ALEXA Mini LF

Software Update Package (SUP) Mini LF 6.0.22

Date: September 17, 2020

Table of Contents

A. Introduction

This document describes changes for ALEXA Mini LF cameras with the new Software Update Package (SUP) Mini LF 6.0.22 in contrast to ALEXA Mini LF SUP 6.0.21. 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 a listing of answers to frequently asked questions please visit the ALEXA Mini LF FAQs.

ALEXA Mini LF SUP 6.0.22 Features and Changes Overview

A more detailed listing can be found below in the section "New Features and Changes in ALEXA Mini LF SUP 6.0.22".

- **Codex Compact Drive status indicator LED will more accurately show when it is OK to remove**
- **Significant bug fixes and improvements to the overall system stability**

Updating

For all ALEXA Mini LF owners we very strongly recommend updating to Mini LF SUP 6.0.22.

- We do not recommend installing a new SUP in the middle of a production. The only exception is if any of the errors described in "New Features and Changes in ALEXA Mini LF SUP 6.0.22" below prevent you from continuing to use a camera. In that case, installing Mini LF SUP 6.0.22 is recommended.

- ALEXA Mini LF SUP 6.0.22 can be installed on all previously shipped ALEXA Mini LF cameras, however, we recommend updating from SUP 6.0.21 to 6.0.22. If your camera is not running Mini LF SUP 6.0.21, please update it to 6.0.21 before updating to 6.0.22. Mini LF SUP 6.0.21 is still available in the "SUP Download Archive" located at the bottom of the Mini LF SUP 6.0.22 web page.

- When updating from any earlier Mini LF SUP to Mini LF SUP 6.0.22, make sure to NOT have any LBUS devices connected to the camera, as that would cause the update to fail. This is caused by an unfortunate bug in Mini LF SUPs ≤ 6.0.21. However, as there is no updated software for any LBUS devices included in Mini LF SUP 6.0.22, there is also no need to attach LBUS devices. This bug is fixed in Mini LF SUP 6.0.22, so, when updating from Mini LF SUP 6.0.22 to any future version, you can (and should) connect LBUS devices to make sure they are running the latest software.

- Please note that the viewfinder might switch off during the update process and doesn't give a visual feedback of the update all the time. Make sure not to power off the camera during a SUP update. Detailed instructions for the update process can be found at the end of this document.

Downdating

While it is possible to downgrade ALEXA Mini LF cameras to previous SUP versions from this version, we strongly recommend against this, since this SUP includes important bug fixes and significantly enhances stability.

Codex Compact Drive 1TB Update

A firmware patch is now 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 Codex or ARRI Service station.

Please note that Mini LF SUP 6.0.22 will not update Compact Drives. ALEXA Mini LF cameras running SUP 6.0.22 are compatible with Compact Drives with and without the update. More information can be found on the ARRI Website here.

Software Compatibility Notes

Please update the ARRIRAW Converter (ARC) to at least version 4.1.1.0 and ARRI Meta Extract (AME) to version 4.1.0.0 to support files recorded with ALEXA Mini LF cameras with SUP 6.0 or later installed.

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.

ALEXA Mini LF SUP 6.0.22 Release Notes
All data subject to change without further notice.

Page 3 of 9

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 SUP 6.0 webpage.

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 6-month extended warranty for free. You can find the registration here.

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.

All data subject to change without further notice.

C. New Features and Changes in ALEXA Mini LF SUP 6.0.22

Recording Media

Compact Drive LED

After a recording has been stopped, the Compact Drive status indicator LED will remain solid red until the Compact Drive is ready to be removed. At that point the LED will turn solid green, indicating that the Compact Drive can be safely removed.

With SUPs before SUP 6.0.22, some instances have been reported where the Compact Drive status indicator LED has shown that it is safe to remove the drive before this was actually the case, causing a number of error conditions once the drive was re-inserted into a camera, including error messages #97, #100, #175 or #200. Please note that none of these errors lead to data loss; even if the recording stopped unexpectedly, the take recorded up to this point is safely stored on the drive.

Please also note that from Mini LF SUP 6.0.22 on, the "10 Second Rule" (see ARRI Technical Information ["ALEXA Mini LF - The 10 Second Rule for Removing Drives"](#)) can be ignored, as the Compact Drive status indicator LED now accurately shows when it is safe to remove the drive.

System Stability Improvements

A number of changes have been made to the internal communications that greatly improve system stability and should significantly reduce the occurrence of error messages #4, #5, #14, #93, #138 or #200. If you still encounter any of these errors with a camera running Mini LF SUP 6.0.22, you most likely have a hardware issue. In that case, please [contact ARRI Service](#), as we have seen some limited cases where these errors were based on hardware. ARRI Service will be able to diagnose and repair these.

