AMIRA SUP 3.0

Software Update Package SUP 3.0.26

R E L E A S E   N O T E S

Date: November 18, 2015

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A. Introduction

We are proud to announce the release of the AMIRA Software Update Package 3.0 for all ARRI AMIRA cameras. This version expands functions for all AMIRA models as indicated below.

SUP 3.0 includes major improvements for AMIRA and we strongly recommend installing this update at your earliest convenience on all AMIRA camera models.

This document also contains known issues for this software version. Please take your time to go through this information.

For more information, please visit **www.arri.com/amira**.

New features & changes overview

- **MPEG-2 recording, 50 MBit/s 422p@HL in MXF container:** XDCAM HD workflow compatible

- **ProRes 4444 XQ recording (**AMIRA Premium only)

- **AMIRA multi-cam interface: camera** remote control with Sony RCPs

- **Intervalometer:** for sophisticated time lapse and stop motion recordings

- **WiFi remote control support:** full camera control with WiFi devices

- **Viewfinder status overlay enhancements, other usability improvements and improved support for accessories**

- **Support for Lexar CFast 2.0 cards: 128GB and 256GB 3600x cards are supported**

Product Line up

The economical - **AMIRA**
Features include: HD 1080i and 1080p; 0.75-100 fps; ProRes 422 and 422 (LT) recording in Rec 709; three looks; adjustable in-camera image parameters for knee, gamma and saturation; peaking for focus control; zebra, false color and waveform for exposure control.

The all-rounder - **AMIRA ADVANCED**
Features additional to AMIRA: 100-200 fps; ProRes 422 (HQ) recording; Log C; unlimited look functions; import looks; ASC CDL in-camera grading; Dynamic auto tracking WB, Bluetooth audio, Prerecord function

The all-inclusive - **AMIRA PREMIUM**
Features additional to the AMIRA Advanced: 2K (2048 x 1152), ProRes 4444 and 4444XQ recording; import custom 3D LUTs.

All models can be upgraded with the 4K UHD license

Technical Specifications

Product	AMIRA	AMIRA Advanced	AMIRA Premium
Sensor Type	35mm format ARRI ALEV III CMOS (28.17x18.13)		
Sensor Pixel Count	3414 x 2198: 3200x1800 (4K UHD) 2880 x 1620 (HD), 2868 x 1612 (2K), for monitoring with surround area: 3168 x 1772 (HD), 3154x1764 (2K)		
Recording Pixel Count	1920x1080 ProRes HD and HD outputs, 2048 x 1152 ProRes 2K, 3840 x 2160 Pro Res 4K UHD and UHD outputs*		
Lens Mounts	PL mount w/ Hirose connector and LDS, B4 mount w/ Hirose connector, EF mount, PL mount titan (ALEXA Mini)		
Shutter	Electronic shutter, 5.0° to 356.0°		
Exposure Index	EI 160 to EI 3200 (EI 800 base sensitivity)		
Exposure Latitude	14+ stops over the entire sensitivity range from EI 160 to EI 3200 as measured with the ARRI Dynamic Range Test Chart (DRTC-1)		
Audio Recording	4 channels, 24 bit PCM, 48 kHz		
Integrated motorized ND Filters	FSND 0.6, 1.2, 2.1		
Sound Level	< 20 dB(A)		
Weight	~ 4.1 kg/9.2 lbs (camera body with PL Lens mount)		
Dimensions	Length: 309mm/12.1", width: 139 mm/5.4" , height: 149mm/5.8" (camera body with PL lens mount)		
Environmental	-20° C to +50° C (-4° F to +122° F)		
Viewfinder	AMIRA Multi Viewfinder MVF-1 (OLED and LCD)		
Outputs Video	2x HD-SDI out 1.5G, 3G and 6G: uncompressed HD/UHD video with embedded audio and metadata**		
Outputs Audio	3,5mm headphone jack, Bluetooth audio		
Outputs Power	Hirose 12pin (for ENG type zoom lenses); 12V: D-tab, Hirose 4pin, Lemo 2pin; 24V: RS 3pin		
Inputs	Genlock, HD-SDI, Timecode (In and Output), all BNC		
Other Interfaces	USB 2.0: For importing and storing AMIRA Look Files, user set up files, frame line files and feature license keys. Stores captured still image formats in DPX (.dpx, 10 bit) or JPEG (.jpg, 8 bit) format. Stores log files. Also used for installing Software Update Packets (SUPs.; Ethernet LAN RJ-45 for camera remote control.		
Recording Media	CFast 2.0 memory cards		
Recording Formats	HD 1920x1080 (interlaced & progressive) 4K UHD 3840x2160*	HD 1920x1080 (interlaced & progressive) 4K UHD 3840x2160*	HD 1920x1080 (interlaced & progressive), 2K 2048x1152, 4K UHD 3840x2160*
Recording Framerates	0,75 - 100 Fps (progressive); 0,75 - 60 Fps with 4K UHD* MPEG-2: 23.98p, 25p, 29.97p, 50i, 59.94i	0,75 - 200 Fps (progressive) 0,75 - 60 Fps with 4K UHD* MPEG-2: 23.98p, 25p, 29.97p, 50i, 59.94i	0,75 - 200 Fps (progressive) 0,75 - 60 Fps with 4K UHD* 0,75 - 120 Fps in ProRes 4444 XQ 0,75 - 30 Fps in ProRes 4444 XQ with 4K UHD* MPEG-2: 23.98p, 25p, 29.97p, 50i, 59.94i
Recording Codecs (w/ embedded audio & metadata)	ProRes 422, 422 LT, MPEG-2	ProRes 422 HQ, 422, 422 LT, MPEG-2	ProRes 4444 XQ, ProRes 4444, 422 HQ, 422, 422 LT, MPEG-2
Rec709/LogC	Rec709	Rec709 & Log C	Rec709 & Log C

