

ARRI®



ALEXA 35

RAISING THE BAR

# ALEXA 35

## A new era begins

ALEXA 35 is a 4K Super 35 camera that elevates digital cinematography to unprecedented heights. ARRI's first new sensor for 12 years builds on the evolution of the ALEXA family over that period, delivering 2.5 stops more dynamic range, film-like highlight handling, better low light performance, and richer colors.

The new REVEAL Color Science takes full advantage of the sensor's image quality and provides a fast, simple workflow, while ARRI Textures enhance in-camera creative control. Easy operation, robust build quality, new electronic accessories, and a complete new mechanical support system round out the ALEXA 35 platform.







“In the ALEXA 35 I have met a new friend, and she is already a valued part of my team.”

Cinematographer Christophe Graillet



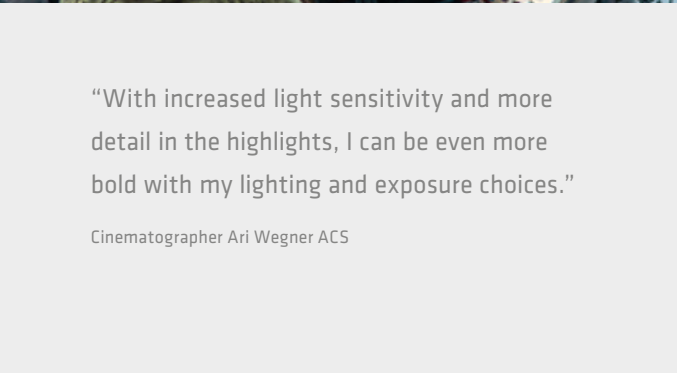
“The ALEXA 35 was absolutely rock solid. We threw it into a commercial, used it on a gimbal for the whole shoot, and it didn't miss a beat.”

Cinematographer Jason Hargreaves ACS



“It's the best digital sensor ever made for motion picture photography. It has gifted me more technical and creative freedom.”

Cinematographer James Friend ASC, BSC



“With increased light sensitivity and more detail in the highlights, I can be even more bold with my lighting and exposure choices.”

Cinematographer Ari Wegner ACS



“The sensor of the ALEXA 35 is something else, both strong and gentle in the perception of color and texture.”

Cinematographer Bárbara Alvarez



“I was so impressed by the latitude of the sensor, and I loved how it depicts colors as vividly as a stained-glass window. It is a game changer.”

Cinematographer Seamus McGarvey ASC, BSC



“The close-ups on the kids' faces were like nothing else I've seen. Even the dark sides of their faces held so much beautiful skin tone and texture.”

Director Rudi Schwab



“The richness of the images captured by this new camera immediately seized my eyes and my heart.”

Cinematographer Jin-Kyung Ha



“As a director, I feel there is now almost no setup I could imagine where I would have to compromise my approach to shooting a scene.”

Director/cinematographer Mike Valentine BSC



“The ALEXA 35 has a vivid, true-to-life color rendition and handles highlights beautifully.”

Cinematographer Neha Parti Matiyani ISC



“ALEXA 35 sets the highest standards in resolution, dynamic range, and color. It's a totally new type of camera.”

Director & DIT Yoshikatsu Date



“I think you just created an unbeatable camera. It has the perfect specs for commercials, documentaries, and features.”

Cinematographer Andreas Luksepp







## More dynamic range With filmic highlight roll-off

ALEXA 35 measures at 17 stops of dynamic range (exposure latitude), far more than any other digital cinema camera. Filmmakers gain 1.5 stops in the highlights and a stop in the shadows over previous ALEXA cameras, while retaining the naturalistic, film-like highlight roll-off. Sophisticated stray-light suppression ensures that the full character and contrast range of each lens is captured. Together, the increased dynamic range and stray light control make it easier to handle any lighting conditions on set, increase flexibility in post, and provide the best possible source for HDR (High Dynamic Range) projects.

“It was a very difficult lighting situation to put ourselves in, with bright windows in the background and lots of negative fill in the foreground. The ALEXA 35 was spectacular, it outperformed all my expectations. I could not get the camera to clip; the dynamic range is so wide and impressive. This is a completely new generation.”

Cinematographer Erik Messerschmidt ASC





## More sensitivity

Up to EI 6400, with lower noise

Impressively low noise and sensitivity settings ranging from EI 160 to EI 6400 make ALEXA 35 a “High ISO” camera. An optional Enhanced Sensitivity Mode can be applied to settings between EI 2560 and EI 6400, producing an even cleaner image in low light. This exceptional sensitivity, combined with the wider dynamic range and truer contrast, allows ALEXA 35 to capture the most delicate nuances of light and shadow in a wider range of shooting situations. Filmmakers can work with available light in real locations, safe in the knowledge that even at extreme ISO values, any noise will have a pleasingly film-like structure.



“We tried out the Enhanced Sensitivity Mode for a night exterior scene because we didn’t have much time and there were a lot of restrictions. We couldn’t use any lights; we just used the streetlights and the light from buildings. It was definitely noticeable that the Enhanced Sensitivity Mode has minimal noise, so I think it’s a real improvement.”

