ARRINEWS IBC ISSUE 2011

ALEXA STUDIO & ALEXA M

New creative options as the ALEXA family grows





L-SERIES Cost-saving LED Fresnel lights impress on world tour





EDITORIAL

DEAR FRIENDS AND COLLEAGUES

by the television and commercials industries, as

well as by motion picture filmmakers. In these pages

three ASC cinematographers share their experiences with ALEXA on major films: Caleb Deschanel, ASC;

Newton Thomas Sigel, ASC; and Chris Menges, BSC,

ASC, who chose to shoot ARRIRAW for unsurpassed

and showcasing prototypes of ALEXA M; these are the

next two members of the family. The M is a compact camera head designed for tight shooting situations and optimized for 3D rigs, while the Studio, with its optical viewfinder, combines cutting edge digital

image-making with traditional elements of the

film cameras that cinematographers know and trust.

At IBC this year we are launching ALEXA Studio

In the two years since we introduced ALEXA here at IBC, adoption of the system has been widespread and swift. With its simple interface and lightning fast workflows, ALEXA has been embraced in earnest

image quality.



Our lighting division will also be bringing a lot to the party, including the groundbreaking L-Series LED Fresnels and the new ARRI M40/25, featuring MAX Technology. A complete range of

new suspension solutions will be unveiled, along with the ARRISUN 18 Event, our latest addition to the Event lighting series. Meanwhile our ARRISCAN film scanner continues to reach new customers, with its archive tools now helping to preserve historic film collections all over the world. There'll be further news and surprises during the course of the show – we hope to see you at the ARRI booth.

Dr. Martin Prillmann Franz Kraus



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EXTREME LATITUDE AND INCREDIBLE CLARITY

Chris Menges, BSC, ASC, chooses ALEXA and ARRIRAW for Stephen Daldry's Extremely Loud and Incredibly Close

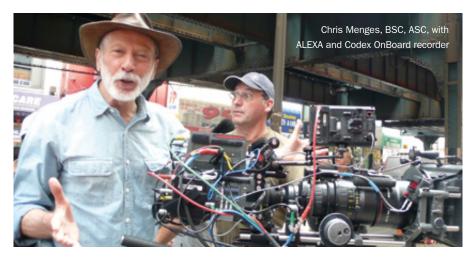
While many ALEXA productions opt for a ProRes workflow using the camera's on-board SxS PRO cards, an increasing number of major feature films are now taking advantage of ARRIRAW recording to access full sensor resolution, raw uncompressed data and the greatest flexibility in post. One of the first of these to be released will be *Extremely Loud and Incredibly Close*, the story of a nine-yearold New Yorker named Oskar Schell, who embarks on an investigative quest after his father is killed in the 9/11 attacks.

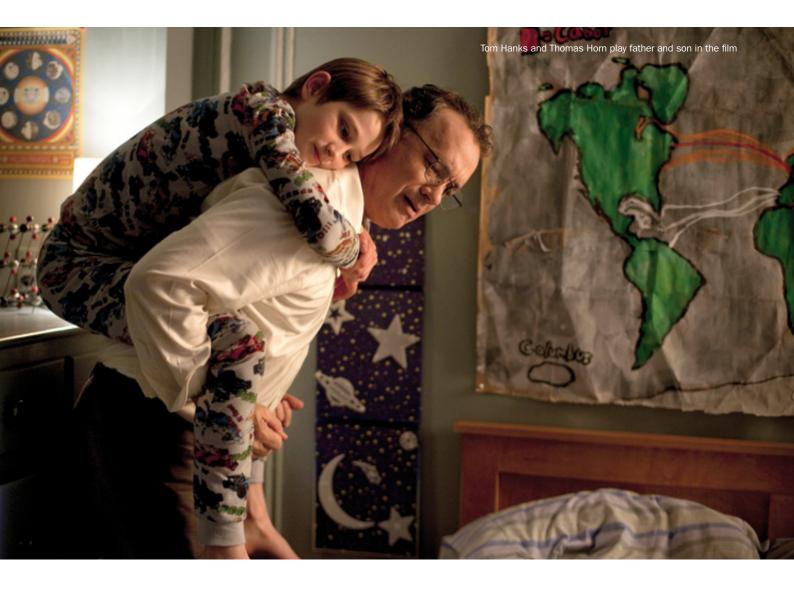
Director Stephen Daldry originally wanted a New York-based DP for the production, and recruited Harris Savides, ASC, who conducted a series of tests with ALEXA and decided to shoot ARRIRAW, using the Codex OnBoard recorder. Sadly, just a few weeks before shooting began, Savides fell ill. Daldry needed a quick replacement and turned to legendary cinematographer Chris Menges, BSC, ASC, with whom he had worked on The Reader. Menges recalls, "I arrived in New York in February 2011 to meet the crew and start working with 1st AC Gregor Tavenner, who reintroduced me to the ALEXA. I had first met the ALEXA three months before when I spent a day understudying Bob Richardson [ASC], shooting Hugo for Martin Scorsese."

Menges set about shooting his own tests and was impressed by the camera's latitude at both ends of the exposure range. "In post I found that you could recover even larger latitude, which made the ALEXA very exciting," he reports. "You could find information in areas that appeared at first glance to be completely black, while color and contrast were excellent."

Tavenner concurs that the tests "all went spectacularly well. Everyone in the workflow came together and it became obvious to me that we were only as strong as the weakest link in the chain." To keep that chain strong, he brought on board Abby Levine, a DIT based in New York. Together, they managed the workflow in a way that allowed Menges to focus on creative aspects of the shoot. "Those two guys are consummate technicians," says Menges. "They allowed me to concentrate on the composition and the light, which is what I'm normally thinking about on a film set."

According to Tavenner, the system performed so well that, "By mid-way through the show, a lot of us could have forgotten that we were shooting digital because you work





with ALEXA like it's a film camera. From Levine's perspective, "It was a pretty seamless experience in terms of the integration of a traditional camera department with a digital workflow and DIT support. In fact, as the comfort level with Chris developed, I would say that it was a model demonstration of the benefits of digital production using an appropriately staffed camera department."

Just as he would on a film set, Menges operated the A-camera himself. "Cinematography is about story; about the psychology of character; about catching performance and using light to breathe life into the frame," he says. "All this information lives within the etched framelines of a camera's ground glass, and that's why I operate. When the chips are down and there is panic on the set or in your mind, study your ground glass and you'll know how to construct the scene."