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Looks	3 fix Looks (in camera adjustable)	Complete Look functions; import Looks	Complete Look functions; import Looks
Adjustable Image Parameters	Knee, Gamma, Saturation, Black Gamma, Saturation by Hue	Knee, Gamma, Saturation, Black Gamma, Saturation by Hue ASC CDL parameter (Slope, Offset, Power, Saturation)	Knee, Gamma, Saturation, Black Gamma, Saturation by Hue ASC CDL parameter (Slope, Offset, Power, Saturation)
Import of Custom 3D LUTs	-	-	Import of custom 3D LUTs
Focus and Exposure control	Peaking, Zebra, False color	Peaking, Zebra, False color	Peaking, Zebra, False color
White Balance	Auto WB	Auto WB, Dynamic auto tracking WB	Auto WB, Dynamic auto tracking WB
Wifi and Ethernet Camera Remote Control	-	Wifi and Ethernet Camera remote control	Wifi and Ethernet Camera remote control
Audio monitoring	Headphone output (mini jack)	Headphone output (mini jack), Bluetooth audio monitoring	Headphone output (mini jack), Bluetooth audio monitoring
Pre Record Function	-	Pre Record function	Pre Record function

* Requires installed 4K UHD license

** Embedded audio only in 1,5G and 3G

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B. Update Instructions

Download and Registration Process for software updates

You can find the Software Update Package (SUP) in the AMIRA Downloads Section on arri.com/amira/downloads. You have to register your AMIRA camera with your camera serial number to access the Software Update Package (SUP) download. Existing ALEXA customers with an active ALEXA account for the download section can use this account, unless otherwise requested.

A SUP can be installed on the camera by using an USB stick as described in detail below.

How to get a Software Update Package

- If you have not registered yet, please go to the AMIRA downloads page at arri.com/amira/downloads and scroll to the 'AMIRA Software Update Package x.x' section (where 'x.x' is the version number of the desired Software Update Package). Click 'Please -> register to get an account.' The AMIRA customer registration page will be opened.

- Fill in the requested data and make sure to put in the serial number(s) of your camera(s) in the format of K1.71700.0-xxxxx. Don't forget to agree to the registration terms at the end of the page.

- When you hit the 'create account' button the system will send you an acknowledgement email with a link to activate your account. After following the link, a welcome mail is sent containing the login credentials. Please login at arri.com/login/login.html and navigate to the download section again.

- Upon accessing the software package download you will be asked to agree to the terms and conditions of that download. The download link is released as soon as you agree to these terms.

Camera Update Procedure

The AMIRA software is updated with an USB stick.

The SUP package will update the AMIRA camera as well as the Viewfinder (MVF-1) as long as the viewfinder is connected to the camera.

- After the download, please double click the downloaded file (*.zip) in order to unpack it or unpack it manually. This will place two update files (*.SUP and *.lic) and the SUP 1.1 release notes onto your computer.
- If not already done, prepare the USB stick for use with AMIRA by connecting it to the camera: please navigate to MENU>Media>Prepare USB medium & press CONFIRM. This will create the required folder structure on the USB stick.
- Connect the USB stick to your computer and place the downloaded *.SUP file in the folder ARRI/AMIRA/SUP on the USB stick.
  Then place the downloaded *.lic file in the folder ARRI/AMIRA/LICENSES on the USB stick.
- Make sure the camera is connected to a cable power source, or is powered with a full battery to avoid power loss during the update process.
- Connect the USB stick to the camera and navigate to MENU>System>Camera update.
- Select the SUP file from the list and press the jogwheel.
- In the following message, press CONFIRM to start the installation.
- Check the audio screen for the update progress.
- After the update process has finished, a success message is displayed on the monitor.

- For a downgrade to a previous SUP version, the license file of this previous version (amira_fw_update_aes_x.x.x.lic) needs to be available on the USB stick under \ARRI\AMIRA\LICENSES\.

