

ALEXA Mini LF SUP 7.1 Beta

Software Update Package (SUP) Mini LF 7.1 Beta

RELEASE NOTES

Date: July 26, 2021



Important Notes

Please read the part "F. Update Procedure" carefully and follow the steps accurately!

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A. Introduction

This document describes changes for ALEXA Mini LF cameras with the Software Update Package (SUP) Mini LF 7.1 Beta in contrast to ALEXA Mini LF SUP 7.0.1 (ALEXA Mini LF SUP 7.0.1 has the same features as SUP 7.0 but includes an important bugfix). We recommend that you take your time to go through these release notes, the known issues section of this document and the user manual before you start using the camera.

For more information on the camera, please visit www.arri.com/alexaminilf.

For frequently asked questions and their answers please visit the <u>ALEXA Mini LF FAQs.</u>

ALEXA Mini LF SUP 7.1 Beta Features and Changes Overview

A more detailed listing can be found below in the section "C. New Features and Changes in ALEXA Mini LF SUP 7.1 Beta".

- A new large format recording format: 2.8K LF 1:1 2.8K in ARRIRAW and Apple ProRes
- Lens Data Archive files for ARRI Signature Prime Lenses and Signature Zoom Lenses
- Sync Shift via Camera Access Protocol
- Various bug fixes and system stability improvements

Updating Camera, Viewfinder and Lens Mount

- This is a BETA version of ALEXA Mini LF SUP 7.1. It is meant to be used for testing and evaluation purposes only, not for productions.
- ALEXA Mini LF SUP 7.1 Beta can be installed on all previously shipped ALEXA Mini LF cameras. However, we recommend updating from SUP 7.0.1 to SUP 7.1 Beta (note: this can take up to 20 Minutes). If your camera is not running Mini LF SUP 7.0.1, please update it to 7.0.1 before updating to SUP 7.1 Beta. ALEXA Mini LF SUP 7.0.1 is still available on the ARRI website.
- We do not recommend updating in the middle of a production.
- When connected to the camera, the MVF-2 viewfinder and lens mount will also be updated automatically.

In case of using an MVF-2 or lens mount with older software with a camera with newer software, please make sure to make a component update of the MVF-2 or lens mount. The version numbers in brackets should be equal (MENU > System > Update).



- Please note that the viewfinder might switch off during the update process and does not give visual feedback of the update all the time. The SDI outputs, however, will stay active, which they did not in previous SUPs.
- Make sure not to power off the camera during an SUP update. Make sure not to unplug the viewfinder during an SUP update. Detailed instructions for the update process can be found at the end of this document.
- Always use a 'private' or 'incognito' browser window when using the Webremote to operate the camera and to perform a SUP update. This prevents possible erroneous behavior.

Updating LBUS Accessories

- The camera SUP does not contain any LBUS accessory software. LBUS accessories (like cforce mini motors, cforce Plus motors, ARRI master Grips, ARRI Operator Control OCU-1 or ARRI LCUBE) connected to the camera during a camera SUP update will therefore not be updated.
- To update LBUS accessories, download the LBUS device update file from the ARRI website, copy it onto a USB stick in the folder ARRI/ECS/, place the USB stick into the camera, connect the LBUS device to LBUS connector on the camera and then initiate the update from MENU > System > Update > Update LBUS Devices.

Downdating

It is possible to downdate from this ALEXA Mini LF SUP 7.1 Beta version to previous SUP versions. For a downdate to a previous SUP version, both the license file of the installed and of the previous version (always included in the SUP zip file and named: 'mini_lf_fw_update_aes_X.X.X.lic') need to be available on the USB memory stick under /ARRI/A-MINI-LF/LICENSES. ALEXA Mini LF SUP 7.0 and 7.0.1 are available for download on the ARRI website.