Understandably for a cinematographer who discovers a scene through the eyepiece, Menges lamented the lack of an optical viewfinder and looks forward to the arrival of the ALEXA Studio. "I know that the next generation of the ALEXA will be as revolutionary



as the Éclair NPR camera was when it arrived in 1964; or crystal sync in the late 60s; or the first reliable radio mics; or the Steadicam."

Menges rated ALEXA at its base sensitivity of El 800. "As far as lighting was concerned I just worked the way I've always worked, with a meter," he says. "The exciting thing is that the camera can dig into the dark; to be able to photograph the sky at night is a beautiful thing."

Daldry wasn't particularly interested in viewing dailies, but Menges had the chance to see a few shots up on a big screen both in prep and during the shoot. "I also saw some of Bob's *Hugo* footage in their DI screening room; it looked absolutely wonderful and they weren't even shooting ARRIRAW," he says. "The real test will be in our final DI grade, but what I've seen so far has been magnificent."

Looking back, Menges enjoyed his experience on *Extremely Loud and Incredibly Close* and is pleased with the film's emotional power. "I salute the crew that Harris Savides chose," he concludes. "Gregor is an outstanding focus puller and when he had to leave the film we were fortunate to work with Andy Harris for the last six weeks. Maceo Bishop, our Steadicam and B-camera operator; key grip Tommy Prate; dolly grip Brendan Malone; gaffer Bill O'Leary and 2nd Unit DP Pat Capone were all a joy to work with. I owe them a debt of thanks."

ARRIRAW





ARRI LOOK Files

ARRI LOOK FILES AND LOOK CREATOR



As of ALEXA Software Update Packet (SUP) 4.0, ALEXA cameras can apply custom 'looks' to manipulate the image output for different applications and individual creative preferences.

ARRI Look Files are XML files that can be created with a MAC OS X application and then loaded into an ALEXA camera in order to modify the look of images coming out of that camera. They enable DPs to define various looks for a production and view images on set that are as close to their final intentions as possible. A look can be previewed on monitors or recorded into the image; either way all the associated metadata travel embedded in the media into postproduction.

Look files are different from look-up tables (LUTs), which change one color space to another, for example from Log C to video. In essence, ARRI Look Files are a purely creative tool and whether they are created by the colorist or by the DP, they encourage greater and earlier interaction between production and post.

The ARRI Look Creator is a MAC OS X application that can create look files for ALEXA through an easy-to-use interface based on film lab thinking, with printer light settings. This free-of-charge program is currently under beta testing; it can be downloaded at ARRI's website, along with a quick guide. ARRI Look Files can also be

"This is a completely new way of handling looks."

Colorist Florian "Utsi" Martin

created using Silverstack SET from Pomfort, with other developers planning to release their own applications in the near future.

Each look file is based on a Log C DPX picture grab taken from an ALEXA and imported to the camera; creating looks based on ARRIRAW will be possible in a future software upgrade.



Download the free ARRI Look Creator:

www.arri.com/downloads/alexa

ALEXA DEVELOPMENTS

120 fps high speed and new ARRI Look Files for ALEXA

120 FPS





The 120 fps feature performed flawlessly at the final Space Shuttle launch

120 FPS HIGH SPEED MODE

In response to feedback from end users and the rapid take-up of the ARRI ALEXA camera system on professional productions of all kinds, ARRI has created a High Speed mode that can record slow motion images using frame rates from 60 to 120 fps.

The 120 fps feature will become available with the upcoming release of ALEXA Software Update Packet (SUP) 5.0 and the appearance on the market of Sony's new 64 GB SxS PRO cards (SBP-64A), which offer a write speed more than two times faster than the current 32 GB cards. Like the ALEXA anamorphic de-squeeze feature, 120 fps functionality can be activated with the purchase of a license. Each license is coded to a particular camera and can be enabled by copying the license to an SD card and loading it into the camera. Licenses can also be disabled, allowing rental facilities control over which cameras are sent out with the High Speed mode.

ALEXA's High Speed mode can record slow motion images to 64 GB SxS PRO cards using all codecs up to ProRes 422 HQ. The 64 GB cards also allow ProRes 4444 filming at up to 60 fps in Regular Speed mode. High Speed mode retains ALEXA's unique high image performance including the film-like, organic look, wide exposure latitude and natural skin tones. Since High Speed mode uses the same Super 35, 16:9 sensor area as Regular Speed mode, both the cinematic depth of field and the lenses' field of view match perfectly between the two modes.

Having full quality 120 fps functionality available on ALEXA cameras will be of tremendous benefit to a range of different production types. It gives directors and cinematographers the opportunity to create slow motion images without the expense and possible delay of having to get a specialized high speed camera to the set. In simple terms this means greater creative freedom, which is the guiding principle of the ALEXA system.

A WINDOW TO HISTORY

ARRISCAN archive tools give new life to a forgotten classic

The ARRISCAN film scanner continues to be adopted by high-end DI facilities all over the world, with recent sales in China, Europe, North America, South America and India. It is increasingly being used to digitize not just new films, but also the oldest and most delicate film materials that exist. Like many other major film collections, Filmoteka Narodowa the Polish National Film Archive - has invested in ARRISCAN archive technologies to restore and preserve its historic film materials. After a rigorous testing process, the archive purchased a 4K ARRISCAN with Wet Gate, Archive Gate and Sprocketless Transport. It also opted for a 4K ARRILASER2 High Speed with ARRICUBE Creator, for recording digitally restored images back out to film.



NITROFILM



All of these tools are in use on a project called Nitrofilm, which aims to digitize more than 150 highly fragile pre-war films, beginning with 43 scheduled for the first three years. Of these, three will undergo a full 4K restoration, the first of which has recently been completed and is currently being screened across Europe. Pawel Smietanka, Head of Film Restorations at Filmoteka Narodowa, spoke to ARRI News about the restoration of *Mania: A Story of Cigarette Factory Workers*, a 1918 Germanproduced film featuring the Polish star Pola Negri.

ARRI News: Why was *Mania* selected for a full-scale restoration?

Pawel Smietanka: Mania was an international production in the sense that the director, Eugen Illés, was Hungarian, the producer, Paul Davidson, was German, and of course the lead actress was Pola Negri, who came from Poland. Aside from Pola Negri being a very important figure in Polish film history, it occurred to us that such a pan-European production suited the Nitrofilm project, which receives funding from the European Union.