C. New Features

1. MPEG-2 recording, 50 MBit/s 422p@HL in MXF container

This new option allows recording with lower data rates and file sizes, while still maintaining a decent image quality.

The format follows the specification for MPEG-2 422p@HL, it is limited to 50Mbit/s and the container format is MXF. The recordings are fully compatible with XDCAM HD environments and workflows.

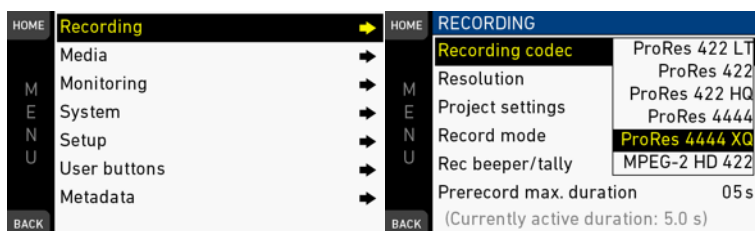Supported frame rates are: 23.98p, 25p, 29.97p, 50i, 59.94i fps.

MPEG-2 clips are supported by all usual editing systems and can also be played back with standalone players like "MXF4mac" http://hamburgpromedia.com/products/mxf4mac/applications/mxf-for-mac-player.php., or the VLC Media Player: http://www.videolan.org/vlc/index.html

2. ProRes 4444 XQ recording

With AMIRA Premium, it is now possible to record also in the highest ProRes quality 4444 XQ as already supported by the ALEXA and ALEXA Mini.

The data rate is about 392 Mbit/s at 1920/25p, which allows recording about 38 min onto a 128GB card.

Supported frame rates range from 0.75 to 120 fps in HD/2K; and from 0.75 up to 30 fps in 4K UHD and 3.2K.

Please check your workflow pipeline for compatibility with ProRes 4444 XQ:
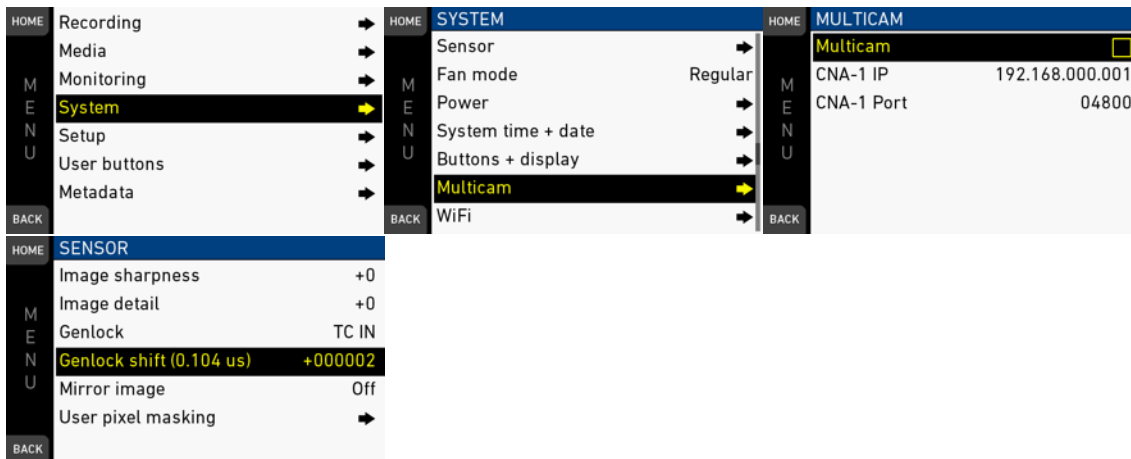http://www.arri.com/camera/amira/workflow/partner_solutions/amira_partner_solutions/

3. AMIRA Multicam interface

This new interface allows remote control of the AMIRA according to broadcast industry standard remote control panels like the Sony RCP-1500. This requires connecting the panel to a Sony CNA-1, which also allows the use of other RCP models from Sony, as well as Sony MSU (Master setup unit) panels. This includes support for remote iris control with B4 or PL ENG lenses.

The interface's other functions include the return (PGM) input to be triggered by the ENG controls, as well as syncing to genlock with the option to phase-shift. The camera tally can be triggered by an Ethernet command, as well as a tally out signal that can be triggered by the record flag in the SDI stream.

A more comprehensive white paper on the features and functions is available from ARRI sales representatives.