Codex Compact Drive 1TB Update

A firmware patch is available to address a firmware error with Codex Compact Drives with the serial number range from 10020001 to 10022568. Drives outside this serial number range already run the latest firmware and require no update. On rare occasions, this firmware error could cause a Compact Drive to take a long time to load in the camera, Dock or Reader, not load at all or result in the camera status "INVALID". For all ALEXA Mini LF owners we recommend updating their Compact Drives to this new firmware. To have the update installed free of charge, affected drives can be sent to any <u>Codex</u> or <u>ARRI Service station</u>.

Please note that Mini LF SUP 7.1 Beta will not update Compact Drives. ALEXA Mini LF cameras running SUP 7.1 Beta are compatible with Compact Drives with and without the update. More information can be found on the ARRI Website <u>here</u>.

Software Compatibility Notes

To properly process files recorded with ALEXA Mini LF cameras with SUP 7.1 or later installed, please update the ARRIRAW Converter (ARC) and the ARRI Meta Extract (AME) to the latest release version. The latest release version of the ARC is 4.4, the latest release version of the AME is 4.4.

Please note, that macOS X version 10.14.4 or later is required to successfully transfer data from a Codex Compact Drive with the Codex USB-C Compact Drive Reader, or the SXR Capture Drive Dock with the Compact Drive Adapter. Using older versions of macOS will result in a copy error for files larger than 9.66 GB.

Please note that macOS X version 10.15 with the Apple MXF plug-in installed (part of "Pro Video Formats 2.1") is required to play back downloaded MXF/Apple ProRes footage in Apple QuickTime Player.

A document providing an overview of postproduction tools that support files recorded with ALEXA Mini LF cameras ("ALEXA Mini LF Supporting Tools & Software Overview.pdf") can be found in the download section of the ALEXA Mini LF webpage.

Please make sure to use the latest version of any third-party tool for your workflow.

Sample footage shot with the ALEXA Mini LF camera can be downloaded here.

Registration

If you have not done so already, please make sure you register your camera using our online customer registration. Your registration ensures that you receive information about future software updates as soon as they are available. If you register your new camera within 1 month of purchase, you will get a 12-month extended warranty for free. You can find the registration <u>here.</u>

B. Legal

Important Notes on Audience and Intended Use

The product is solely and exclusively available for commercial customers and shall be used by skilled personnel only. Every user should be trained according to ARRI guidelines. Use the product only for the purpose described in this document. Always follow the valid instructions and system requirements for all equipment involved.

Important Notes on Vital Precautions

High voltage! Risk of electric shock and fire!
Short-circuits may entail lethal damage!
Before use, read and follow all valid instructions.
Use solely and exclusively as described in the instructions.
Never open. Never insert objects.
For operation, always use a power source as indicated in the instructions.
Always unplug the power cable by gripping the power plug, not the cable.
Never try to repair. All repair work should be done by a qualified ARRI Service Center.
Never remove or deactivate any safety equipment (incl. warning stickers or paint-marked screws).
Always protect from moisture, cold, heat, dirt, vibration, shock, or aggressive substances.
Never cover any fan openings.
Heavy weight! Risk of injury and damage!
If placed on an unstable surface, the camera can fall and cause serious harm!
Always place the camera on proper support devices. Safely attach it as described in the instructions.

For further important safety information, please refer to the user manual.

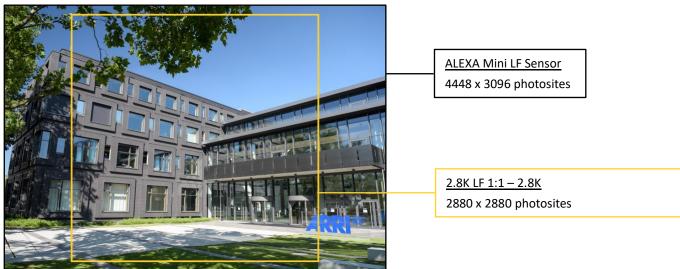
C. New Features and Changes in ALEXA Mini LF SUP 7.1 Beta