AN: Where did your copy of the film come from?

PS: It was found by a Czech gentleman, who was a fan of Pola Negri and realized how important it was, so he donated it to our collection. *Mania* is one of Negri's earlier films, but she went on to become a huge international star. Our copy is probably the

most complete that exists, so we had an opportunity to create the best possible reconstruction. We hope that there will be a lot of interest in seeing such an early Pola Negri film restored to the highest achievable quality.

AN: Is that why you opted for a 4K workflow?

PS: Yes. This being our first project, we wanted to illustrate what can be done with a 4K restoration of such an old and delicate film, in order to set a benchmark for the future. Another reason we chose 4K was because we knew we would be putting Mania back onto 35 mm film with our ARRILASER once the restoration was complete. We have actually done two versions: one is for exhibition in theatres and the other is for archiving, so was recorded out to black-andwhite separation masters. While the archive copy has been kept at 16 fps, which is the frame rate at which the film was shot, the release version has been time-stretched to 24 fps by duplicating eight frames for every second of running time. This will make the action and the performances appear much more natural to modern audiences.

AN: How did you set about restoring the various color tints in the film?

PS: All we had was our nitrate print, so we found the best examples of five different colors on the print and worked from them. The intertitles are green and the other color tints are amarant, which is a shade of pinky rose; yellow-orange; greenish olive; and finally blue-



"It was the right system to use and the quality is excellent."

green. Their appearance does not seem to be motivated by each scene's time of day, like other silent films where night scenes are always tinted blue. In fact there is a scene that jumps from one color to another as it cuts between close-ups and wider shots. We're not sure of the reasoning behind it, but our general approach has been to respect the original.

AN: Have you used your ARRICUBE Creator to get these color tints right?

PS: We have, and I think we've produced some very accurate and consistent results. ARRI in Munich has supported us in refining our calibrations and getting them right.



It's a gradual process of printing, checking the color with the ARRICUBE, making slight changes, printing again and checking again. It might take four prints to get the color absolutely correct.

AN: In general, how badly degraded was your print of the film?

PS: Although our print was almost complete (we were only missing 13 intertitles, which were sourced from the Bundersarchiv in Germany), there was severe damage to it, especially at the beginning and end of each reel. There was a lot of dirt and dust, a lot of scratches, and many splices that had to be repaired.

AN: Which of your ARRISCAN archive tools were used?

PS: The first thing we did was to scan the whole film dry, through the Archive Gate. This was partly to record the state of the print for

a 'before-and-after' restoration example we plan to screen after the end credits, and partly because we couldn't be sure how the emulsion would react to the Wet Gate. After viewing the dry scan we realized how bad the damage was and decided to put the whole film through the Wet Gate. The scanning process was so delicate that in total it took three months. We didn't really need to use our Sprocketless Transport on *Mania*, though I'm sure it will be used on other Nitrofilm projects.

AN: Now that you've completed a major restoration, do you feel that the ARRI tools were the right ones to have invested in?

PS: Absolutely. It was the right system to use and the quality is excellent; the one area we want to improve is the speed of Wet Gate scanning, so we're very pleased to see the release of the Wet Gate dryer. This new tool will make Wet Gate scanning much faster, which is very important for large film archives that have a lot of historic film materials requiring attention.

AN: When and where can the restored *Mania* be seen, and what is next for Nitrofilm?

PS: Screenings are happening across Europe between September and November 2011. We start in Warsaw on September 4th and then move on to Paris, Madrid, London, Kiev and Berlin. Our next 4K restoration is *Pan Tedeusz*, based on the national epic of Poland.



Watch the *Mania* trailer: www.arri.com/goto/1109/mania

Visit the Nitrofilm website: www.nitrofilm.pl

FASTER WET SCANS



ARRI has released a secondary warm air drying system for the ARRISCAN, designed to be used alongside the 16 mm and 35 mm Wet Gates for archive and restoration workflows. It can be retrofitted to existing Wet Gates and will go out as standard with new deliveries.

The ARRISCAN was the first high resolution scanner to offer a wet gate system. It uses a significantly less toxic fluid than the industry standard Tetrachlorethylene to clean away dust and fill in scratches. Institutions that have invested in ARRISCAN Wet Gates include the British, Polish, Lithuanian, Austrian, Chinese and Brazilian national film archives.

As film emerges from the Wet Gate it passes through a gentle stream of compressed air. For delicate materials that have to be scanned slowly, this is sufficient to dry the film before it spools onto the take-up reel. However, many archives are now using the ARRISCAN Wet Gates for less vulnerable material that can be scanned more quickly. In these situations, the secondary drying system speeds up wet scanning to almost the same frame rate as dry scanning.



M40

RRI®

The new M40/25, another fixture in ARRI's award-winning, lens-less M-Series







"Ever since the ARRIMAX came out we've been waiting for a whole family of these lights."

Randy Dye, best boy

At IBC this year, ARRI unveils a new fixture from its award-winning M-Series, narrowing the gap between the 1800 W M18 and the 18 kW ARRIMAX. Sporting ARRI's unique, patented MAX Technology, the M40/25 is a lens-less system that combines the advantages of a Fresnel and a PAR fixture. The unit is open face and thus very

bright, but focusable from 18-52°, producing a crisp, clear shadow. By eliminating the need for spread lenses, the M40/25 speeds up workflows on set and reduces the risk of lost production time because of glass breakage.

The same lamphead equipped with a PAR reflector becomes the AS40/25, replacing the current ARRISUN 40/25. It is lighter than its predecessor, but has the same accessory diameter so that existing lenses, barndoors and scrims can be reused. The M40/25 and AS40/25 can be operated with 4 kW and 2.5 kW metal halide lamps.

Both fixtures implement the True Blue features ARRI customers have come to value in recent years. Two strong disc brakes keep the lamphead firmly in place even if heavy accessories are used, while the electronics housing is spaced apart from the actual lamp housing to keep temperatures down and prolong the lifetime of components. The units are ruggedized and IP23 certified to withstand rough location handling and weather.

ARRI offers a CCL ballast for use with the M40/25 and AS40/25. CCL means compensation for cable loss, which can be considerable with long head-to-ballast cables: at 100 m cable length only around 3500 W might arrive at the lamp, instead of 4000 W. The new ballast fully compensates for such power losses, ensuring a uniformly high light output regardless of cable length.