Cinematographer Jessie Wang







## More accurate colors

### From bold hues to subtle tones

Introduced alongside the ALEXA 35 is REVEAL Color Science, which is the collective name for a suite of image processing steps that, along with the new sensor, help the camera to record more accurate colors with subtler tonal variations. Skin tones of all types and colors are rendered in a flattering, lifelike way. Highly saturated colors such as those in neon signs or car brake lights are captured with incredible realism, as are typically challenging colors like cyan, burgundy, and pastel shades. Overall, the true-to-life color fidelity and amazing resolving power of the sensor make for beautiful, immersive images.

“The way the new sensor sees color is astonishing to me, even after using ARRI cameras for the last few years. It works so well for black skin tones. In scorching African sunshine, the highlight roll-off is really nice and you still see detail in the shadows. There is a massive improvement to image quality with the ALEXA 35, you can actually see it.”

Cinematographer Barnabas Emordi





## More creative control

### ARRI Textures – choose your digital film stock

ARRI Textures provide a new and unique way for cinematographers to exert greater creative control on set. A texture defines the amount and character of grain in an image, as well as the amount of contrast at different levels of detail, perceived by the viewer as sharpness. Previous ALEXA cameras were pre-programmed with a default texture, but with ALEXA 35 you can choose from an evolving menu of custom ARRI Textures, either to suit a specific shooting environment or to hone your look. This allows you to fundamentally alter the way the camera records images, much like selecting a film stock.



“We used one of the ARRI Textures that are available in the ALEXA 35. It added some grain, and a lot of us cinematographers do have a love for grain. There was a certain feel to it, a different structure to just pushing the ASA. For our story the combination of anamorphic lenses, this ARRI Texture, and the use of available light, was really nice.”

Cinematographer Nikolaus Summerer





## Super 35 sensor

### Wide lens choice, 19 recording formats

With its Super 35 4:3 native 4K sensor, ALEXA 35 can be used with the vast global inventory of existing lenses—modern and vintage, anamorphic and spherical, Super 35 and large format. Filmmakers wanting to shoot with ARRI cameras while having to fulfill 4K mandates now have an immeasurably broader lens choice.

A total of 19 recording formats, incorporating efficient in-camera downsampling and anamorphic de-squeezing, allow productions to optimize data rate, resolution, and other parameters, based on their individual needs.

Virtual studios will benefit from the camera's ability to record lens metadata in all common standards and output real-time streaming metadata to ARRI's Live Link Metadata Plug-in for Unreal Engine.