New Large Format Recording Format

ALEXA Mini LF SUP 7.1 Beta includes the new 2.8K LF 1:1 – 2.8K recording format in either ARRIRAW or Apple ProRes. This format is designed for shooting with anamorphic S35 or large format 2x lenses for a target deliverable of 2:1. By using a sensor area of 2880 x 2880 photosites, a pixel count equivalent to 4K UHD is achieved, which makes this format usable for productions that require a 4K UHD resolution. This recording format is named 'LF' as its height (2880 photosites) exceeds the height of an ALEXA S35 sensor (2202 photosites). However, it is covered by many S35 anamorphic lenses like, for example, the ARRI Master Anamorphic lenses. In the white paper <u>ALEXA LF & Anamorphic</u> <u>lenses</u> you will find more detailed information about this topic. We are currently updating this white paper to also include the ALEXA Mini LF new recording formats.

1. MXF/ARRIRAW 2.8K LF 1:1 - 2.8K

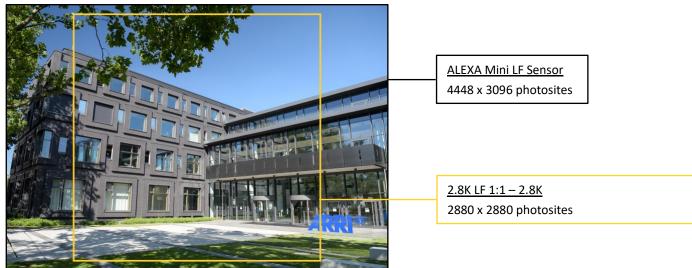
Maximum frame rate: 60 fps. Sensor area: 2880 x 2880, recorded file resolution: 2880 x 2880



Please note that UHD monitoring and surround view are not available in this recording format.

2. MXF/Apple ProRes 2.8K LF 1:1 – 2.8K

Maximum frame rate: 60 fps. Sensor photo-sites used: 2880 x 2880, recorded file resolution: 3072 x 3024. Note: The recorded ProRes clip has black borders (3072 x 3024 pixels) around the image content (2880 x 2880) which are stated in the clip metadata and therefore cropped in most post-production tools.



Please note that UHD monitoring and surround view are not available in this recording format.

Overview Table of ALEXA Mini LF Recording Formats

Please also see the Appendix "Overview Table of Recording Formats for ALEXA Mini LF, ALEXA Mini & ALEXA LF". Please also see the Formats & Data Rate Calculator on our website for more information.

Recording formats are sorted here as well as in the camera menus by "LF" or "S35" first and then sorted descending starting with the format with the highest horizontal resolution of sensor photosites.

			ALEXA Min Mini LF SUF						
Codec	Recording Format	Max. fps	Compact Drive 1TB (h:m)		nsor osites	Reco Image	orded Pixels	Act	nsor tive e Area
		(1)	@ 24 fps (2)	h	v	h	V	h	v
	4.5K LF 3:2 Open Gate - 4.5K	40	0:32	4448	3096	4448		36.70	25.54
ARRIRAW	4.5K LF 2.39:1 - 4.5K	60	0:54	4448	1856	4448	1856	36.70	15.31
(3)	3.8K LF 16:9 - UHD	60	0:54	3840	2160	3840	2160	31.68	17.82
(0)	2.8K LF 1:1 - 2.8K	60	tbd	2880	2880	2880		23.76	
	3.4K S35 3:2 - 3.4K	60	0:59	3424	2202	3424		28.25	
	4.5K LF 3:2 Open Gate - 4.5K		1:13	4448	3096	4480		36.70	
	4.5K LF 2.39:1 - 4.5K	60	2:01	4448	1856	4480		36.70	
	4.3K LF 16:9 - UHD	48	2:01	4320	2430	3840	2160	35.64	20.05
	4.3K LF 16:9 - HD	75	7:57	4320	2430	1920		35.64	
Apple	3.8K LF 16:9 - UHD	60	2:01	3840	2160	3840		31.68	
ProRes (4)	3.8K LF 16:9 - 2K	90	7:00	3840	2160	2048	1152	31.68	17.82
	3.8K LF 16:9 - HD	90	7:57	3840	2160	1920	1080	31.68	17.82
	2.8K LF 1:1 - 2.8K	60	tbd	2880	2880	3072	3024	23.76	23.76
	3.2K S35 16:9 - 3.2K	75	2:35	3200	1800	3200	1800	26.40	14.85
	2.8K S35 4:3 - 2.8K	75	2:24	2880	2160	2880	2160	23.76	17.82
	2.8K S35 16:9 - HD	100	7:57	2880	1620	1920	1080	23.76	13.37