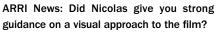
With the Academy Award-winning, lensless 18/12K ARRIMAX, ARRI unveiled a new type of reflector; the patented MAX Reflector is a multi-faceted mirror that eliminates the need for spreader lenses and combines the advantages of a PAR and a Fresnel.

It was used again for the M18, which introduced a new power class and redefined on-set workflows. The industry quickly realized that MAX Reflector fixtures make lighting easier and demand increased for the same technology to be applied to traditional power classes, leading to the release of the M40/25.

MAX Technology is a banner under which to position all ARRI lights with a MAX Reflector. As well as the M-Series, the latest ARRILITE Plus lampheads feature MAX Technology, with more fixtures to come soon.



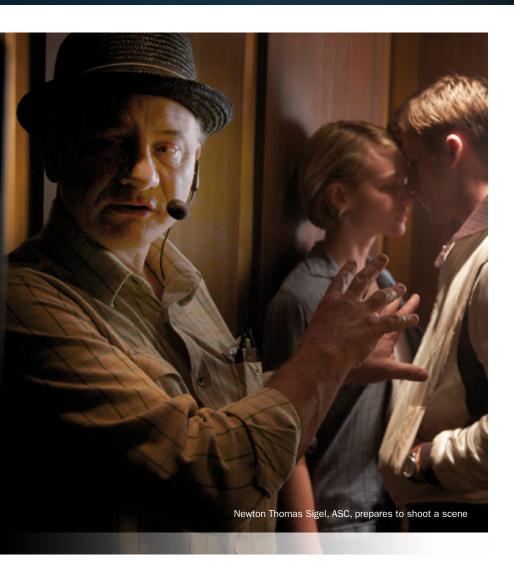
Adapted from a novel by James Sallis, Drive is the story of a Hollywood stunt driver who offers out his skills to criminal gangs, only to find himself the intended target of a contract killing after a failed heist. Directed by Nicolas Winding Refn, the film won the Best Director Award at the 2011 Cannes Film Festival and was shot with ARRI ALEXA cameras by cinematographer Newton Thomas Sigel, ASC.



Newton Thomas Sigel: I really liked the uniqueness of Nicolas' vision and his intention to approach this film a little differently from what you might expect. The main thing he told me was that he wanted to stick to a predominantly wide-angle palette and didn't want to shoot handheld; he was after a more composed and formal look. He had previously always worked in the ultra low budget digital world, with the exception of one Super 16 film, so I think he was most comfortable shooting digital. I knew I was going to be doing a lot of low light filming, driving around at night on the streets and I wanted to be able to utilize as much of the existing urban lighting as possible.

AN: Is that what led you to ALEXA?

NTS: I had seen a couple of ALEXA test shots that were done for *Men in Black 3* and I thought it looked intriguing; what seemed unique to me was the enormous dynamic range. At the time there were only a few ALEXAs around, but Denny Clairmont managed to get two cameras together for me. I went out on a limb a little bit because I had only seen some very preliminary tests, but it was great; the camera delivered all that I expected and more, with amazing dynamic range and a remarkable ability to see into shadows.



"What seemed unique to me was the enormous dynamic range."

AN: Did you do any testing yourself?

NTS: I couldn't get a camera until literally a few days before we started shooting, but I did go out one night to test with it. I drove around downtown LA with Ryan Gosling, trying out various small LED and tungsten lights rigged around the car to discover what was going to work. Some of that footage actually ended up in the movie, so we could immediately see how effective the ALEXA was.

AN: Did ALEXA handle the huge exposure ranges that can traditionally make car shots quite difficult?

NTS: Absolutely - for day scenes the camera held that exposure range between highlight and shadow more than any camera I've ever seen. You might still have to do some lighting inside the car, depending on how you're trying to shape the light, but certainly not as much as in the old days. For night scenes it was easy to balance street and city lights in the background with very small lights on the actor, so we could drive for real, without towing or using an insert car. We didn't have to put big lights in Ryan's eye line, which meant he never felt uncomfortable driving himself.

AN: Did you experiment with different sensitivity ratings?

NTS: I stuck with the 800 ASA base sensitivity, although I did a couple of shots at 1600 just to see what it would do and basically I thought they were fine. Although I say I stuck to 800, I certainly found that you can underexpose quite a bit - almost as though it was 1200 or 1600 ASA - without increasing noise or creating any defects in the image.

AN: This shoot was fairly early days for ALEXA; what recording format were you using?

NTS: We recorded HDCAM SR to SRW-1 decks. We investigated ARRIRAW and the Codex system but at that stage there was an availability issue, so we ended up going to tape. We also looked at

the SxS PRO cards and compared all three together in tests. Eventually we decided to use SxS recording as backup for some of the car stuff, but to use HDCAM SR as our principal recording medium.

AN: What was your dailies workflow?

NTS: We were very low budget and couldn't afford to have nice color corrected dailies like I'm used to, so I used a Truelight system on set for basic color correction and then the dailies were done through FotoKem. I would go in there occasionally to look at stuff on a big screen, but otherwise I would have to watch compressed DVDs on a monitor at home, which was pretty useless in terms of really gauging the quality of the material. The best way was to go to the lab either at the beginning or end of each day to see the dailies properly projected.

AN: Did you reference any other car chase movies?

NTS: We talked about the great car chases – *Bullitt, The French Connection, Ronin* and *Vanishing Point,* and examined the grammar they used. We wanted to give each of our three big chases its own unique flavor or character, so it was a question of deciding which elements to utilize for which chase.



Watch the Drive trailer: www.arri.com/goto/1109/drive



KEEPING IT IN THE ALEXA FAMILY

Debut of working ALEXA Studio and M prototypes

ARRI comes to IBC 2011 with the two new ALEXA models promised at NAB earlier this year in an advanced state of readiness, with working prototypes shared between the IBC show floor and high-profile industry leaders.

The ALEXA Studio is the flagship of the range; like the ARRICAM Studio, it is equipped with a quiet, adjustable mirror shutter and an optical viewfinder, giving operators a real-time, high contrast image with true colors. This enables them to judge focus more accurately and respond more organically to the action and performances in front of them. For maximum flexibility, operators can switch to the ALEXA EVF-1 electronic viewfinder should they so choose.

