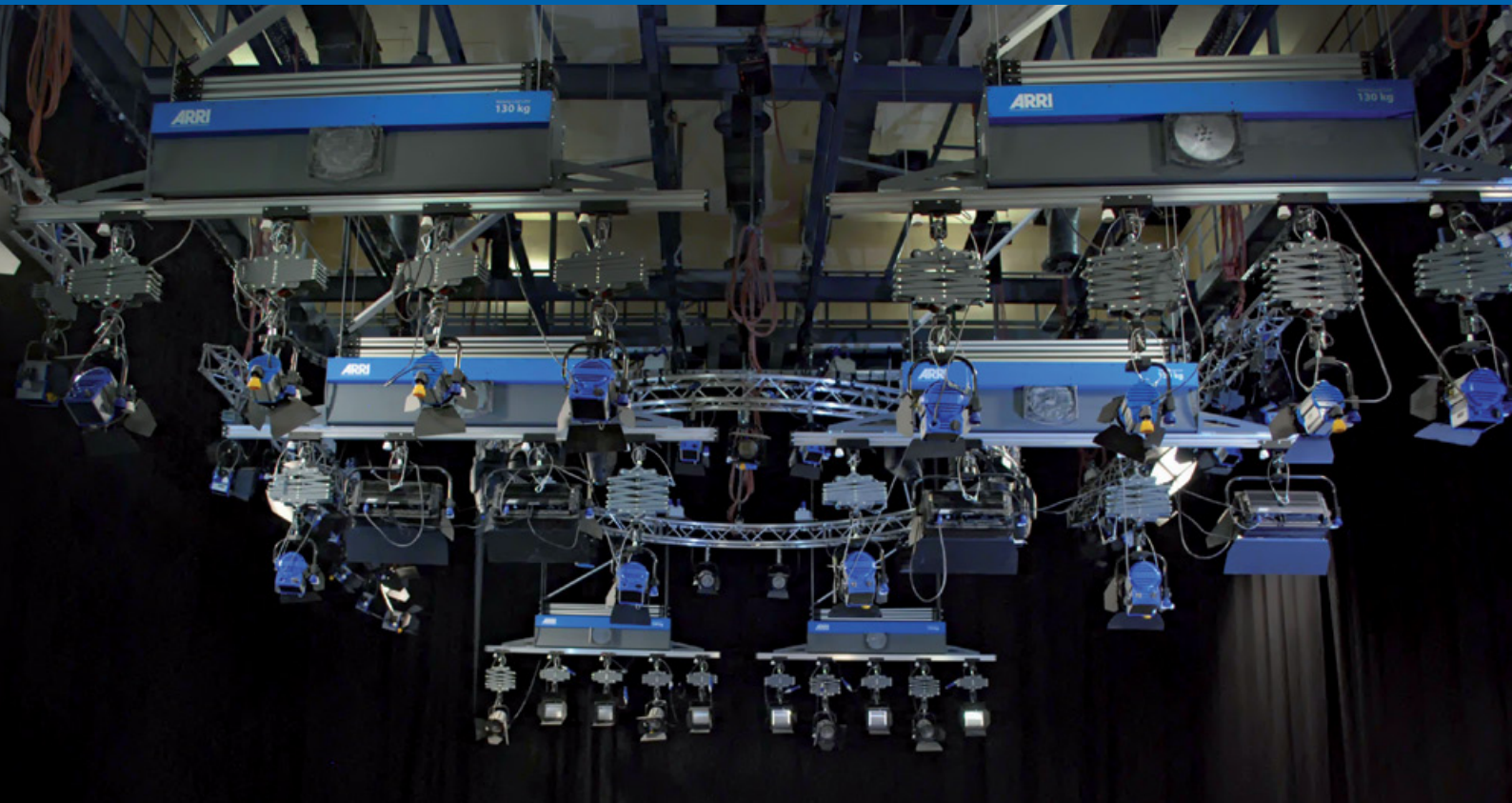
ARRISCAN
Archive Gate



ARRISCAN Hoverscan
image stabilization tool



ARRILASER film recorder
and its Oscar®-winning developers



ARRI LIGHTING SOLUTIONS

Astana Media Center in Kazakhstan equipped with cutting-edge ARRI lighting and suspension systems



Under commission from the Kazakhstan government and in partnership with the Istanbul-based system-integrator Akfa Technology, ARRI Lighting Solutions has designed and equipped the new Astana Media Center (AMC), a state-of-the-art, 75,500m² media complex in Astana, Kazakhstan's capital. As a result, the AMC has become one of the most advanced production facilities in the region, offering sophisticated studios and lighting tools, and

enabling high-quality content creation for national and syndicated distribution.

Vladislav Bogusevich, Technical Director of the AMC, notes, "Just two years ago I prepared my first technical proposal for this project; I wanted a central building where all national television and radio channels could collaborate. Actual construction began in January 2011 and I can hardly believe what ARRI has achieved in such a short time. We now have the highest standards of technology and bring EuroAsia, Kazakhstan TV, Khabar Agency and MIR - the local subsidiary of Moscow-based CIS - all under one roof."