HOME	Recording	→
	Media	→
M E N U	Monitoring	→
	System	→
	Setup	→
	User buttons	→
BACK	Metadata	→

HOME	SYSTEM	
	Sensor	→
M E N U	Fan mode	Regular
	Power	→
	System time + date	→
	Buttons + display	→
	Multicam	→
BACK	WiFi	→

HOME	MULTICAM	
	Multicam	☐
M E N U	CNA-1 IP	192.168.000.001
	CNA-1 Port	04800
BACK		

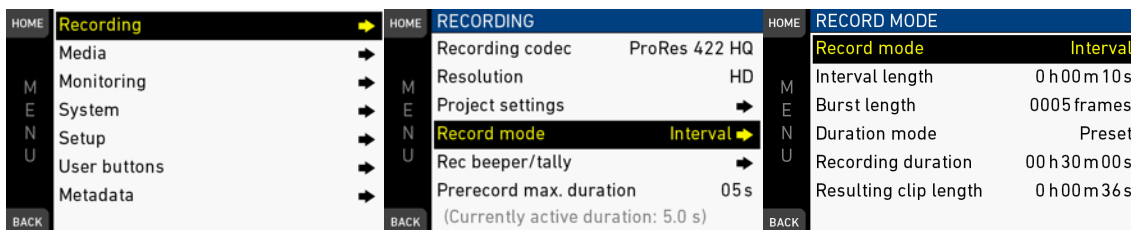| HOME | SENSOR | |
	Image sharpness	+0
M E N U	Image detail	+0
	Genlock	TC IN
	Genlock shift (0.104 us)	**+000002**
	Mirror image	Off
BACK	User pixel masking	→

4. Interval recording (Intervalometer)

Interval recording allows sophisticated time lapse recordings, with all necessary settings in a intuitive interface:

Based on the camera's framerate (together with the shutterangle or exposure time defining the exposure of the individual frames), an interval can be set (how often is the record triggered) including a burst length (how many frames at an interval).

Interval recording can be started and stopped manually or by setting a preset recording duration or resulting clip length.

On top of that, a stop motion mode is included, which allows to manually triggering single frame recordings.

HOME	**Recording**	→
	Media	→
M E N U	Monitoring	→
	System	→
	Setup	→
	User buttons	→
BACK	Metadata	→

HOME	RECORDING	
	Recording codec	ProRes 422 HQ
M E N U	Resolution	HD
	Project settings	→
	Record mode	**Interval →**
	Rec beeper/tally	→
	Prerecord max. duration	05 s
BACK	(Currently active duration: 5.0 s)	

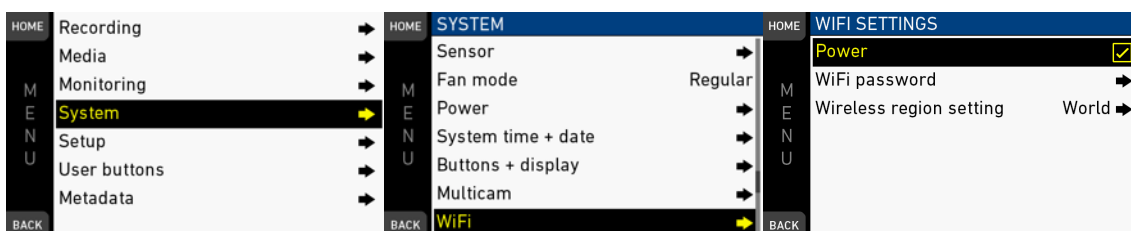| HOME | RECORD MODE | |
	Record mode	**Interval**
M E N U	Interval length	0 h 00 m 10 s
	Burst length	0005 frames
	Duration mode	Preset
	Recording duration	00 h 30 m 00 s
BACK	Resulting clip length	0 h 00 m 36 s

5. WiFi remote control support*

This function facilitates the replication of the entire AMIRA menu structure in the web browser of any device that supports WiFi access. This allows full access to all AMIRA menu functions.

To control access, an individual password can be defined, as well as the region-dependent WiFi settings can be selected.

See the manual for more details.

HOME	Recording	→
	Media	→
M E N U	Monitoring	→
	System	→
	Setup	→
	User buttons	→
BACK	Metadata	→

HOME	SYSTEM	
	Sensor	→
M E N U	Fan mode	Regular
	Power	→
	System time + date	→
	Buttons + display	→
	Multicam	→
BACK	**WiFi**	→

HOME	WIFI SETTINGS	
	Power	☑
M E N U	WiFi password	→
	Wireless region setting	World →
BACK		

* Disclaimer

"The camera operator is responsible for enabling wireless camera control. We provide password protection, but please be careful and diligent in providing this only to authorized production personnel."

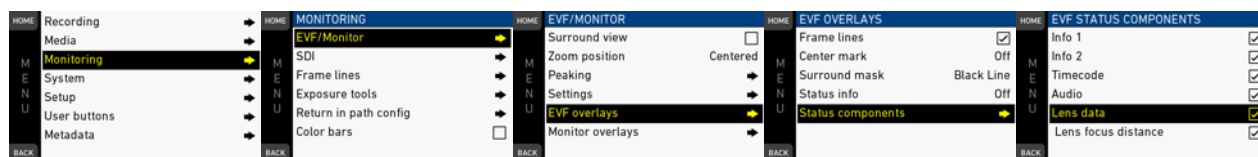## 6. Viewfinder, monitor and SDI status overlay enhancements:

New "Overlay Menu"
A new user button "Overlay Menu" activates the top line of the overlay display in the viewfinder, monitor or SDI outputs, to be edited directly in the overlay just using the viewfinder menu wheel.
You can change the settings for FPS, Shutter, EI and WB in a very quick and direct manner, without using the standard camera menu.

