

## ALEXA 35 & ALEXA 35 Live

Software Update Package (SUP) 2.0.1

### RELEASE NOTES

October 1st, 2024



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## A. Introduction

ALEXA 35 SUP 2.0.1 contains a new feature for ALEXA 35 Live and an important bugfix.

We highly recommend that you take your time to go through these release notes, the known issues section of this document and the user manual before operating the camera.

For more information on the camera, please visit [www.arri.com/alexa-35](http://www.arri.com/alexa-35) or [arri.com/alexa35live](http://arri.com/alexa35live)

### Update Recommendation

This release includes an important bugfix and an additional feature. We recommend updating to all customers.

### Overview of New Features of SUP 2.0.1

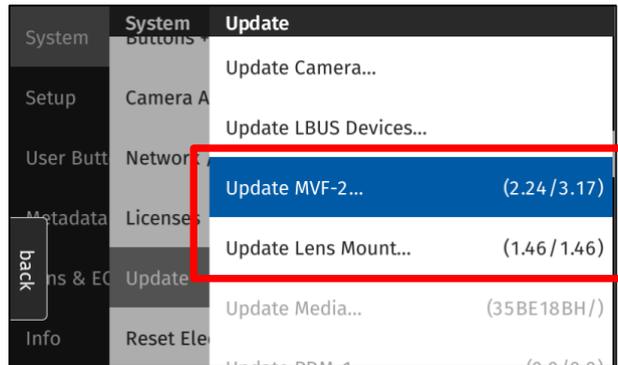
- **Change Look during recording on ALEXA 35 Live**

### Overview of New Features of SUP 2.0.0

- **ALEXA 35 Live Support**
  - Live Painting
  - Multicam Looks
  - Multicam Textures
  - Remote Tally Support
  - Restrict Local Camera Control
- **License options for ALEXA 35**
- **Support for Tally Light Module TLM-1**

## Updating Camera, Viewfinder and Lens Mount

- This SUP can be installed on all previously shipped ALEXA 35 cameras.
- We do not recommend updating in the middle of a production.
- When connected to the camera, the MVF-2 viewfinder and the lens mount will also be updated automatically.
- When you encounter a camera in rental or on set where the MVF-2 or the lens mount have older software installed, the camera will make you aware of this. We recommend to then perform a component update of the MVF-2 or lens mount (CAMERA MENU > System > Update). The first version number in brackets is the version of the component, the second the version of the component's software included in the camera's SUP. In the example below, the MVF-2 has an older software installed (2.24) than the MVF-2 software that is part of the camera's SUP (3.17). After the component update, both numbers should be the same, as is the case in the example below for the lens mount.



The following versions are included with ALEXA 35 SUP 2.0.0:

- Multi Viewfinder MVF-2: 3.51
  - LPL Mount: 1.58
  - PL Mount (LBUS): 1.96
  - PL Mount (Hirose): 1.96
  - EF Mount (LBUS): 1.14
  - Camera Access Protocol (CAP): 1.12
  - mxf Library: 4.2.5
- Please note that the viewfinder might switch off during the update process and does not give visual feedback of the update all the time. Refer to the side display in that case.
  - Make sure not to power off the camera during an update. Make sure not to unplug the viewfinder during an 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 Web Remote to perform a SUP update (or when remotely controlling the camera with the Web Remote). This prevents possible erroneous behavior.

## Updating Fiber Camera Adapter and Fiber Base Station

- The camera SUP does not contain software for the Fiber Camera Adapter or Fiber Base Station. Even if those devices are connected to the camera during a camera SUP update they will not be updated.
- To update the Fiber Camera Adapter and Fiber Base station please refer to their respective User Manuals.

## Updating the Camera Control Monitor CCM-1

- The camera SUP does not contain any Camera Control Monitor CCM-1 software. A CCM-1 that is connected to the camera during a camera SUP update will not be updated.
- To update the CCM-1, download the CCM-1 update file from the ARRI website, copy it onto a USB-C Stick in the root folder and connect the USB-Stick to the CCM-1. Disconnect the CCM-1 from the camera and navigate to Menu > Firmware > Update and select the update file to initiate the update process.

### Updating the Audio Extension Module AEM-1

- The camera SUP does not contain any Audio Extension Module AEM-1 software. An AEM-1 that is connected to the camera during a camera SUP update will not be updated.
- To update the AEM-1, download the AEM-1 update file from the ARRI website, copy it onto a USB-C Stick in the root folder and connect the USB-Stick to the AEM-1. Initiate the update on the AEM-1 by going to MENU > SETUP > UPDATE and select YES to start the process.