#### 4.6K 3:2 Open Gate

4608 x 3164



#### 4.6K 4608 x 3164

ARRIRAW **75 fps**  
Apple ProRes **60 fps**

#### 4.6K 16:9

4608 x 2592



#### 4.6K 4608 x 2592

ARRIRAW **75 fps**  
4K 4096 x 2304  
Apple ProRes **75 fps**

#### 4K 16:9

4096 x 2304



#### 4K 4096 x 2304

ARRIRAW **120 fps**  
Apple ProRes **100 fps**

#### UHD 3840 x 2160

Apple ProRes **120 fps**

#### 2K 2048 x 1152

Apple ProRes **120 fps**

#### HD 1920 x 1080

Apple ProRes **120 fps**

#### 4K 2:1

4096 x 2048



#### 4K 4096 x 2048

ARRIRAW **120 fps**  
Apple ProRes **120 fps**

#### 3.3K 6:5

3328 x 2790



#### 3.3K 3328 x 2790

ARRIRAW **100 fps**  
Apple ProRes **75 fps**

#### 4K 2.39: Ana 2x

4096 x 1716  
Apple ProRes **90 fps**

#### 3K 1:1

3072 x 3072



#### 3K 3072 x 3072

ARRIRAW **100 fps**  
Apple ProRes **90 fps**

#### 3.8K 2:1 Ana 2x

3840 x 1920  
Apple ProRes **100 fps**

#### 2.7K 8:9

2743 x 3086

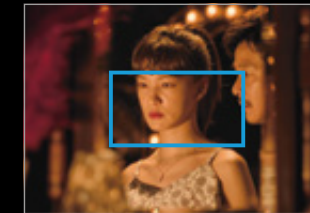


#### UHD 16:9 Ana 2x

3840 x 2160  
Apple ProRes **100 fps**

#### 2K 16:9 S16

2048 x 1152



#### 2K 2048 x 1152

Apple ProRes **120 fps**

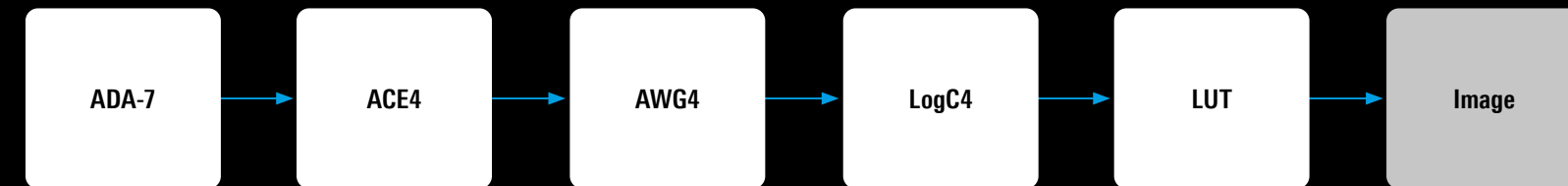




## Faster workflow, higher image quality

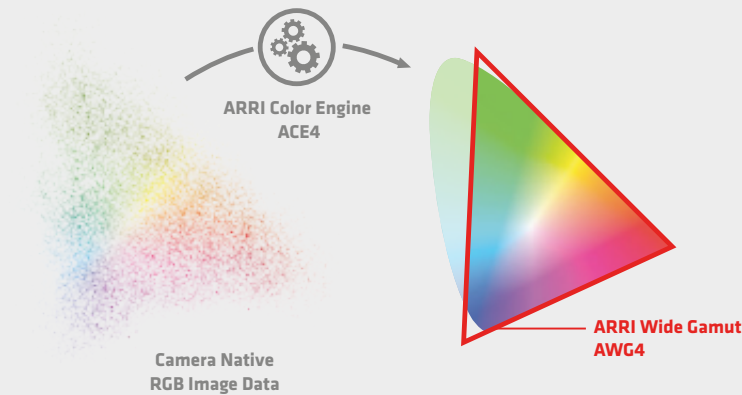
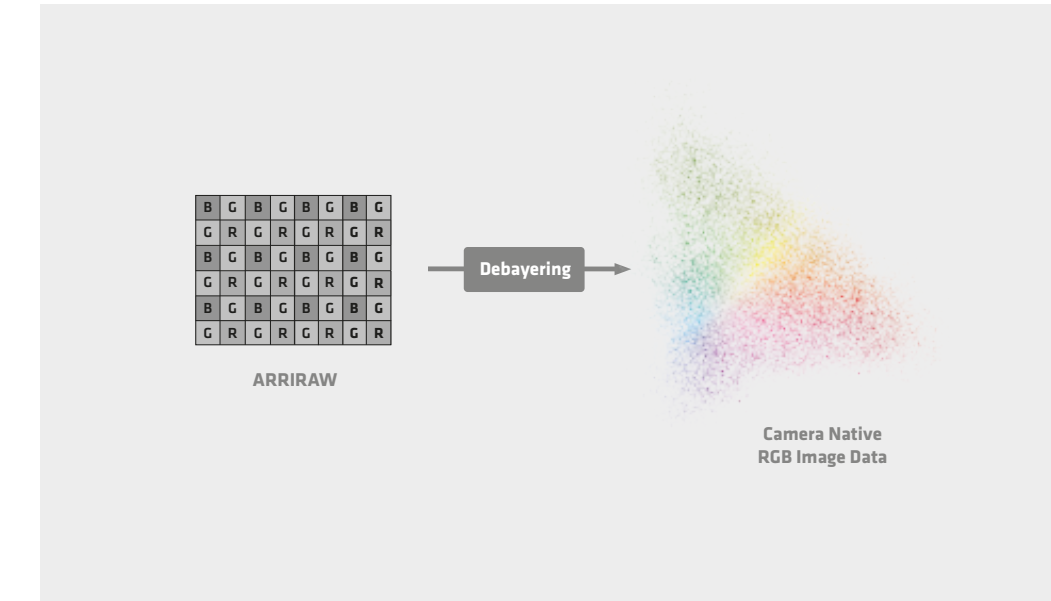
ARRI's discussions with filmmakers and careful review of the image pipeline have led to significant image quality enhancements and a faster, easier workflow. REVEAL Color Science is a suite of new image processing steps used by ALEXA 35 internally and also available through leading third-party postproduction tools for ARRIRAW processing. It includes an improved debayering algorithm for cleaner compositing, a new color engine for more accurate color reproduction, a new wide gamut native color space for faster grading, new LogC4 encoding to contain the increased dynamic range, and new LogC4 LUTs (Look Up Tables) for enriched color fidelity.

### REVEAL Color Science process



### ARRI Debayer Algorithm ADA-7

- First step in the new and improved image pipeline
- Converts ARRIRAW into camera native RGB image data
- Makes the most of the new sensor's capabilities
- Cleaner color edges for blue and greenscreens
- Easy compositing speeds up VFX work in post



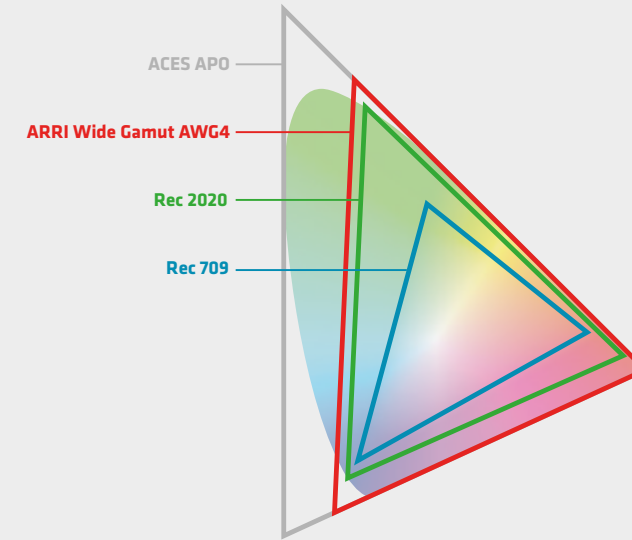
### ARRI Color Engine ACE4

- Transforms camera native RGB image data into the AWG4 color space
- Brings what the sensor sees closer to human visual perception
- More subtle and accurate color reproduction
- Pleasing and naturalistic rendition of all skin tones
- Better color tracking and differentiation at all exposures
- Much improved saturated colors (brake lights, neon signs)