With its 4:3 Super 35 sensor, the Studio is the ideal partner for anamorphic lenses, which create a unique look that has been appreciated by directors and cinematographers for over half a century. The Studio comes equipped with anamorphic de-squeeze and 120 fps high speed licenses, and can be ordered from the first day of IBC, with deliveries beginning in December this year.







The ALEXA M is a flexible solution consisting of a separate camera head and body; it is tailored for action and aerial photography, tight corner shots and 3D productions. Based on cutting edge ARRI technologies, the M model features the same

technologies, the M model features the same sensor, image processing, build quality, efficient workflows and exceptional image quality that have made ALEXA such a worldwide success.

The head and body of the M are connected with a fiber optic cable, which in a hybrid form can also be used for powering the head. Weighing less than 3 kg, the compact front end offers multiple mounting points and versatile maneuverability. Meanwhile the body provides various recording options, just like the standard ALEXA: images, sound and metadata can be recorded onto SxS PRO cards or external recording devices, offering many different workflows. ALEXA M has a PL mount, works perfectly with all existing 35 mm lenses and is compatible with a wide range of ARRI accessories. All of the initial prototypes of the ALEXA M are being delivered to James Cameron and Vince Pace, whose world-leading 3D company CAMERON – PACE Group (CPG) announced a partnership with ARRI at NAB 2011. CPG is currently integrating ALEXA M into its new compact 3D rig, which minimizes cabling and offers an optimized, streamlined 3D camera solution. This crucial industry collaboration will see the first ALEXA Ms used exclusively on 3D CPG productions, with the resulting feedback informing the functionality of ARRI's final ALEXA M production model, due to go on general sale in early 2012.

ALEXA M with new Alura Zooms

on CPG 3D rig

ARRISUN

EVENT

A new lighting fixture joins the ARRI Event System

The ARRI Event System comprises a series of efficient, high color-rendering daylight lampheads, as well as remote, intelligent ballasts. For more than 10 years the Event System has been used at top international auto shows, as well as for sports, fashion and red carpet events where superior light quality is required.

Following the great success of the AS18 lamphead in the film industry, a version of the same fixture has been developed to meet the requirements of event and trade show lighting: the AS18 Event. This new member of the ARRI Event family combines the AS18's integration of the latest ARRI lighting technology with specific event lighting features.

ВОСТОРГ - В КАНДОМ АВТОМОБИЛЕ БМИ



The AS18 Event is almost the same size as the ARRISUN 12 Event, but light output is increased by about 70% due to its compatibility with the new 1800 W lamp and also due to the CCL technology integrated into the EB 1200/1800 EVENT THREE ballast. It shares the same lenses and accessories as the AS12 Event, and by utilizing a special adapter it can also be powered from the EB 1200 EVENT THREE.

COMPENSATION OF CABLE LOSSES (CCL)

CCL is a feature of the EB 1200/1800 EVENT THREE; it maintains full power all the way to the 1800 W lamp even when using cables of up to 100 m, which would otherwise mean a 15% loss of output.

TRUE BLUE DISC BRAKE

The ARRI True Blue tilt lock design continues to attract praise from broadcast and film industry professionals. An innovative disc brake enables the lamphead to be completely locked off with a minimal exertion of force and holds it securely in position even with heavy accessories attached.

design by C2 Light

EB 1200/1800 EVENT THREE BALLAST

Integrated electronic detection in the EB 1200/1800 EVENT THREE enables it to be used with either the AS12 Event or AS18 Event. A new multicore cable management system and the Event 1800 Split Box allow three lampheads to be connected to the ballast pack. As with other Event lampheads, the AS18 Event is equipped with ignition time control.

FACETTED GLASS REFLECTOR

The facetted glass reflector, an essential element of ARRI's Event lampheads, produces an even spread of superior quality light with about 8% more light output than an aluminum reflector. The dichroic coating provides excellent color rendering and reduces the emission of heat from the front of the lamphead.

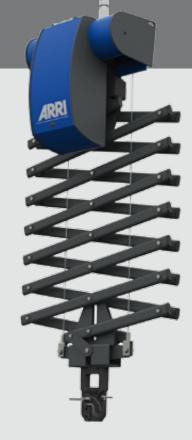
CROSS COOLING

The cross cooling system channels a stream of air through the fixture, reducing the housing temperature and allowing safe operation at any tilt angle.

SUSPENSION SOLUTIONS

ARRI's new range of lighting suspension equipment for studios and theaters

ARRI has offered lighting suspension solutions for almost 40 years, but now introduces a new and complete range for TV studios and theaters, incorporating pantographs, hoists and telescopes, as well as various rail systems, carriages and accessories. Modularity, good design and safety are all fundamental characteristics of the new rigging products. The range encompasses total digital solutions with intuitive control systems, new tools for large studios and entry-level equipment to bring innovation within the reach of small studios and tight budgets.

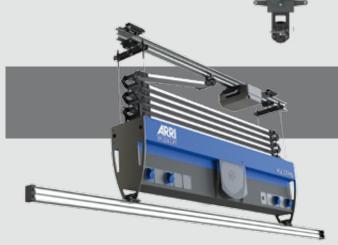




CABLE PANTOGRAPHS

ARRI's cable pantographs are available in two product families: the manual poleoperated and the motorized. The ARRI spring pantograph is one of the most popular models, with all-aluminum construction to guarantee lifelong high performance. It is now available with an external friction mechanism and can handle loads of up to 30 kg.





POWER CABLE CHANNEL TRACK

A new cable channel track is also now available, combining the Type 80 rail with a power and sockets distribution system. This allows a clean, unobtrusive installation of cables alongside the rails to power and control lights on manual or motorized pantographs, drop arms, or carriages. The new track comes in two-meter modular sections with variable socket panel modules for power and data outputs.

TELESCOPES

ARRI's new telescope uses the latest brushless technology, with position control, soft start and stop, variable speed and load sensors as standard features, and remote status report available to control all of the telescope parameters. The new design can be configured for any studio application, with special brackets or carriages available by request for under or over grid mounting to any support structure. Modular socket panels allow individual customization and a large digital display shows telescope numbers and load weight. With a maximum drop of up to 15 m, the telescope has a lifting capacity of up to 60 kg.