Improved layout for lens data overlays
The display of the lens data for zoom and iris, which may be provided by LDS, ENG or EF lenses, is now integrated into the bottom and top lines of the overlay. The value for distance is located in the lower third part of the image and can be activated/deactivated separately.

Timecode display on SDI out
For devices not supporting embedded timecode in the SDI signal, the timecode can now be displayed as part of the overlay as on the EVF.

Improved battery and card status display
The status display for the batteries and cards are optimized for improved visibility.

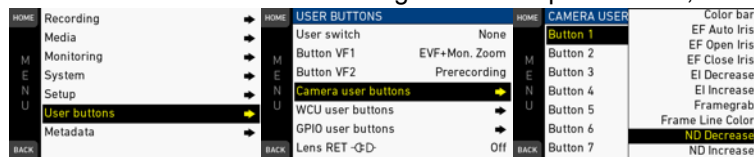More prominent Battery and card capacity warnings
To achieve increased attention, the battery and card capacity warnings are now displayed as lower third pop ups within the image.
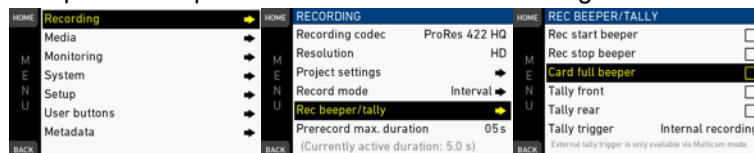
7. Other usability improvements

User buttons for switching ND filters
New user buttons allow switching ND filters up and down, instead of using the switch.
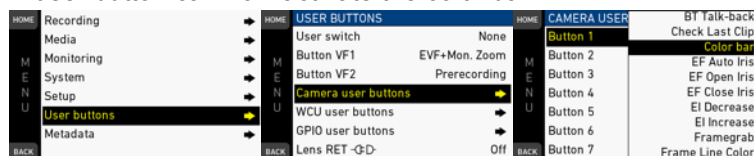
Record stop beeper when card is full
An optional beeper can be activated as a warning when the record has stopped due to a full CFast card.

- User button for color bar
A user button can now activate the color bar
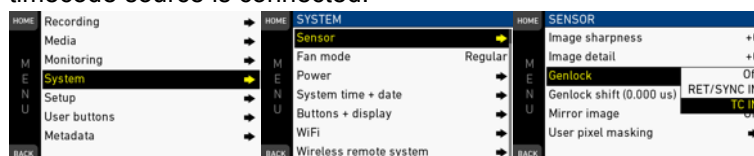
Prerecord mode restored after reboot
The Prerecord mode will remain activated after rebooting the camera

8. Accessories support

Sensor sync and tuning on timecode input signal
The sensor clock can now be synced and tuned by a timecode input signal. This is useful when timecode devices are connected to the camera, which do not provide a separate genlock signal.
In order to genlock and tune the sensor with the timecode input, please activate Genlock/TC IN while the timecode source is connected.

The system will tune the clock while the signal is connected. After a few seconds you can disconnect the timecode source. Setting the genlock to off will avoid a warning in the info screen noting that the Genlock source is missing. The camera will stay tuned until the camera is disconnected from power for longer than 15 minutes or until it is being re-tuned to another source.

Note: Sensor clock tuning does not replace syncing the timecode. The quality of the timecode source has a direct influence on the quality of the sensor clock tuning. When a good timecode generator and a good cable are used, the camera should stay in sync with the timecode for up to 8 hours at least.

UMC-4 camera remote control support with EXT connector
When connected to the EXT connector, the UMC-4 can now remote control the camera

Start/Stop support for ENG LDS lenses w/o using ENG cable
When using a Fujinon Cabrio zoom or a similar ENG style lens with LDS contacts, the Rec Start/Stop and the return button on the lens servo can be used without connecting the lens by cable to the camera.

GPIO support on EXT connector (with ARRI GPIO box)
Connecting the ARRI GPIO box to the EXT connector allows triggering the camera user buttons with a third party remote device.

9. Support for Lexar CFast 2.0 cards

Lexar 128GB and 256GB 3600x (!) cards are supported with SUP 3.0.
64GB cards, 3400x cards and 3500x cards are NOT supported.

D. Known Issues

This is a list of known issues for this particular SUP 3.0 software Package. For a listing of answers to frequently asked questions please visit our website at arri.com/camera/amira/learn/amira_faq.

Accessories

• Lens mount change.

When changing the lens mount, please make sure the camera is powered down when you remove or attach a lens mount. Changing lens mounts with powered up camera can potentially damage the camera electronics.