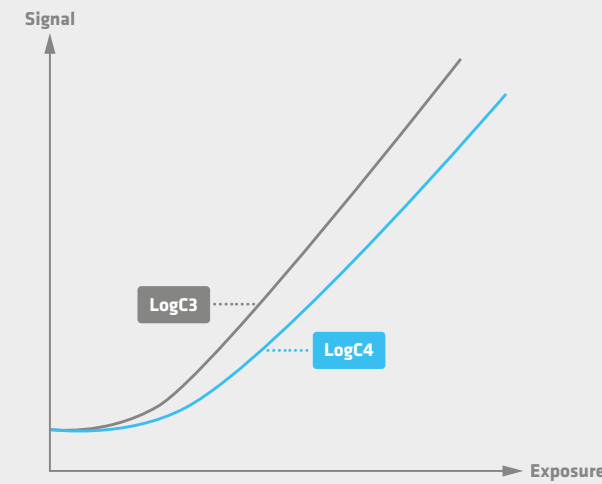
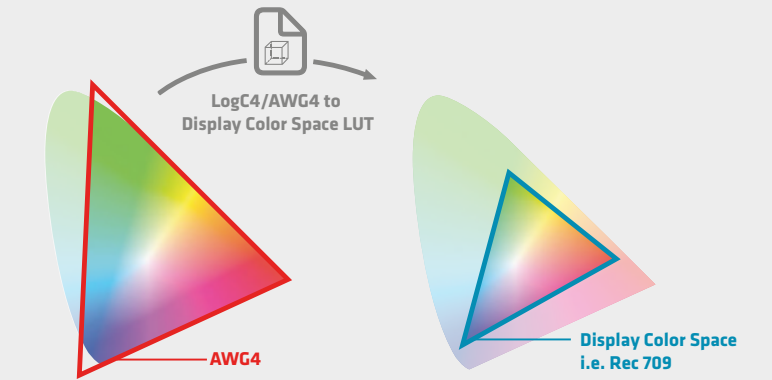
### ARRI Wide Gamut AWG4

- New camera color space for faster and easier grading
- “Goldilocks” color space: just the right size
- Larger than Rec 2020 but minimizes “virtual” colors
- More accurate color space conversions
- Fully enclosed by and compatible with ACES



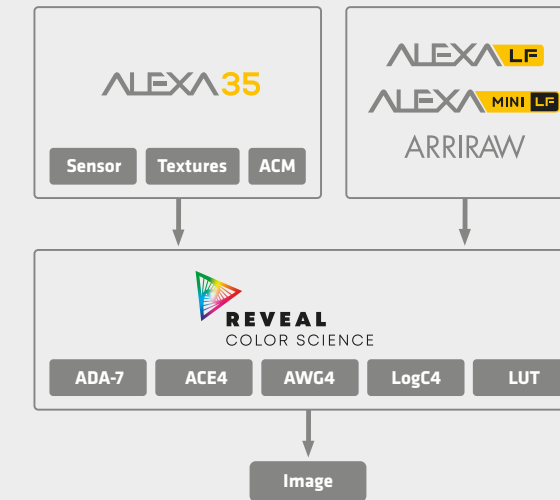
### LogC4 Look Up Tables

- Transform LogC4/AWG4 images into various display color spaces
- Allow DPs and colorists to create bespoke looks
- ARRI custom LUTs take full advantage of new sensor and LogC4/AWG4
- Improved color fidelity



### LogC4 Tonal Curve

- Encodes brightness changes
- Captures the sensor's increased exposure latitude
- Same curve for all EI (ISO) settings



### Backwards Compatible

- ALEXA 35 images can be intercut with other ALEXA or AMIRA images
- Additionally, ALEXA LF/Mini Lf ARRIRAW can use REVEAL Color Science workflow



## Fast and easy to use

### A single, rugged camera that can do it all

ALEXA 35 is the smallest fully featured ARRI production camera ever, packing the features and processing power of a larger ALEXA into a Mini-sized body. Crews will be intuitively familiar with the simple menu structure; support for 1TB and 2TB Codex Compact Drives; and MVF-2 viewfinder, now with HDR. Fast and easy operation is assured through usability improvements such as a new left-side display and additional user buttons. Temperature resistant, splash and dust-proof, and conceived with future hardware and software updates in mind, ALEXA 35 is the best A-camera, B-camera, and drone or gimbal camera on the market, all rolled into one.