### Updating LBUS Accessories

- The camera SUP does not contain any LBUS accessory software. LBUS accessories (like RIA-1, ZMU-4, cforce mini motors, cforce plus motors, ARRI Master Grips, ARRI Operator Control Unit OCU-1 or ARRI LCUBE) connected to the camera during a camera SUP update will not be updated.
- To update LBUS accessories, download the LBUS device update file from the ARRI website, copy it onto a camera USB stick in the folder ARRI/ECS/, place the USB stick into the camera, connect the LBUS device to the LBUS connector on the camera and then initiate the update from MENU > System > Update > Update LBUS Devices... .

### Updating Codex Compact Drive 1TB

Codex Compact Drive 1TB units with a serial number lower than 602##### need to be updated before they can be used in an ALEXA 35. Newer drives are shipped with updated firmware. If a drive that needs a firmware update is inserted into the camera, an update prompt will be displayed. After the drive has finished updating, the camera will remain in update mode so that multiple drives can be updated. To restore normal operation, reboot the camera.

Caution: All data on the drive will be irreversibly erased when updating the drive firmware. Please back up your data before the update!

Note: Updated Compact Drive 1TB and the new Compact Drive 2TB will also be supported by ALEXA Mini LF starting with ALEXA Mini LF SUP 7.1.1.

### Downdating the Camera

Downdating an ALEXA 35 to the previous release is possible. ALEXA 35 Live is not compatible with any software version lower than SUP 2.0.0.

- However, MVF-2 viewfinders with serial numbers above 6849 and Compact Drive 2TB units with serial numbers starting with '273xxxxx' require ALEXA 35 SUP 1.0.4 or newer.

### Software Compatibility

- ALEXA 35 Live requires
  - LPS-1 Fiber Camera Adapter software v0.3.1 or later
  - LPS-1 Fiber Base Station software v0.3.1 or later
  - Skaarhoj RCP software 1.0.3 (core-arri-camera) or later
- ARRIRAW Clips recorded with the Multicam Texture can only be processed with DaVinci Resolve 19.0 beta 6.
- Please note that for AEM-1 output monitoring to work, the AEM-1 must be updated to AEM-1 software V1.1G, which is posted on the ARRI AEM-1 webpage.
- Please note that the Camera Control Monitor CCM-1 must be updated to CCM-1 SUP 5.5.2 to work with ALEXA 35 SUP 1.2.3 or later. If you run CCM-1 SUP 5.5.1 or earlier, use of the CCM-1 is severely impeded or even impossible. The CCM-1 SUP 5.5.2 is compatible with ALEXA 35 SUP 1.2.0 and later.
- To use custom color management, you need the ARRI Reference Tool version 1.4.0 or later, which can create ALF4c look files that enable custom color management.
- To process files recorded with ALEXA 35 or create look files for ALEXA 35 (ALF4 or ALF4c), please use the latest version of the [ARRI Reference Tool \(ART\)](#). ALEXA 35 SUP 2.0.0 has been tested with and works well with ARRI Reference Tool 1.4.0 or later. The old ARRIRAW Converter will not be able to process ALEXA 35 files.
- To create HDE Files the CODEX Device Manager has to be updated to [version 7.3.3](#).
- A listing of third-party software and their compatibility to ALEXA 35 can be found on the [ALEXA 35 Workflow webpage](#). Please make sure to always use the latest version of any third-party software.

### Sample Footage

Sample footage shot with the ALEXA 35 camera can be downloaded on the [ALEXA 35 sample footage webpage](#).

## Registration

If you have not done so already, please make sure to 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 one-year extended warranty for free. You can find the registration at [www.arri.com/productregistration](http://www.arri.com/productregistration).

## B. New Features of SUP 2.0.1

### Change look during recording on ALEXA 35 Live

On an ALEXA 35 Live, an ALEXA 35 with the FCA-1 attached or an ALEXA 35 with the Multicam license installed, it is now possible to change the active look via the Camera Access Protocol (CAP) while the camera is recording. This can only be done via the CAP protocol (for example by an RCP or a third party client); switching looks while the camera is recording is not possible through the camera menu or the Web Remote.

Note 1: The Skaarhoj RCP has the capability to change looks while recording from software 1.0.3 (core-arri-camera) on.

Note 2: The clip metadata will only contain the look that was active when the recording was started. Switching the look while recording will not change that metadata.

### Other changes

In previous SUPs, the LPL mount sent incorrect data if it was turned off. This caused problems with lens mapping and pre-marked rings. This issue has been resolved.

## C. New Features of SUP 2.0.0

### ALEXA 35 Live Support

With the release of SUP 2.0.0 we introduce the ALEXA 35 Live - Multicam System. This is the first software version to support all multicam features.

All live options are visible if either a Multicam License is installed or an FCA-1 is attached to the camera.