When looking for a technology provider, the AMC knew it needed a company that could deliver to an extremely tight deadline without any compromise in quality. These priorities naturally led the Kazakh client to

ARRI's Lighting Solutions team, which had both local and global experience in such projects, including an earlier installation in Astana for Khabar-TV, one of the largest networks in the country, as well as countless successful installations throughout Europe, Russia, the Near and Middle East, Africa and Asia.

Adnan Sen, Project Manager at Akfa Technology, comments, "This was a very big project, one of the biggest in Akfa's history. To have finished everything in six months is a huge success story; we had as many as 150 engineers and workers on the project at various points. We worked with ARRI because it's a well-known company and we had used ARRI products before. We knew we could rely on ARRI quality and secondly we knew that there was probably nobody else who could work within this short time schedule."

“We knew we could rely on ARRI quality...”

Adnan Sen, project manager

The job involved equipping 14 modern 1080p HD studios, comprising four 900m² production studios; two 450m² production studios; four 350m² news studios; two 200m² daylight studios on the top floor of the media tower (the Sky Studios); and two smaller visual effects studios. ARRI also put together a special lighting package for AMC's location productions, made up of ARRI True Blue daylight, LED Caster and ARRILITE Plus fixtures.

A total of over 1,500 ARRI lights, 200 hoists, 400 pantographs and an electrical infrastructure of 2,500 dimmer channels with a total capacity of 7.5 MW now illuminate the AMC. Working closely with Akfa, ARRI Lighting Solutions also supervised the installation, which was carried out by local and Turkish engineers. The two Sky Studios were among the first studios anywhere in the world to be equipped with ARRI's

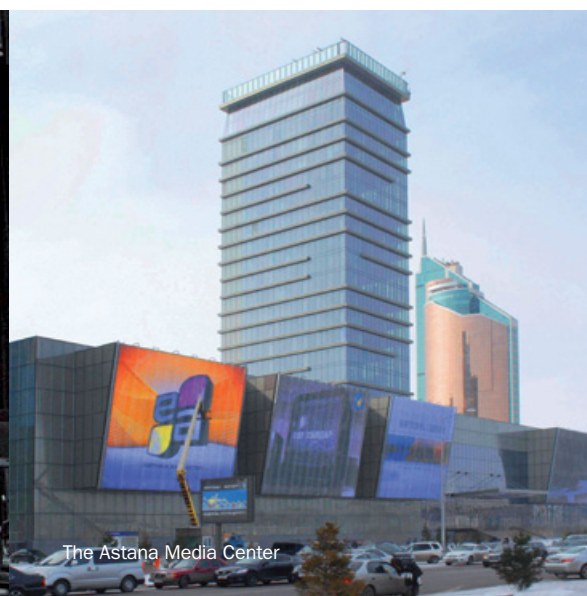
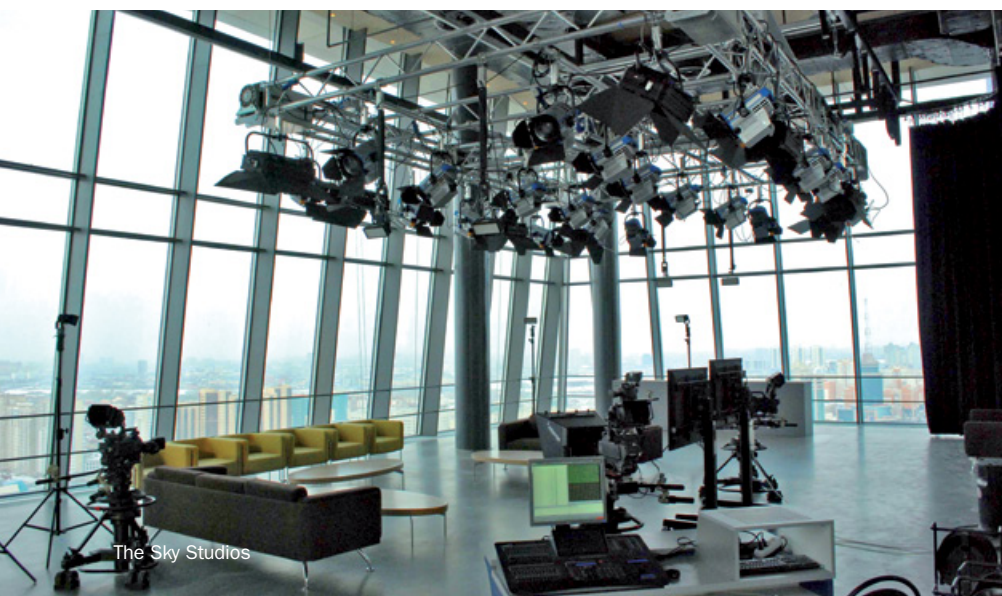


groundbreaking new L-7 LED Fresnels. These versatile, efficient lampheads will bring huge energy savings and reflect the AMC's commitment to embrace the latest technological advances.