## Support for any situation

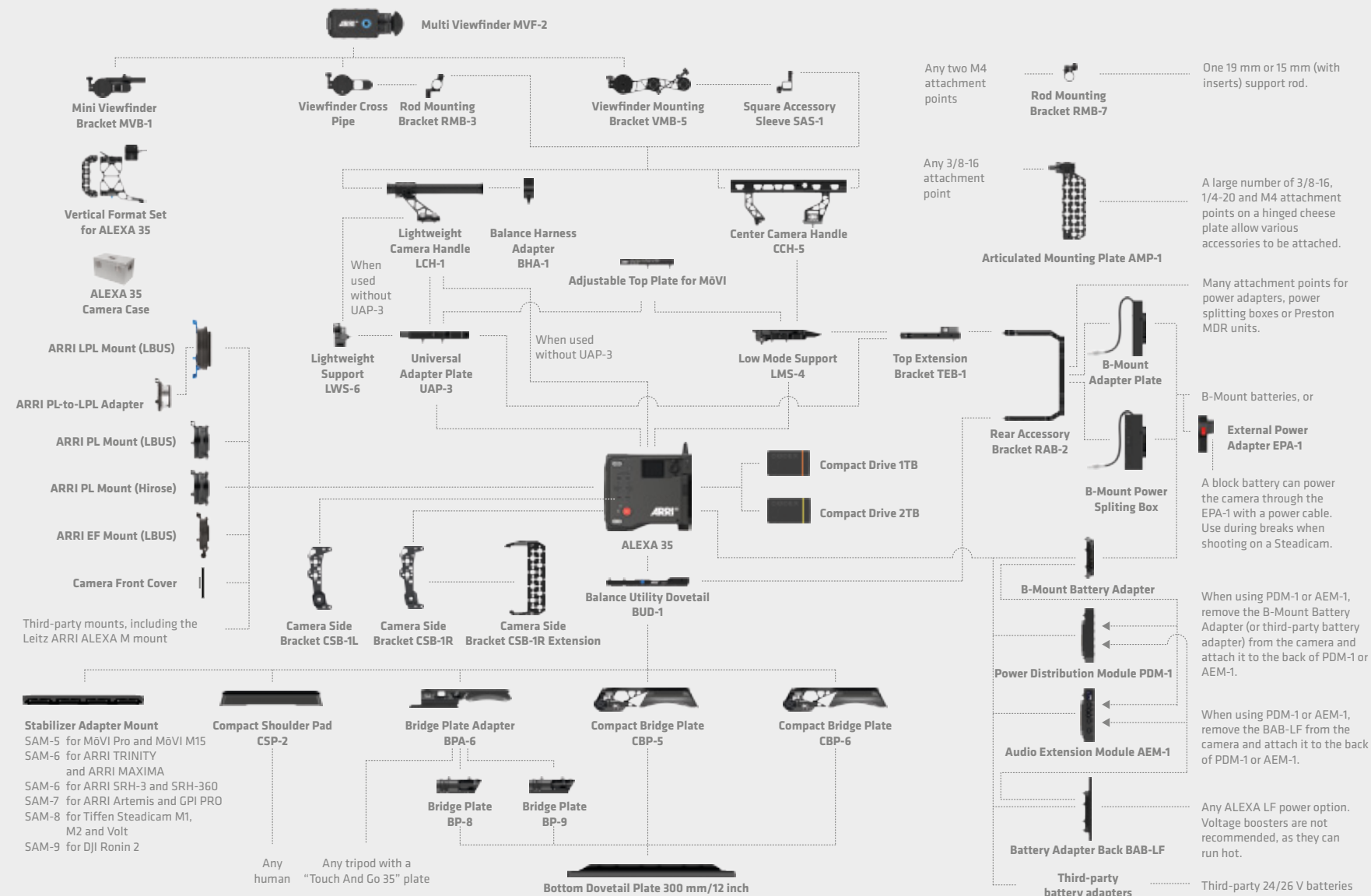
### Electronic accessories and mechanical support

ARRI has crafted a new line of bespoke ALEXA 35 accessories that expand the camera's capabilities and ensure maximum speed and versatility on set. Closely integrated electronic accessories offer additional power outputs or extended audio features. A complete new set of mechanical support items provides flexible options for any situation, scaling quickly and easily from a small and lightweight setup to a full-blown production configuration. ALEXA 35 is available in sales sets that group together components suitable for different shooting styles and production types, with further accessories and system options facilitating countless setups.





## ALEXA 35 system components overview



## Powering the future B-Mount, the new 24 V standard

ALEXA 35 utilizes the B-Mount battery interface, an open industry standard endorsed by ARRI and the wider industry. Providing high-capacity 24 V power, but also able to support 12 V, B-Mount offers more efficiency and improved data communication over previous systems. Cross-compatible with camera, lighting, and stabilizer equipment from manufacturers worldwide, it enables productions to streamline their power requirements.



- Specifications are fully documented and open to any company
- High-capacity, future-proof power for cameras and lights
- Robust construction, compact form factor, and seamless interlocking
- Suited to modern camera stabilizer systems and compliant with on-board safety standards for the lighting industry
- Bi-voltage ready, B-Mount will power future ARRI cameras and lights