• EF lens image stabilizer

The image stabilizer of EF lenses is not supported currently.

• Lens data for ENG style lenses using LDS contacts vs. lens camera cable

For some ENG style lenses lens data from LDS contacts may differ from lens data received through a lens camera cable.

• Re-connecting Bluetooth devices after boot up

Some Bluetooth devices for audio monitoring are not always automatically reconnected when the camera is booted. Please make sure to manually reconnect your Bluetooth device in this case.

• Auto iris calculation for EF and ENG lenses

The Auto iris calculation with EF and ENG style lenses is based on the exposure for a neutral gray card.

Use HOME > EI > IRIS > OPTIONS > AUTO IRIS OFFSET to adjust the offset for auto iris.

• Cooke /i lenses with outdated firmware may not be recognized by the camera.

Please make sure your Cooke /i lenses are updated to their current firmware.

• Start/Stop on Canon HJ18 B4 is not working.

Communication to a Canon HJ18 B4 lens is not working with the ARRI B4 Mount currently.

Audio

• Specific behavior on the audio line inputs

The audio line inputs allow a signal of +8dBu max, while the signal attenuation is limited to -6dB max. Please make sure that your line input does not exceed +8dBu in order to avoid clipping. For higher input levels, please use an external attenuator or just reduce the signal level.

For cameras including the upgrade to the new audio board (IOAU2) the line input level can be switched to 24dBu. For details on how to activate this mode, please check the AMIRA manual.

• Single audio input cannot be recorded with different levels.

A single audio input can be routed to different recording channels, but the recording levels are the same on all channels and cannot be different.

• Audio glitches when booting down

Please be cautious of potentially loud audio glitches when wearing headphones while powering down the camera.

• Headphone output connected to an audio mixer

When the headphone output is connected to an audio mixer for monitoring the audio recording, the audio board may be damaged if the camera contains the initial IAOU 1 audio board. This would only affect the volume of the headphone out. If you recognize reduced maximal volume of the headphone output, this may indicate this damage. Please contact an ARRI service center in this case.

Inputs/Outputs

• 4K UHD/3.2K: no NTSC frames rates supported on SDI 1

SDI 1 offers only framerates consisting of whole numbers at 4K UHD and 3.2K

• 6G UHD-SDI output* no embedded audio

The 6G UHD-SDI output does not support embedded audio in the signal stream.

* Requires installed 4K UHD license

• SDI frame rate is not automatically set to project frame rate

Other than the sensor frame rate, the SDI frame rate is not automatically set to the project frame rate. This may result in "jerky" motion on the SDI out in standby/record as well as in playback.

• No Return-In in 3.2K and 4K UHD mode*

The Return-In input is not supported when the camera is in 3.2K or 4K UHD mode.

• HD-SDI genlock is limited to single link HD-SDI 422 1.5G signal

For genlock with HD-SDI, the input needs to be a 1.5G single link HD-SDI signal.

• Limited scaling quality in HD-SDI outputs when recording in 2K

The resulting image quality is considered sufficient for monitoring but may be limited for recording the signal as the master record. This is due to the downscaling of the 2K resolution to HD. Please set the recording format to HD when recording HD on the HD-SDI output as master record.

• Switching frame rates back and forth while genlock is active on the HD-SDI input, the sync may get lost

In the rare case, the framerate of the HD-SDI genlock source is switched back and forth, while the camera is syncing to that source, the sync may be lost if the camera does not re-sync properly. In this case please manually trigger a re-sync by e.g. disconnecting and re-connecting the SDI cable.

• Genlock sync accuracy may jitter

When using a genlock source (Tri-Level, BlackBurst, HDSDI or Timecode) for syncing the camera, the sync can be shifted to match the phase of the source, but it may jitter in the range between 0 and 0.2 us (microseconds)

• Color bars and test tone in parallel on SDI outputs

Parallel test tone with color bars is only available on SDI 1 out but not on SDI 2 out.

• SDI embedded audio gets de-activated when the return input is active

Also after switching back to the camera image, the embedded audio may become active again only after about 2 sec.

* requires installed 4K UHD license

Media

• *_BIN.bin file on CFast cards

AMIRA creates a file named "*_BIN.bin" (i.e. A001R3VJ_BIN.bin) when recording. This is used for internal data management, you may just ignore this file.

Recording

• Power loss during record with SanDisk 120GB or 60GB cards.

A CFast 2.0 card may need to be reformatted when it is removed during recording or in the event of a sudden power loss occurs while the camera is writing to the card. The camera will indicate the error with a warning message. Please follow the instructions in the warning to avoid damage to the card or further recordings. No action is required if no warning is displayed.

Please contact ARRI service for more information or if you encounter any further issues.

• SanDisk CFast 60GB card frame rate limitations.