(1) = All Apple ProRes flavors have the same maximum frame rate on ALEXA Mini LF

(2) = Record Duration for Apple ProRes stated for Apple ProRes 4444

(3) = The file format for ARRIRAW is .mxf

(4) = The file format for Apple ProRes is .mxf

yellow background = new format in Mini LF SUP 7.1

Lens Files for ARRI Signature Primes and Signature Zooms

The following lens files were added in ALEXA Mini LF SUP 7.1 Beta:

- ARRI Signature Prime 12 mm
- ARRI Signature Prime 280 mm
- ARRI Signature Zoom 45 135 mm
- ARRI Signature Zoom 65 300

Although these lenses have LDS-2 built-in and do not necessarily require lens files to be present in the camera, the files are included in case of malfunction of the lens or lens mount.

Sync Shift via Camera Access Protocol (CAP)

The Sync Shift option can now also be used through the Camera Access Protocol. The Sync Shift option applies an offset to the genlock signal at the input. Minimum step size is 52 ns, maximum possible correction is up to +/- 20 ms (= 384000 steps), depending on the sensor frame rate.

Various Bug Fixes & System Stability Improvements

This SUP includes various bug fixes and other improvements to the overall system stability.

D. Known Issues – Mechanical Accessories

RAB-1 Clamp 2 may experience poor clamping performance

Some early RAB-1 Clamp 2 units (K2.0023406) ran into assembly issues leading to poor clamping performance or the inability to release adequately. If a RAB-1 Clamp 2 is found to slip on the Rear Accessory Bracket RAB-1 (K2.0013937) or not to release correctly, please contact ARRI Service to get the part repaired or exchanged.

Compact Bridge Plate CBP-1 and CBP-2 lever malfunction

To release the Compact Bridge Plate CBP-1 or CBP-2 from a balance plate, the safety catch on the main locking lever of the CBP must be released for the main locking lever to be moved from the BALANCE to the RELEASE position. Some early CBP-1 and CBP-2 units could have the main locking lever moved directly from the LOCK position to the RELEASE position. In that case, please contact ARRI Service to get the part repaired or exchanged.

E. Known Issues – Software

Lenses

ALURA 1.4x and 2.0x Extender are not recognized

ALURA 1.4x and 2.0x Extender are not recognized by the camera and therefore the lens information shown in the menu, the SDI overlays and the WCU-4 show the information of the lens without considering the use of the extenders.

Monitoring

MVF-2 can show subtle flickering in upper part

Sometimes a subtle flickering can be observed in the upper part of the image of the MVF-2 viewfinder (through the eyepiece, not the flip-out monitor).

MVF-2 shows ARRI logo continuously

Sometimes, especially directly after a software update, the MVF-2 may display the ARRI Logo for an extended time. In this case unplug and re-plug the viewfinder. If this does not solve the issue, please check the software version of the MVF-2 viewfinder in MENU > System > Update.

Brightness flicker when EVF Zoom is activated or EVF Surround view is off

Brightness flicker in the upper part of the OLED display can be noticed.

MVF-2 flip-out monitor shows vertical stripe

Sometimes the MVF-2 flip-out monitor shows a vertical stripe on the left side of the image which is part of the image from the right. This can be fixed by unplugging and re-plugging the VF cable.