## Tools and apps

### Software supporting your workflow

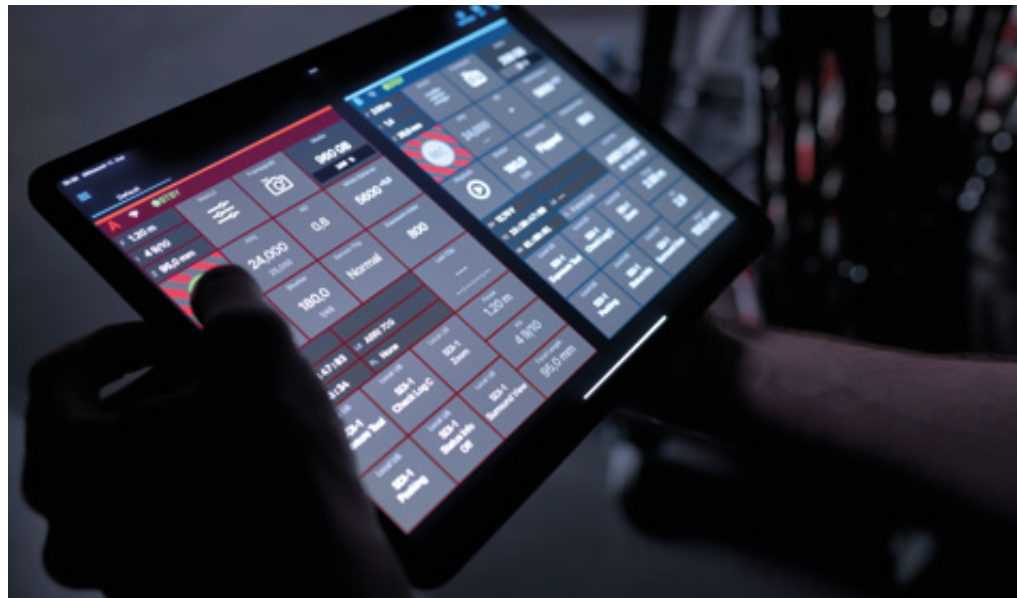
ARRI's functional and educational online resources for filmmakers draw on the company's uniquely diverse products and services, its direct contact with producers and creatives, and its extensive knowledge of postproduction.

A range of free-of-charge tools, apps, and tutorials can be found in the Learn & Help section of ARRI's website. In addition to the standalone apps showcased here, they include online tools like the ARRI Frame Line & Lens Illumination Tool, ARRI Formats and Data Rate Calculator, and ARRI Camera Simulator to help you navigate the menus of ARRI cameras such as the ALEXA 35.



#### ARRI Reference Tool

Combines the functionality of the ARRIRAW Converter, ARRI Color Tool, and ARRI Meta Extract. Supports all ALEXA 35 recording formats and allows the creation of ALF4 look files, conversion to SDR and HDR color spaces with looks applied, and export to Apple ProRes, OpenEXR, and TIFF files.



#### ARRI Camera Companion App

The Camera Companion App offers remote control of one or multiple cameras, as well as customization of the user interface. It focuses on the functions that are most frequently needed during production.

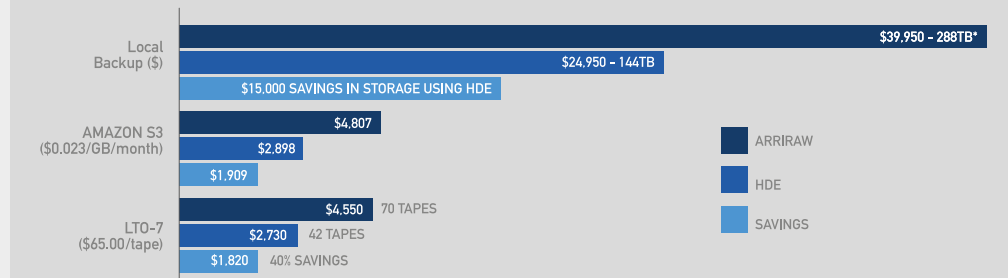


#### ARRIRAW HDE Transcoder

Codex High Density Encoding (HDE) is a lossless encoding technique that reduces ARRIRAW file sizes by around 40%, giving productions a data-efficient method of capturing the highest quality images. The ARRIRAW HDE Transcoder enables easy HDE workflows with ALEXA 35.

#### Storage cost and HDE savings

4K camera system project (10 million frames/116 hours)