Due to the lower write speed on the SanDisk 60GB cards, the max frame rates are limited at the highest data rates: ProRes 4444 recording in 2K: 120 fps; ProRes 4444 recording in HD: 137 fps; ProRes 422HQ recording in 2K: 181 fps. ProRes 422HQ recording in 2K: 181 fps

• SanDisk 120GB or 128GB cards recording in card slot B at very high temperatures with very high data rates.

Using SanDisk 120GB or 128GB cards at extremely high environmental temperatures well above 40° Celsius or 104° Fahrenheit, and recording ProRes 4444 at highest frame rates close to 200fps, the card slot B might be limited in the maximal duration of recording. Please use CFast slot A for longer recordings if the above conditions are met.

• Error message for maximum clip size.

On very rare occasions, the camera may stop recording and report "Recording stopped - maximum clip size reached". This can only occur with image content that has very little detail and using a codec with low data rate like ProRes LT.

• 400 clips max possible per card

AMIRA cannot record more than 400 clips on a single card. Please note that the camera gives no further information but just refuses to record more clips.

• Limited card capacities with CFast 2.0 cards

To ensure maximum recording performance in all card states, the capacity of the CFast 2.0 cards is limited by 5%.

• Exposure time is limited to 1/24 sec

The exposure time limitation to 1/24 sec reduces the maximum shutter angle (of 356°) at framerates lower than 24fps.

• Changing Exposure Index or White Balance during record

When changing Exposure Index or White Balance during record it is possible that a single frame contains two different image characteristics.

• Recording on other card is not possible during erasing

During card erasing, you cannot record to the second card.

You cannot change any camera settings while cards are being erased.

• Sensor setting for high humidity is not restored when rebooting

When switching codecs or when rebooting the camera, the setting for the sensor temperature (System/Sensor/Sensor temperature: normal/high humidity) will be reverted to default "normal".

• Failure while recording

In the very rare case of a failure while recording, the camera will reboot and display a message.

• Vertical image mirroring is applied as clip metadata

Mirroring information is stored as metadata in Quicktime files. MPEG-2 HD MXF files do not support mirroring via metadata, so the clips appear as recorded when played back externally.

• Limited amount of reels when recording MPEG-2

When recording in MPEG-2, the maximum amount of reels on one card is limited to 2 reels. When a card has reached this amount, it needs to be erased before it can be used for further recordings. Please make sure you have copied all content from the card before erasing."

SUP update

• Camera default setup is reset

When updating the camera with a SUP, the "Default setup" is cleared.

• Timezone/daylight saving time are reset

After a SUP update, please make sure to re-set time zone/daylight saving time accordingly.

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Release Notes   All data subject to change without further notice.

Timecode

• SDI embedded timecode with 3G HD-SDI output on some devices

When HD-SDI outputs are set to 3G, some devices may not read the timecode embedded in the signal. No limitations are seen with timecode output using 1.5G HD-SDI output settings.
With SUP 3.0 the timecode is part of the overlay metadata and can be displayed in the overlay of EVF, monitor and SDI outputs under "Monitoring/SDI/SDI processing/Overlays/status components".

• Potential timecode delay after playback

Playing back clips recorded with framerates higher than 30 fps, may cause a slight delay (< 1 frame) in the synced timecode. Please make sure to check or re-sync the timecode in this case.

Usability

• Licenses can be removed from the camera menu.

Installed licenses can be deleted in the license menu. This will remove the corresponding function from the camera. To re-install a license (like AMIRA Advanced or Premium licenses), the appropriate license key for this individual camera needs to be reloaded. If a camera set was purchased including the preinstalled license, the license key can be found on the USB stick which was delivered with the camera. If a license was purchased from the ARRI license web shop, please use the license provided there.

• Loading looks containing a custom 3D LUT require the "AMIRA Premium license"

When attempting to load such a look, it will just fail but no message will be displayed.

• Filename length 28 characters max.

Filenames longer than 28 characters (excluding extension) cannot be loaded by AMIRA, they are neither seen in the corresponding lists nor can be used.

• Limited number of camera files on USB sticks.

Only a limited number of camera files can be supplied on a USB stick: User Setups: 20; Look Files: 100; Frame lines: 100; License files: 100; SUPs: 20.

• Only one USB slot can be used at a time

When 2 USB sticks are connected during boot up, the device in slot 1 is ignored and only the device in slot 2 is used. You may use the second slot to power a USB device.

• Do not remove USB sticks during read or write operations

Please make sure a USB file transfer is finished (read or write of user setup, camera log, frame lines, license keys etc.), before removing the device. An incomplete file transfer can cause corrupt files on the camera or on the stick.

• Some USB devices may not work properly with AMIRA

You may encounter issues with some USB devices. Please test the device prior to using it for critical tasks, or use the USB stick delivered with the camera.

• USB devices for AMIRA

AMIRA only supports USB sticks or pendrives. Harddrives or similar will not be recognized. Please see the manual for more information.