Post

No Mirror image function for MXF/Apple ProRes in DaVinci Resolve

The vertical "Mirror image" function does not work for MXF/Apple ProRes in DaVinci Resolve. However, it will work with ARRIRAW.

Recording

Activating SDI ZOOM at fps setting over 70 fps in 2.8K S35 4:3 - 2.8K results in image artifacts

Under the following conditions, clearly visible image artifacts will occur on all monitor outputs and in the recorded material:

- Recording format: 2.8K S35 4:3 2.8K
- FPS ≥ 70
- SDI Zoom (via User Button or CAP, not MVF-2 Zoom)

Remote Control

WiFi still on when camera is in host mode and WiFi is turned off

When the camera is in WiFi host mode (MENU > System > Network/WiFi > WiFi Mode > Host), a client is connected and WiFi Power is turned off, WiFi Power stays on.

Webremote reconnect takes long after switching WiFi power OFF and back ON.

Sometimes the reconnect of the Webremote takes unexpectedly long after switching WiFi power OFF and back ON.

Web remote function not working properly after SUP update

After updating the camera, the web remote function may not work properly unless the browser cache of your web browser has been cleared.

SmallHD Cine 7 partial functionality

When remote controlling the camera with a SmallHD Cine 7, not all features will work as expected.

When connecting to a WiFi network in client mode, you may have to enter the correct password twice.

WiFi does not work as expected in WPA encrypted networks

Only networks indicating WPA/WPA2 encryption will perform as expected. WPA only encrypted networks are not supported.

Problems when Playback is initiated by Webremote

When clip playback is initiated through the Webremote, both Webremote and camera exhibit erratic behavior. Recording a short clip will reset this issue.

Sync

SDI out of sync

If two cameras are being synchronized by syncing one of them to timecode, the recorded images will be in sync, but the SDI outputs will be slightly out of sync.

Warning message unavailable

A camera in setting Slave mode inherits all settings from the master camera. When attempting to change settings on a camera in settings Slave mode not all items prompt the warning that these settings can only be changed on the master camera, but instead are not modifiable.

Disabling EXT Sync leads to error message

When disabling EXT Sync the camera can display a software error (#4) and prompt the user to reboot. After rebooting the camera will resume working as expected.

Usability

Cannot overwrite existing User Pixel Mask

Saving a User Pixel Mask on the USB stick is only possible when the sensor folder on the USB stick does not already contain a User Pixel Mask. If you want to save a User Pixel Mask, make sure the folder is empty or re-name any existing User Pixel Masks. Even then, sometimes a new User Pixel Mask cannot be saved, and the monitor gets stuck with the message 'Exporting user pixel mask, please wait...'. Restarting fixes all of this.

Menu item selection highlight scrolls past bottom of menu

In some menus the menu item selection highlight can be scrolled past the bottom of the menu.

Audio icon deactivated in playback of clip with audio

When RECORDING settings do not allow to record audio, the audio icon is shown deactivated erroneously in playback of a clip that contains audio.

Updating

ALEXA Mini SUP camera update might fail

In a few cases the camera update may fail with the message 'Last SUP installation was incomplete. Please re-install SUP. (#135)'.

F. Update Procedure

Where to download the new Software Update Package (SUP)

To download the Software Update Package for this beta it is necessary to register on the ALEXA Mini LF SUP 7.1 Beta download page on the ARRI website. After registration you will receive a download link via e-mail. A SUP can be installed on the camera by using a USB stick as described in detail below.

Camera Update Procedure

The ALEXA Mini LF software is updated from a USB memory stick. The SUP will update the ALEXA Mini LF camera along with the Viewfinder (MVF-2) and the lens mount – provided they are connected to the camera.