## Technical Data

<b>Sensor Type</b>	Super 35 format ARRI ALEV 4 CMOS sensor with Bayer pattern color filter array				
<b>Sensor Photosites and Size</b>	4608 x 3164 Ø 33.96 mm / 1.337"				
<b>Sensor Frame Rates</b>	0.75 - 120 fps				
<b>Project Frame Rates</b>	23.976, 24, 25, 29.97, 30, 47.952, 48, 50, 59.94, 60 fps				
<b>Weight</b>	2.9 kg / 6.4 lbs (camera body with three antennas and LPL Mount (LBUS))				
<b>Photosite Pitch</b>	6.075 µm				
<b>Sensor Modes</b>	<b>Active Image Area (Dimensions)</b>	<b>Image Circle Ø</b>	<b>Active Image Area (Photosites)</b>	<b>Recording Resolution (Pixel)</b>	<b>Max fps* (1TB / 2TB Drive)</b>
4.6K 3:2 Open Gate	28.00 x 19.20 mm 1.102 x 0.756"	33.96 mm 1.337"	4608 x 3164	4.6K (4608 x 3164)	35 / 75 fps (ARRIRAW) 60 / 60 fps (Apple ProRes)
4.6K 16:9	28.00 x 15.70 mm 1.102 x 0.618"	32.10 mm 1.264"	4608 x 2592	4.6K (4608 x 2592) 4K (4096 x 2304)	45 / 75 fps (ARRIRAW) 75 / 75 fps (Apple ProRes)
4K 16:9	24.90 x 14.00 mm 0.980 x 0.551"	28.57 mm 1.125"	4096 x 2304	4K (4096 x 2304)	55 / 120 fps (ARRIRAW) 100 / 100 fps (Apple ProRes)
				UHD (3840 x 2160)	120 / 120 fps (Apple ProRes)
				2K (2048 x 1152)	120 / 120 fps (Apple ProRes)
				HD (1920 x 1080)	120 / 120 fps (Apple ProRes)
4K 2:1	24.90 x 12.40 mm 0.980 x 0.490"	27.82 mm 1.095"	4096 x 2048	4K (4096 x 2048)	65 / 120 fps (ARRIRAW) 120 / 120 fps (Apple ProRes)
3.3K 6:5	20.22 x 16.95 mm 0.796 x 0.693"	26.38 mm 1.039"	3328 x 2790	3.3K (3328 x 2790) 4K 2.39:1 Ana. 2x (4096 x 1716)	55 / 100 fps (ARRIRAW) 75 / 75 fps (Apple ProRes) 90 / 90 fps (Apple ProRes)
3K 1:1	18.70 x 18.70 mm 0.737 x 0.737"	26.45 mm 1.041"	3072 x 3072	3K (3072 x 3072) 3.8K 2:1 Ana. 2x (3840 x 1920)	55 / 100 fps (ARRIRAW) 90 / 90 fps (Apple ProRes) 100 / 100 fps (Apple ProRes)
2.7K 8:9	16.70 x 18.70 mm 0.656 x 0.738"	25.09 mm 0.988"	2743 x 3086	UHD 16:9 Ana. 2x (3840 x 2160)	100 / 100 fps (Apple ProRes)
2K 16:9 516	12.40 x 7.00 mm 0.490 x 0.276"	14.24 mm 0.561"	2048 x 1152	2K (2048 x 1152)	120 / 120 fps (Apple ProRes)
<b>Exposure Index</b>	Adjustable from EI 160 - 6400 in 1/3 stops				
<b>Dynamic Range</b>	17 stops (2.5 more than with previous ALEXA cameras)				
<b>Shutter</b>	Electronic shutter, 5.0"- 356" or 1s - 1/8000s				
<b>Recording Codecs</b>	MXF/ARRIRAW MXF/Apple ProRes 4444 XQ MXF/Apple ProRes 4444 MXF/Apple ProRes 422 HQ				
<b>Recording Media</b>	Codex Compact Drive 1TB (CA08-1024), Codex Compact Drive 2TB (CB16-2048)				
<b>Recording Modes</b>	Standard real-time recording, Pre-recording				
<b>Viewfinder Type</b>	Multi Viewfinder MVF-2 with OLED viewfinder display (1920 x 1080) and 4" LCD flip-out monitor (800 x 400)				
<b>Viewfinder Diopter</b>	Adjustable from -5 to +5 diopters				
<b>Color Output</b>	Rec 709, Rec 2020, Rec 2100 PQ, Rec 2100 HLG, LogC4				
<b>Look Control</b>	ARRI Textures Custom color look (through ARRI Look File ALF4 or ARRI Look Library)				
<b>White Balance</b>	Manual and auto white balance, adjustable from 2000K to 11000K Color correction adjustable from -16 to +16 CC (1 CC corresponds to 035 Kodak CC values or 1/8 Rosco values)				