SELF-CLIMBING HOISTS

The self-climbing hoists from ARRI incorporate a suspension pipe or rail, the relevant safety power outlet, and a worm-geared motor for raising and lowering the unit. To reduce the costs of site installation, each hoist is supplied with a pre-mounted rail to which the wire ropes, flip-flop power cable tray and electrical terminal box are already attached a unique design that satisfies the latest trends in television production.

KILLER JOE

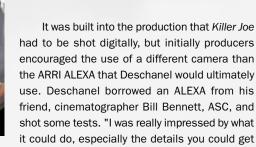
Caleb Deschanel, ASC, on shooting William Friedkin's new thriller with ALEXA



When Caleb Deschanel, ASC, got the call to work on the indie feature *Killer Joe*, he knew it would be a challenging shoot. The recipient of last year's ASC Lifetime Achievement Award and five-time Oscar nominee had never shot any feature on a schedule as tight as 26 days; it would also be his first digital movie.

However, Deschanel also knew that

veteran director William Friedkin, with whom he had collaborated on *The Hunted* (2003), was capable of working both quickly and decisively. "What really made it work," says the cinematographer, "was Billy being so well prepared. He was so opinionated, decisive, and knowledgeable about what he was doing; he didn't dwell on things. Sometimes we'd do one take and he'd want to quickly move on. The assistants would ask, 'Aren't we going to do another one?' and he'd just say, 'We got it. It's great! Why do we need to do it again?' That was an interesting way for me to work and the actors really benefited from the energy his approach brought to the set."



in low light situations," he says. "I showed Billy the tests and he was blown away."

Deschanel is quick to point out that while the ALEXA delivered what he was hoping for on *Killer Joe*, he would not call its sensor a "replacement" for the motion picture film that he has used throughout an illustrious career that has so far spanned four decades. "We're at this transitional period," he says. "Regrettably, film will disappear, but at a time when film stocks are the best they've ever been - the fastest; the finest grain structure; the greatest resolution. They're wonderful and there are still certain projects I would only want to shoot on film." "I showed Billy the tests and he was blown away."

There were, on the other hand, aspects of shooting digitally that he greatly enjoyed: "You can see what you've got immediately," he says. "The assistant can see if it's in focus. If you're worried about focus, you can check it then and not have to wait for dailies. With film, I think there would have been times we'd have been less sure about moving on without doing an extra take for safety."

Digital imaging technician Nate Borck had an important role to play on set and Deschanel found their working relationship to be a highly positive one. "He was very helpful," says the cinematographer. "I would go to him for the kind of things I'd normally talk to the lab about."

Deschanel reports being very happy with the image quality from the ALEXA, as well as its performance in low light and high contrast situations. He shot the whole film at the native EI 800 setting and notes, "The speed is enormous, and the latitude is really very good; I like the way it handles highlights. No, it's not as forgiving about highlights as film, but the way it goes to white is very pleasing."

While Deschanel did find a few issues to report during his relatively early experience with the camera, he acknowledges that they have now been addressed by ARRI. Killer Joe was shot before on-board, magazine-style ARRIRAW recorders were available, which left him cabled to a separate recording device. This, combined with the lack of a traditional optical viewfinder (soon to appear on the ALEXA Studio model), made him occasionally feel restricted. Overall though, he thoroughly enjoyed his time on Killer Joe, rising to the challenges involved in the very tight shooting schedule.

Friedkin often looked for ways to cover scenes with long, single takes, and Deschanel recalls one particular setup where this proved possible. "We shot in this abandoned pool hall," he says. "Billy wanted Killer Joe [Matthew McConaughey] to walk through the place and look around to be sure nobody was hiding there. I'd gone in on Saturday to watch the rehearsal and had an idea how it was

going to be staged. When we arrived Monday, we had the grips set up a dolly shot to take Matthew through the whole scene. The actors came in and we shot it very quickly, and I really like the results. We all had to go with our first instinct and when you're operating on that level all the time it makes the process really invigorating and exciting."

Killer Joe has been selected for the official competition of the 68th Venice International Film Festival. Since completing the film, Deschanel has again made use of ALEXA (this time using ARRIRAW) for a bigbudget feature, Abraham Lincoln: Vampire Hunter, due out next year.



www.arri.com/goto/1109/killerjoe





A GLASS QUARTET

New ARRI/FUJINON zooms make an Alura foursome



Following the tremendous success of the first two ARRI/FUJINON Alura Zooms, which were released alongside the initial ARRI ALEXA model, ARRI announces two new lightweight additions to the range: the ARRI/FUJINON Alura Zoom 15.5-45 / T2.8 and Alura Zoom 30-80 / T2.8.

Just as the ALEXA camera system has developed and progressed over the last two years, work has also continued on the lenses designed to function as its perfect partner. A crucial part of this work involves consulting with creative professionals and ascertaining what tools are most needed by today's filmmakers. A clear message from the market has been that, with cameras getting smaller and shooting styles becoming more action-oriented, lightweight zooms are in great demand.

The new lightweight Alura Zooms are perfect for handheld and Steadicam work, while the original Aluras, with their much wider focal ranges, are the ideal choice for tripod and dolly setups. Together, the four color-matched lenses comprise a complete and affordable solution for 35 mm format film and digital productions of any kind.

All of the Aluras exhibit high contrast and high resolution, producing sharp, punchy images with clear highlights and true, deep blacks. The special optical design ensures an evenly illuminated image on the sensor or film plane, while flares, ghosting and veiling glare



are greatly reduced by FUJINON's multi-layer EBC (Electron Beam Coating) lens coating. Breathing (an unwanted change in image size when focusing) has been minimized, as has color fringing, through the use of extraordinary dispersion glass.

Lightweight zooms are also becoming popular for 3D applications. Having a zoom instead of a prime lens on a 3D rig allows easy adjustment of focal length without timeconsuming lens changes, rig readjustments and calibration. Since 3D rigs are inherently cumbersome affairs, regular studio zooms tend to be too large and heavy, whereas the lightweight Alura Zooms are ideal. In addition, their compatibility with the ARRI Lens Data System allows vital lens information and image metadata to be recorded.