The update can be started through the menu of the MVF-2 viewfinder or through the Web Remote. The Web Remote requires a connection to the camera via WiFi or Ethernet (with ALEXA Ethernet/RJ-45 Cable KC-153-S, K2.72021.0). Open a web browser and enter the URL: http://mini-LF-xxxxx.local (replace xxxxx with your camera's 5-digit serial number). For further information on the Web Remote, please refer to the User Manual.

- After the download, please double click the downloaded file (*.zip) to unpack it or unpack it manually. This
 will place two update files (*.SUP and *.lic) onto your computer.
- If not done beforehand, prepare the USB memory stick for use with ALEXA Mini LF by connecting it to the camera. Then choose *Menu > Media > Prepare USB Medium...* in the camera's menu on the MVF-2 flip-out monitor and 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/A-MINI-LF/SUP on the USB stick. Then place the downloaded *.lic file in the folder ARRI/A-MINI-LF/LICENSES on the USB stick.
- SUPs contain not only updates for the camera body but also for the MVF-2 viewfinder and the LPL lens mount. Therefore, the MVF-2 viewfinder and the LPL lens mount should be attached to the camera when performing an update.
- Make sure the camera is connected to a power supply (best) or is powered with a full battery to avoid power loss during the update process.
- Perform a factory reset on the camera with the menu item *Menu > Setup > Factory Reset...*
- NOTICE: Remove the recording media from camera!
- Make sure to export all camera logfiles before installing ALEXA Mini LF SUP 7.1 Beta. Send these files to MiniLFfeedback@arri.de
- Connect the USB stick to the camera and navigate to the menu item Menu > System > Update > Update Camera...
- Select the SUP file from the list and click the item.
- In the following message, press INSTALL to start the installation.
- Press CONFIRM to start the installation.
- The camera will present a screen presenting the update progress. Please do not shutdown the camera or unplug power until the camera reboots.
- After the update process has finished, a success message is displayed. Please note, that the update can take up to 20 minutes.
- Please repeat the last six steps (marked in purple) and update the camera for a second time.
- It may happen that the Viewfinder goes black during the update and does not provide any further information. In this case do NOT cut off power but check SDI 1 for a red ERROR icon or connect via Web Remote. If you get a "fail", re-run the update.
- Make sure you set the correct time zone in Menu > System > System Time & Date.
- If the MVF-2 viewfinder or LPL lens mount were not connected to the camera during the update process, the camera will still store the new software for those devices. The next time those devices are connected and have an older software than the one stored in the camera, the camera will offer to update those devices.