\*Some Apple ProRes 4444 XQ formats have slightly lower maximum fps

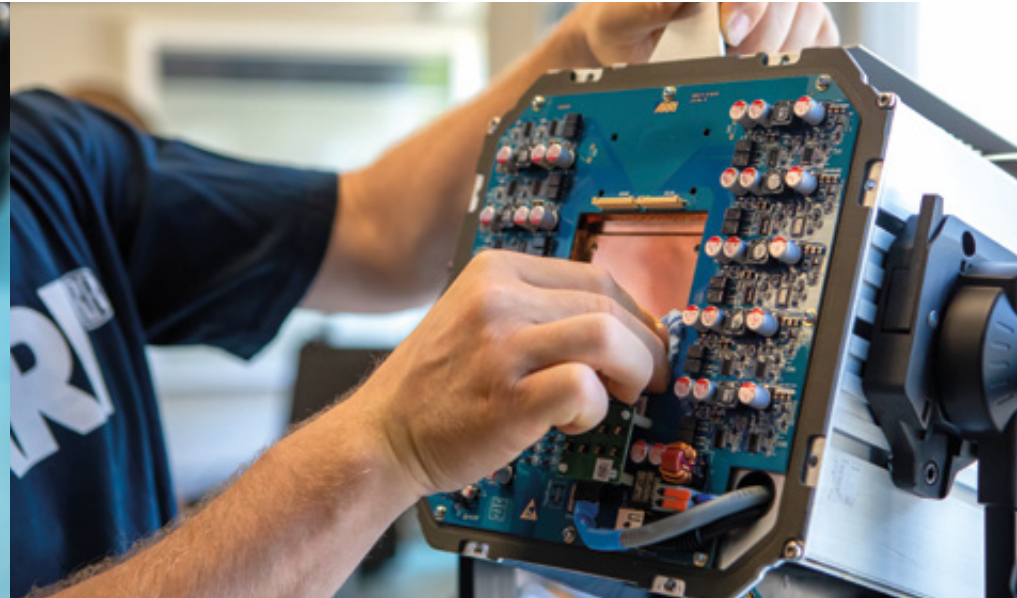
<b>Filters</b>	Four position built-in motorized ND filter: Clear, 0.6, 1.2, 1.8 Fixed optical low pass, UV, IR filter
<b>Lens Squeeze Factors</b>	1.00, 1.25, 1.30, 1.33, 1.50, 1.65, 1.80, 1.85, 2.00
<b>Exposure and Focus Tools</b>	False Color, Zoom, Aperture and Color Peaking
<b>Audio Recording</b>	4 channel linear PCM (24 bit, 48 kHz)
<b>Image Outputs</b>	2x VF custom CoaXPress connectors for MVF-2 viewfinder 2x 12G SDI (BNC) 422 1.5G HD, 422 3G HD, 444 3G HD, 422 6G UHD, 422 12G UHD, 444 12G UHD
<b>Interfaces</b>	1x LBUS (LEMO 4-pin) for lens motors, daisy chainable 1x SERIAL (LEMO 4-pin) for distance measuring accessories 1x TC (LEMO 5-pin) for timecode In/Out 1x ETH (LEMO 10-pin) for remote control and service 1x SYNC IN (BNC) for Genlock synchronization 1x RET IN (BNC, switchable on SDI 2) 1x USB-C for user setups, look files etc 1x Rear Interface (18-pin Pogo) 1x Top Interface (5-pin Pogo)
<b>Audio Inputs</b>	1x AUDIO (LEMO 6-pin) for balanced stereo line in (line input max. level +24 dBu correlating to 0 dBFS) Two built-in microphones for scratch audio With Audio Extension Module AEM-1: additional 3x TA3 connectors (MIC/Line, +48 V, AES)
<b>Audio Outputs</b>	1x 3.5 mm stereo headphone connector (on MVF-2) 2x SDI (embedded audio)
<b>Power Inputs</b>	1x PWR (LEMO 8-pin) 1x BAT (camera rear interface / battery adapter) 20.5 - 33.6 V DC
<b>Power Outputs</b>	1x RS (Fischer 3-pin) for 24 V accessory power out, start/stop and shutter pulse 1x 12 V (LEMO 2-pin) for 12 V accessory power out 1x LBUS (LEMO 4-pin) for lens motors & 24 V power out, daisy-chainable 1x AUDIO (LEMO 6-pin) for balanced stereo line in and 12 V accessory power out 1x ETH (LEMO 10-pin) for remote control, service and 24 V accessory power out With Power Distribution Module PDM-1: additionally 4x 24 V, 2x 12 V and 1x D-Tap
<b>Remote Control Options</b>	Camera Companion App ARRI Electronic Control System (ECS) Web-based remote control from phones, tablets and laptops via WiFi & Ethernet Camera Access Protocol (CAP) via WiFi & Ethernet GPIO interface for integration with custom control interface
<b>Wireless Interfaces</b>	Built-in WiFi module (IEEE 802.11b/g) Built-in White Radio for ARRI ECS lens and camera remote control
<b>Lens Mounts &amp; Adapters</b>	ARRI LPL Mount (LBUS) ARRI PL-to-LPL Adapter ARRI PL Mount (LBUS) ARRI PL Mount (Hirose) ARRI EF Mount (LBUS) Leitz M Mount for ARRI
<b>Flange Focal Depth</b>	LPL Mount: 44 mm , PL mount: 52 mm
<b>Power Consumption</b>	~ 90 W (Camera body and MVF-2)
<b>Measurements (HxWxL)</b>	147 x 152.5 x 203 mm / 5.8 x 6.0 x 8.0" (camera body with LPL lens mount)
<b>Operating Temperature</b>	-20° C to +45° C / -4° F to +113° F @ 0-95% RH
<b>Storage Temperature</b>	-30° C to +70° C / -22° F to +158° F
<b>IP Rating</b>	IP 51
<b>Sound Level</b>	< 20 dB(A) at 30 fps, recording 4K 16:9 - UHD, Apple ProRes 4444 XQ, ≤ +30° ambient temperature
<b>Licenses</b>	ALEXA 35 Cine License





## ARRI Service Worldwide technical support

ARRI prides itself on the build quality and reliability of its equipment, but also on the aftersales care provided to customers. Like all ARRI products, the ALEXA 35 is supported by a network of highly trained service technicians committed to the highest levels of customer care. With 15 advanced service centers worldwide, the global service workflow is equipped to handle issues between offices and across different time zones to maximize responsiveness and reduce delays. Through the ARRI website, customers can find their nearest service location and make a service request, as well as search for spare parts and book advanced service training. Registering your ALEXA 35 is the surest way of staying informed about the latest updates and announcements.



## ARRI Academy Strengthen your knowledge

Offering a wide range of multi-day training courses, individual sessions, and educational events in different countries and languages worldwide, ARRI Academy is the best route for users of all abilities to gain hands-on knowledge of ARRI products and workflows, and build their on-set confidence. Online courses are also available for remote learning.

This ARRI ALEXA 35 brochure (80.0045041) is published by Arnold & Richter Cine Technik, July 2022 © ARRI/2022  
Technical data and offerings are subject to change without notice. All rights reserved. Without any warranty.  
Not binding 07/2022. ARRI, ALEXA and REVEAL are registered Trademarks of Arnold & Richter Cine Technik GmbH & Co. Betriebs KG.  
Screenshots, behind-the-scenes images, and testimonials all sourced from the global ALEXA 35 field test and "Encounters" short film series.





[www.arri.com/alex35](http://www.arri.com/alex35)