• "ARRI 709" look file export

If for any reason you may want to export the look file "ARRI 709" to USB, you are suggested to make a DUPLICATE and just save it under a different name (i.e. "ARRI 709mod").

• Running the SENSOR FPS at a different speed than the PROJECT RATE

The frame rates for sensor and project rate must match to enable audio recording and to create clips that will play back at project speed (i.e. not in slow or fast motion).
The settings can be checked:
- on the HOME screen, where the project rate is shown behind the time code (e.g. @25p).

- on the FPS screen, where the project rate is shown below the FPS setting, including an notation whether you are recording at normal speed, slow, or quick motion.

- Non-matching settings will trigger the message "audio recording disabled (FPS)" on the audio screen and a small crossed-out speaker icon over the audio levels on the viewfinder monitor.

Non-matching settings will also show the FPS icon in the home screen and the EVF/SDI status overlays in orange. The home screen will show an orange exclamation mark next to the FPS logo.

• Using Zebra and Aperture Peaking in combination may result in false exposure indication

Enabling Zebra and Aperture Peaking in parallel may result in a false exposure indication.

• Framegrab is only available in standby mode

The framegrab to USB function is only available when the camera is in standby mode. It is not possible during RECORD and PLAYBACK, or when INTERVAL or STOP MOTION recording is activated.

Framegrabs are always stored in HD 1920x1080 resolution and use the gamma setting of the SDI output.

• Renaming of "REC 709", "X2 ALEXA" and "LCC" Look files

To unify the look file naming with the ALEXA SXT ALF 2 support, the look file for "REC 709" has been renamed to "ARRI 709", "X2 ALEXA" to "ARRI classic 709" and "LCC" to "LCC 709".
There are no changes to the parameters of the look files.

• AMIRA SUP 3.0 included Look files are not always compatible with ARRI Color Tool v1.1 (or earlier)

To load look files in the ACT (ARRI Color Tool), which have been modified in and then exported from AMIRA with SUP 3.0, the latest ACT version v1.2 (or higher) is required. This version is available for download at www.arri.com/camera/amira/downloads/
The wide gamut support (Rec 2020, DCI P3, DCI D65, DCI D60) in ACT v1.2 is not yet supported with AMIRA SUP 3.0. This support will follow with an upcoming SUP. Therefore looks including a different color space other than ARRI 709, can not be loaded into AMIRA.
Please note that the camera still supports look files created by previous ACT versions.

• User setups created with earlier SUPs are not compatible with SUP 3.0

User setups, which have been created with an earlier SUP, can not be loaded into SUP 3.0 (or higher). A new user setup needs to be created with SUP 3.0.

• MPEG-2 playback in camera

In some rare cases, playback of an MPEG-2 clip may be interrupted. You can still check the clip in camera by fast forwarding with various speeds. In doubt, please playback the clip on a computer.

Viewfinder

• Do not cover the viewfinder proximity sensor for a long time!

Please note that constantly covering the proximity sensor (for MVF-1 serial number 2150 and below located at the edge of the viewfinder close to the eyepiece; for Serial number 2151 and higher or upgraded eyepiece located within the eyepiece) with tape or similar, can cause an irreversible burn-in on the OLED display!

• For MVF-1 up to serial number 2150: the viewfinder sometimes may not switch on.

The AMIRA MVF uses a proximity sensor to activate the OLED display only while the eyepiece is in use. Approaching the MVF at an unfavorable angle may cause it not to trigger properly.

• ZOOM or SURROUND VIEW at very low framerates

The EVF/MONITOR's image momentarily fades when either zoom or surround view are activated or de-activated at very low frame rates (below about 5 fps).

• Heated Eyecup HE-6 is not compatible with the AMIRA viewfinder

When using the heated eyecup, the proximity sensor that activates the OLED display will always be in an activated state. In this state, the OLED display will not switch off when not in use, and can burn in when the displayed image does not change over time. This is especially true for status overlays.

Please use the new HE-7 Heated Eyecup instead. This is compatible with all MVF-1 viewfinders starting with serial number 2151, or viewfinders with the eyepiece upgrade installed.

Important Changes and Bugfixes

• Embedded audio in SDI outputs not working with certain monitors: Fixed in SUP 3.0

• MVF-1 is not hot pluggable: Fixed in SUP 3.0

• False "redscreen" warnings at installation of SUP 2.0: Fixed in SUP 3.0

• False warning for low data rate with specific image content: Fixed in SUP 3.0

• Fan behavior w/ UHD recording at higher than 30fps framerates: Fixed in SUP 3.0

• Occasionally no embedded audio in SDI output: Fixed in SUP 3.0

• In the White Balance list a fix Auto WB entry is put on first position

Service

For service purposes the ND filter stage can be moved mechanically with screws at the bottom of the camera. Please do not turn the screws yourself, as this could severely damage the interior of the camera. Please contact an ARRI service station for any issues here.

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Release Notes   All data subject to change without further notice.