	Alura 18-80	Alura 45-250	Alura 15.5-45	Alura 30-80
Lens type	studio zoom	studio zoom	lightweight zoom	lightweight zoom
Focal range	18-80 mm	45-250 mm	15.5-45 mm	30-80 mm
Maximum aperture	T2.6	T2.6	T2.8	T2.8
Weight	4.7 kg / 10.4 lbs	7.5 kg / 16.5 lbs	2.2 kg / 4.9 lbs	2.2 kg / 4.9 lbs
Close focus	0.7 m / 2'4"	1.2 m / 3'11"	0.6 m / 2'	0.6 m / 2'
Front diameter	134 mm	134 mm	114 mm	114 mm
Lens Data System	-	-	✓	✓

ARRICCESSORIZE

New products in the ARRI Professional Camera Accessory range

The Professional Camera Accessory (PCA) range makes the legendary build quality and performance of ARRI's matte boxes, follow focus units, support systems and electronic accessories available to cameras from other manufacturers.

With the PCA range, film-style functionality is made possible for almost any type of digital camera, from small, handheld HDV units and HD-capable DSLRs to broadcast HD and high-end digital models. This aligns them with universal industry working practices and allows them to be used efficiently and effectively on professional sets everywhere.

In response to the continual release of new cameras from many different manufacturers in this segment of the market, the PCA range evolves constantly to ensure that ARRI accessories can be used with the latest and most popular models. This is reflected by the release at IBC 2011 of several new PCA developments, including Mini Base Plate adapters for the Sony NEX-FS100 and Ikonoskop A-cam dII.

Also new for IBC is the ARRI Mini Follow Focus MFF-2. This compact follow focus utilizes a unique and space-saving snap-on bridge mechanism that makes it suitable even for very small cameras. Despite this, it is compatible with all ARRI drive gears and can be used

with three different focus knobs. In addition, it features a plunger mechanism that engages adjustable, hard stops for lenses with infinite rotation and a reversing function for Nikon and Leica lenses.

The new ARRI Shoulder Pad SP-1 is modular and easy to use. It fits on to 15 mm lightweight support rods and incorporates a Universal Mounting Bracket UMB-1 that can be used separately as a bracket tool for on-board recorders, batteries, or other accessories. The SP-1 is aimed at filmmakers working with DSLRs and smaller cameras such as the Sony PMW-F3, Sony NEX-FS100 and Panasonic AG-AF100.

Compact, lightweight and affordable, the ARRI Mini Matte Box MMB-2 is a modular system that can be configured to facilitate anything from basic to full professional setups. Designed for the DSLR and smaller video camera market, it features integrated handgrips, giving operators maximum control and stability. From IBC, the MMB-2 is available with a double 4" x 5.65" filter stage, further expanding creative options.



1ST AC GREG LUNTZEL TRIES THE ARRI FF-5



"I have been using the FF-5 Cine Follow Focus on *Men in Black* 3 and I particularly appreciate the ability to swap between the different focus knobs [two-speed knob, hard-stop knob and standard knob] as it means I don't have to carry a second follow focus for lightweight work. I also like the open design of the modified standard focus knob because I can use my fingers as a soft stop in conjunction with the witness mark on the knob. This new system is exactly what I have been waiting for."

Men in Black 3 was shot with ARRICAM cameras equipped with HD-IVS, as well as ALEXA cameras for certain sequences.



HOW ALEXA MADE IT IN AMERICA

DP Tim lves turns to ALEXA for the second season of HBO's How to Make It in America

How to Make It in America is a comedy drama series from HBO that follows two enterprising twentysomethings as they try to make a name for themselves in New York City's competitive fashion scene. The first season was shot on 35 mm film with ARRICAM cameras supplied by ARRI CSC. For the second season, cinematographer Tim Ives returned to CSC, but this time chose to shoot with ALEXA, reflecting the rapid advance into high-end US television production that the ALEXA system has made over the last year.

MUB200

"B"

'B

26 ARRINEWS



ARRI News: What prompted the decision to go from 35 mm film to ALEXA for season two?

Tim lves: Well first of all it wasn't a budgetary decision; it was my decision, backed up by the producers after I'd done some tests and talked to them about the camera. I've been waiting for digital to get to the point where I thought it was as good as film, or offered something that rivaled film, and this system certainly does that. I love the ALEXA; it's the first digital camera I've worked with that really feels like a cinematographer's tool, in the way that film does.

AN: Was there a shift in visual approach?

TI: The pilot, which I didn't do, was shot on film and they gave it that classic New York gritty look, with the grain of a high ASA stock. I wanted to keep it gritty but I didn't want to see any grain; I wanted more of a Vogue magazine feel, which I thought would be really strong for the coolness and youthfulness of the show. I felt the ALEXA added a modern look to the film aesthetic that we all know and love, which was exciting in the way it positioned our characters in the present. I'm not dismissing the idea of using film in my future work; it's just that for this show, which is about kids in their twenties, the ALEXA had a more immediate look. But we're still holding on to a film aesthetic; that was really important to us.

AN: Did the transition to ALEXA affect your lighting style?

TI: One of the main reasons I wanted to shoot with ALEXA was the ability to use it with

minimal lighting at night. For night-time exterior work I used to have to light up entire city streets, but this year I cherry-picked it a bit more and wasn't so obsessed with that theatrical style of lighting. We found ourselves not necessarily using fewer lights, but exchanging them for lower wattage lights. With ALEXA's EI 800 sensitivity there was a bit of a learning curve in the first week or so and we quickly realized that we could hold back a little bit.

AN: Season one had a lot of handheld camerawork; did that continue into season two?

TI: Absolutely; we did a lot of handheld work and a little bit of Steadicam. Basically we did whatever felt right for each scene, but the general approach was handheld. My operators, Petr Hlinomaz and Jay Feather, were excellent and did a great job. We were recording straight to SxS cards, so we weren't tethered and the cameras were relatively lightweight; they were quite happy with it and didn't complain once. I operated the camera myself once in a while and found the ALEXA to be very ergonomic, more so than other cameras in the HD world.

AN: Were you generally shooting on location?

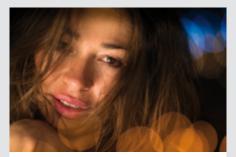
TI: Last year we had 70 locations and this year we had more than 130, so the schedule was massive. We had two stages over at Silvercup Studios for a total of eight days out of three months of shooting, but this was predominantly a location show. We had to move quickly and with the ALEXA we were able to do so; recording to SxS cards definitely helped with that. It also allowed me to pass the footage on to post closer to the way I imagined it, rather than giving them way too many options. You perhaps get a bit more detail recording to a drive rather than the cards, but the ProRes workflow and look were ideal for this production.