		12	ALEXA Mini LF Mini LF SUP 7.1	LF 21						ALE. Mini (ALEXA Mini Mini SUP 6.1				LF SL	ALEXA LF LF SUP 4.3			
Codec	Recording Format	Max. fps	Max. Drive 1TB fps (h:m)	Sensor Recorded Photosites Image Pixels	s Ima	Recorded mage Pixels	0)	sensor Active Image Area (mm)	Recording Format	Max. fps	Sensor Photosites		Recorded Image Pixels	Recording Format	Max. fps	Sensor Photosites		Recorded Image Pixels	els
		E	(2)	Ч	ч ,	>	ح	>			ч	>	> 4		(c)	٩	>	h v	>
	4.5K LF 3:2 Open Gate - 4.5K	40	0:32	4448 3096 4448	96 44		3096 36.70 25.54	25.54						4.5K	90	4448 3	3096 4448	448 3096	96
	4.5K LF 2.39:1 - 4.5K	60	0:54	4448 1856 4448	56 44	48 1856	1856 36.70	15.31						LF 2.39:1 4.5K	150	4448	1856 4448		1856
	3.8K LF 16:9 - UHD	60	0:54	3840 2160 3840	60 384	40 2160	2160 31.68	17.82						LF 16:9 UHD	06	3840 2	2160 3840	340 2160	60
(+)	2.8K LF 1:1 - 2.8K	60	tbd	2880 2880 2880 2880 2880 23.76 23.76	80 28t	8 <mark>0 2880</mark>	0 23.76	23.76											
	3.4K S35 3:2 - 3.4K	60	0:59	3424 2202 3424 2202 28.25 18.17	02 34;	24 2202	28.25	18.17	Open Gate 3.4k	30	3424 2	202 34	3424 2202 3424 2202						
	4.5K LF 3:2 Open Gate - 4.5K	40	1:13	4448 3096 4480 3096 36.70 25.54	96 44	30 3096	36.70	25.54						LF Open Gate 4.5k 60		4448 3096 4448	096 4	448 3096	96
	4.5K LF 2.39:1 - 4.5K	60	2:01	4448 18	1856 4480		1856 36.70	15.31						LF 2.39:1 4.5K	100	100 4448 1856 4448	856 4		1856
	4.3K LF 16:9 - UHD	48	2:01	4320 24	2430 3840		2160 35.64	20.05											
	4.3K LF 16:9 - HD	75	7:57	4320 24	2430 1920		1080 35.64	20.05											
	3.8K LF 16:9 - UHD	60	2:01	3840 21	2160 3840		2160 31.68	17.82						LF 16:9 UHD	60	3840 2	2160 3840		2160
ProBoo (E)	3.8K LF 16:9 - 2K	06	7:00	3840 21	2160 2048		1152 31.68	17.82						LF 16:9 2K	60	3840 2	2160 20	2048 11	1152
	3.8K LF 16:9 - HD	06	7:57	3840 2160 1920	60 192		1080 31.68	17.82						LF 16:9 HD	60	3840 2	2160 19	1920 108	1080
	2.8K LF 1:1 - 2.8K	60	tbd	2880 2880 3072	80 30		3024 23.76	23.76											
	3.2K S35 16:9 - 3.2K	75	2:35	3200 1800 3200	00 32(30 1800	1800 26.40	14.85	16:9 3.2K	60	3200 1	800 32	3200 1800 3200 1800						
	2.8K S35 4:3 - 2.8K	75	2:24	2880 2160 2880	60 28	30 2160	2160 23.76 17.82	17.82	4:3 2.8K	50	2880 2	2160 2880	380 2160						
	2.8K S35 16:9 - HD	100	7:57	2880 1620 1920 1080 23.76 13.37	20 19;	20 1080	23.76	13.37	16:9 HD	200	2880 1620		1920 1080						
(1) = All Apple	(1) = All Apple ProRes flavors have the same maximum frame rate on ALEXA	١ximum	frame rate or		Mini LF														
(2) = Record L	(2) = Record Duration for Apple ProRes stated for Apple ProRes 4444)r Appl€	ProRes 444	4															
(3) - This hold	(3) – This holds for all Annia Broßes flavore evcent i E Onen Gate Broßes 4444 XO (40 frei) and i E 2 30-1 Broßes 4444 XO (60 frei)		Door Goto D	m Doc 111	VXV	10 fne) ar	3 C 1 I PC	10-1 Drot	Pac 1111 YO 160	fne)									

(3) = This holds for all Apple ProRes flavors except LF Open Gate Proves 4444 XQ (40 fps) and LF 2.39:1 ProRes 4444 XQ (60 fps)
(4) = The file format for ARRIRAW is: .mxf for ALEXA Mini LF and ALEXA Mini. .ari for ALEXA LF
(5) = The file format for Apple ProRes is: .mxf for ALEXA Mini LF, .mov for ALEXA LF and ALEXA Mini E and ALEXA Mini LF and ALEXA Mini V of an ALEXA Mini Purple characters = same in ALEXA Mini LF and ALEXA Mini LF and ALEXA Mini V of and ALEXA Mini V of an ALEXA Mini LF and ALEXA Mini V of ALEXA V of ALEXA V of ALEXA Mini V of ALEXA Mini V of ALEXA Mini V of ALEXA V o

Appendix A: Overview Table of Recording Formats for Mini LF, Mini & ALEXA LF