The Sky Studios were also the first to install ARRI's new self-climbing Flydeck, an innovative suspension system for heavy loads. The Flydeck incorporates an on-board motor for vertical adjustment and tracks

horizontally along I-beams, presenting a complete, movable solution that is easy to install. The lightweight system is made entirely of aluminum and comes supplied with flip-flop cable management and numerous pre-wired connector strips. ARRI engineers had to design additional suspension solutions for the various production studios, which were equipped with special truss circles, truss bars and trackable hoists that make operating the lighting equipment as flexible as possible.

The Astana Media Center is an imposing complex with a monumental tower that stands 24 floors above the central axis of the city. Adorning the façade are giant screens that will display live broadcasts from the TV channels housed inside. In total, the complex has a capacity for 20 TV channels, 50 video edit suites, 10 radio stations and 35 audio production suites. Construction of the AMC cost some 425 million dollars, of which half was spent on state-of-the-art technology; it will go live and begin broadcasting in May 2012.



KEY CONTACTS

Europe, Middle East, Africa, India

ARRI Cine Technik
Business Unit Camera &
Digital Intermediate Systems
Stephan Schenk
+49 - (0) 89 - 38 09 - 1044
sschenk@arri.de

ARRI Cine Technik
Business Unit Lighting
ARRI Lighting Solutions
Sigrid Müller
+49 - (0) 30 - 678 233 30
smueller@arri.de

ARRI Italia
Antonio Cazzaniga
+39 - 02 - 26 22 71 75
acazzaniga@arri.it

Australia / New Zealand

ARRI Australia
Stefan Sedlmeier
+61 (2) 9855 4308
ssedlmeier@arri.com.au

www.arri.com
ARNOLD & RICHTER CINE TECHNIK
GmbH & Co. Betriebs KG
Türkenstr. 89 · 80799 Munich
Telefon +49 - (0) 89 - 3809 - 0
Fax +49 - (0) 89 - 3809 - 1244

Published by:

Arnold & Richter Cine Technik, Türkenstr. 89, 80799 Munich

Editor & Chief Copywriter:

Mark Hope-Jones

Additional contributors:

Jeanfre Fachon, Syna Greiser, Jan Heugel, Elfi Kerscher, Will Loyd-Holmes, Sibylle Maier, Catia Marini, Thorsten Meywald, Dr. Alexandra Musto, Judith Petty, Hans Pfeleiderer, Henning Rädlein, Marc Shipman-Mueller, An Tran, Philip Vischer, Norbert Wunderlich

Main cover image: Rolf Steinmann photographed by Chadden Hunter

Editorial Design & Art Direction: polta.co

The opinions expressed by individuals quoted in articles in ARRI NEWS do not necessarily represent those of ARRI or the editors of ARRI NEWS. Because of our constant endeavour to improve quality and design, modifications may be made to products from time to time. Details of availability and specifications given in this publication are subject to change without notice.

Ident Nr.: K5.44025.H



PHOTOMETRIC CALCULATOR

The ARRI Photometric Calculator is a useful tool that facilitates the calculation of photometric data for different configurations of ARRI lampheads. It can be used to quickly answer questions such as: if I have the ARRISUN 40/25 at a distance of 10 m with a 4K lamp, how bright will it be with a spot lens? When I use a 100 ASA film stock at a shutter angle of 172.8°, filming at 24 fps, what should my lens aperture be? What would the difference be if I used a narrow flood lens, or a 2.5K bulb?

Essentially, the Photometric Calculator is a database of hundreds of different lamphead / bulb / lens / focus combinations, with an integrated calculator that gives you the photometric data for the distance you desire. It is designed to be used with a smart phone (iPhone or Android) or iPad, as well as with a laptop / PC, so you can use it when you're in the field or in the office figuring out a lighting plan. With this web tool you can determine:

- The lens aperture of your camera
- Whether you'd need a different lamphead lens or perhaps a second lamphead to achieve a certain level of brightness
- Whether a lamphead is suitable for your desired application before you rent it

For each of the many configurations of ARRI lampheads you can view not only the bare photometric values, but also the light distribution as a graph. The tool also links you directly back to the product's webpage in case you need more information about the light itself.



Photometric Calculator web tool:
<http://calc.arri.de>

WEB TOOLS ON THE MOVE

ARRI web applications provide on-set information via iPads, iPhones and other mobile devices



ALEXA POCKET GUIDE

The ALEXA Pocket Guide is a web application that is accessible over the internet with any piece of hardware that has an internet browser, which means that to use it you don't have to install anything onto your mobile device.

In addition, you can 'cache' the web app to your iOS device (iPhone or iPad) to use it even when you're not online, so people shooting in a remote desert or rain forest will still be able to use the web app on their iOS device, even though they don't have internet access. Usage on other types of device requires an internet connection.



ALEXA Pocket Guide WebApp:
www.arri.com/alexa/apg



L7-C SERIES[®]

CUT. SHAPE. FOCUS. TUNE.

ARRI presents the first LED-based lights to truly match the versatility and homogeneity of conventional tungsten Fresnels: a new generation of focusable, tuneable lights that offers complete control, combining breakthrough performance with incredible efficiency.