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.

E. Known Issues – Software

Image Processing

No Image Flip for MXF/Apple ProRes
The "Image Flip" function does not work for MXF/Apple ProRes. However, it will work with ARRIRAW.

Monitoring

Internal microphones are always audible on headphones
When the internal microphones are turned on, their sound is always audible on headphones that are connected to the MVF-2 headphones connector and there is no possibility to turn them off.

Magnification is reset after Recording Resolution change
The Magnification setting is reset to 100% when changing Recording Resolution. So, it needs to be re-adjusted after each Recording Resolution change.

MVF-2 eyepiece image flickering
The top lines of the image in the MVF-2 eyepiece flicker when switching magnification on or off.

Post

Apple ProRes Clips shot in LF Open Gate or LF 2.39:1 have black borders
Many postproduction applications including DaVinci Resolve will show black borders when playing back MXF/Apple ProRes clips shot with the ALEXA Mini LF in LF Open Gate or LF 2.39:1 recording resolutions. This is a metadata issue. The proper active image area for LF Open Gate is 4448 x 3096 and for LF 2.39:1 is 4448 x 1856.

Post: ARRIRAW frame grabs show black borders
ARRIRAW frame grabs in some recording resolutions can show black borders.

Remote Control

ARRI lens motor not recognized
When using an EF Lens without internal motors, it is possible, that the camera thinks there are internal lens motors and will therefore not recognize external ARRI lens control motors. Workaround: disable the lens mount in MENU > SYSTEM > LENS MOUNT SETTINGS.

LPL lens mount disabled
When transferring an LDA lens file from the WCU-4 to the camera, LDS will get disabled and it is not possible to enable again, until a factory reset is performed. This does not affect the functionality of the LBUS connector on the lens mount.

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.

Slave shows error #88
When the master camera enters playback mode, the slave cameras display active alert #88 (Camera synchronization is still pending). The alert disappears after a few seconds when the master camera has exited playback mode.

Updating

MVF-2 flip-out display turns black during camera update
Sometimes, when updating the camera SUP, the flip-out display of the attached MVF-2 turns black and stays black until the camera is rebooted at the end of the update.

Updating fails when LBUS devices are connected

When updating from any earlier Mini LF SUP to Mini LF SUP 6.0.22, make sure to NOT have any LBUS devices connected to the camera, as that would cause the update to fail. This is caused by an unfortunate bug in Mini LF SUPs ≤ 6.0.21. However, as there is no updated software for any LBUS devices included in Mini LF SUP 6.0.22, there is also no need to attach LBUS devices. This bug is fixed in Mini LF SUP 6.0.22, so, when updating from Mini LF SUP 6.0.22 to any future version, you can (and should) connect LBUS devices to make sure they are running the latest software.

Please note that on rare occasions updates can fail even if no LBUS accessories are attached. If that is the case, simply remove all accessories and lenses and try updating the camera again.

Usability

MONITOR status defaults to "lens" page

The status bar of the flip-out MONITOR defaults to the "lens data" page after a reboot or an update.

Switching from ARRIRAW to Apple ProRes or changing Recording Resolution may take longer than expected

Switching from ARRIRAW to Apple ProRes or changing the recording resolution in Apple ProRes may take longer than expected.

Function (FN-1) settings do not work

The ability to edit camera settings in the overlay menu using the Function (FN) buttons will not work if the viewfinder is connected and the flip-out monitor is closed or if the viewfinder was connected and the flip-out monitor was closed when the viewfinder was disconnected. It will work, however, if the viewfinder was not connected when powering up the camera.

Adding White Balance with wheel increments in 46 Kelvin steps

When adding a white balance value to the list by incrementing the number directly with the click-wheel of the MVF-2, values will increment in 46 Kelvin steps. Use the keyboard-like entry instead to enter the desired value.

F. Update Procedure

Where to download the new Software Update Package (SUP)

You can find the Software Update Package in the [Software Update Packages download section](#). 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.

- 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) and the SUP release notes 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, the LPL lens mount and LBUS accessories. Therefore, the MVF-2 viewfinder and the LPL lens mount should be attached to the camera when performing an update. Please note that for THIS update, do not connect any and LBUS accessories, as that can lead to the update failing. See "Updating fails when LBUS devices are connected" above in Known Issues for more info.
- 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...*
- Remove the recording media from camera.
- 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.
- Make sure you set the correct time zone in *Menu > System > System Time & Date*.
- If the MVF-2 viewfinder, LPL lens mount or LBUS accessories 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.