AN: Were others on the production convinced by your decision to go with ALEXA?

TI: Very much so. HBO were already on board with ALEXA because they shot *Game* of *Thrones* with it, but there was some convincing to do with my directors, and in particular with Julian Farino, our main director and producer. He and [executive producer] Stephen Levinson liked the tests, and then half way through the season I got notes from them congratulating me on my choice and saying how perfect it was for the show, which was really rewarding to hear.

THE PERFECT PORTRAIT LENS

Introducing the new ARRI Master Prime 135



MP 135 shot taken by Tom Faehrmann, BVK



MP 135 shot taken by Gavin Finney, BSC



MP 135 shot taken by Fred Elmes, ASC



ARRI's continuous dialogue with cinematographers, operators and directors has revealed demand for a new Master Prime with a focal length of 135 mm. This is the ideal portrait lens for many situations, fitting nicely between the Master Prime 100 and 150; it brings the Master Prime set up to an astounding 16 focal lengths.

Discussions with both cinematographers and photographers identified four crucial criteria for a perfect portrait lens: the right focal length, high image quality, shallow depth of field and the ability to get close to the subject.

A focal length of 135 mm is long enough to separate a subject from the foreground and background, but not at the expense of a pleasing, three-dimensional perspective. Like the rest of the Master Prime range, the 135 mm produces a high resolution, high contrast image with very low flares and veiling glare: a clean starting point from which the cinematographer can shape and sculpt the image through lighting, filters or digital manipulations during the DI grade. It also shares the same lens markings and 114 mm front diameter as other Master Primes, allowing the use of the same matte box and making lens switching fast and easy.

The widest aperture of T1.3 and the Master Primes' unique ability to maintain their high image quality even wide open allow for an extremely shallow depth of field when desired. Depth of field is a creative tool that can be used to control the level of separation between the subject and its surroundings. Last but not least, to facilitate close-ups, the Master Prime 135 has been designed with a close focus distance of 0.95 m (37"), retaining its high image quality even at this close range.



ALEXA AND ALURA

DP John Sharaf on his ideal camera and lens combination

From documentaries, commercials and news segments to television shows and features, cinematographer John Sharaf has done his share of shooting in different styles on every kind of format. When the ARRI ALEXA came on the market, Sharaf was one of the first to recognize its unique features and to purchase the camera along with the two ARRI/FUJINON Alura Zooms that were released at the same time.

"I have to say the first thing that attracted me to the Aluras was the cost, and then the ARRI and Fujinon pedigree further hypnotized me," admits Sharaf. "When I looked at the 18-80 mm Alura on the projector at ARRI I was totally convinced! It was tack sharp and with great contrast. When I shot portraits the next day I was in heaven with the quality of the picture and the way it handled skin tones. At first I wondered if I would really need the 45-250 mm as well, but the more I used the short zoom, the more I wanted the long one. Knowing that it would match in f-stop, sharpness and contrast, as well as matte box size, made it a no-brainer to add the 45-250 as soon as I was able to do so, and I'm glad I did every time I use them."

One of the first productions on which Sharaf put his investments to work was *The Making of Michael,* a documentary about the posthumous Michael Jackson album. Many of the interviews in the documentary took place in cramped recording spaces. "The mixing studio was particularly tiny," says the cinematographer. "Even though I had probably less than three feet to the background objects in the interview, I was able to turn them into a colorful abstract image that made our interview subject stand out. The 18-80 mm allows me to use the same lens all day when working like this inside. I'm definitely favoring the long end for interviews, in order to 'fuzzup' the background and draw attention to our subject, and the wide end when covering the actualities."

Since the Michael Jackson project, Sharaf has had several months to put the ALEXA/Alura combination through its paces on other productions. "I have to say 'hats-off' to ARRI and Fujinon for creating the perfect lens set for the ALEXA camera," concludes the cinematographer. "Together it's a complete system that satisfies creative, technical and economic considerations."

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L-SERIES SET FOR LIFT-OFF

ARRI's eagerly anticipated L-Series LED Fresnels win international acclaim on tour

IBC marks the arrival of the ARRI L-Series, a new generation of LED-based lights that was launched earlier in the year and that integrates LED technology into existing industry lighting practices.

The initial three L-7 fixtures share the same basic housing and 7" Fresnel lens; the L7-D outputs a daylight-equivalent 5600 K, and the L7-T a tungsten-equivalent 3200 K, while the top-of-the-range L7-C offers total color control. Since their launch, the L-Series fixtures have been touring the world with ARRI product managers, exciting positive feedback wherever they go.

The tour has been truly international in scope, taking in the Americas, Asia, Africa and Europe. Television and film studios, rental facilities and production companies have been visited on the tour, with enthusiastic responses from all quarters. The combination of ARRI build quality and a versatile, high quality light field with the huge cost savings that can be made through a like-for-like replacement of traditional tungsten Fresnels with L-Series units has aroused fevered interest. In Berlin the L-Series was presented at the Showtech exhibition to great acclaim. One major local company to have invested in L-Series fixtures is fernsehwerft, whose Head of Studio Production, Mike Richter, notes, "The LED technology embodied in the L-Series is a future-oriented concept that moves us toward an era of more eco-friendly lighting devices."

At the Mediatech show in Johannesburg, the L-Series was displayed on the Gold Awardwinning MovieMart stand, where it generated strong interest due to the acute energy price rises currently affecting South Africa.

On the Barbizon booth at SMPTE in Sydney, General Manager Marshall Harrington commented, "One of the most impressive features is the ability to upgrade the LED module, which 'future proofs' the studio's investment."

With the tour now at an end, it is clear that the L-Series is set to have a profound impact on television and motion picture lighting all over the world. The L7-C and L7-T begin delivery in September this year, while the L7-D will be arriving with customers in the first quarter of 2012. Orders are being taken now.





FOUR YOUR CONSIDERATION

Two new lightweight zooms expand the ARRI/FUJINON Alura series

The new Alura 15.5-45/T2.8 and Alura 30-80/T2.8 zooms are compact and lightweight: perfect for handheld, Steadicam and 3D rigs. They are compatible with the ARRI Lens Data System, deliver outstanding optical performance and, like the original two Alura Zooms, match all other ARRI prime and zoom lenses.

Visit the ARRI booth at IBC: Hall 11.F21