### Live Painting

The Image chain supports the real time modification of familiar shading parameters such as Pedestal, Black Gamma, Lift, and Knee. This option can be enabled in the Image menu which is found in MENU > IMAGE > LOOK.

With Live Painting enabled, the Display Rendering Transform (DRT) is changed to the Live REVEAL DRT with a raised diffuse white point to target ITU recommended behavior and better align with live productions' aesthetic preferences. This means that the diffuse white point will target 203 nits in an HDR production, whereas our Cinematic REVEAL DRT targets 100 nits. If preferred, users can utilize ARRI Look Files with Custom Color Management (.ALF4c files) to override the internal DRT with their custom rendering or even load the cinematic REVEAL rendering if that is desired.

A new shading parameter introduced with the ALEXA 35 Live is Cinema Knee. This parameter enables productions to dynamically choose the intensity of the cinematic rendering they want in their picture. It acts as a blend between the traditional ITU-style Live REVEAL DRT and our Cinematic REVEAL DRT, controlling cinematic rendering qualities such as contrast, skin-tone handling, highlight bleaching, and roll-off. This enables users to tune the cinematic rendering features to productions needs in real- time.

To ensure consistent and reliable behavior, the Cinema Knee parameter is not available when an ARRI Look File with Custom Color Management (.ALF4c file) is loaded since a specific look has been pre- designed. All other shading parameters remain accessible.

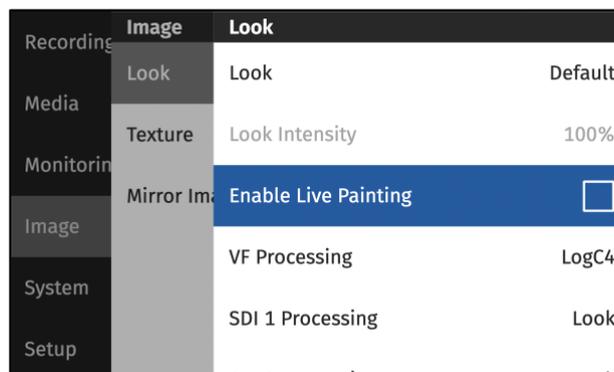
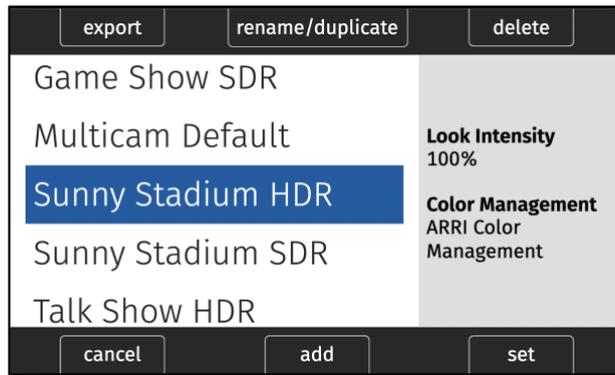


	Image	Look
Recording	Look	Look Default
Media	Texture	Look Intensity 100%
Monitoring	Mirror Im	Enable Live Painting <input type="checkbox"/>
Image		VF Processing LogC4
System		SDI 1 Processing Look
Setup		SDI 2 Processing Look



### Multicam Looks

The Multicam license enables the use of five new Multicam Look files geared towards specific uses in a Live Environment.



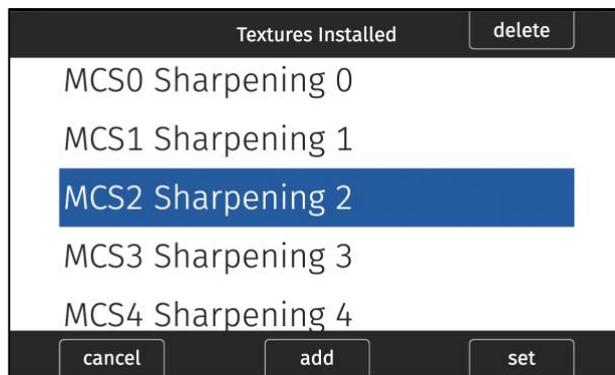
### Multicam Textures

Installing the Multicam license makes additional ARRI Textures available. These textures are designed for use in live production environments and have been created to control sharpness and detail.

The Multicam Sharpening textures offer low grain for clean images and work best at low to medium EI settings. At higher EI settings, it is advisable to choose between MCS0 and MCS3 to avoid over-sharpening the higher EI noise features. The MCS4 and MCS5 textures are best suited for low to medium EI settings and are not recommended for high EI settings, as these multicam textures can accentuate the grain at higher EI values above 2000 ASA.

ARRI recommends starting with MCS3 as a starting point for sharpness/detail settings when matching to third party camera systems.

If there is a desire for a softer or more cinematic texture rendering, it is recommended to use the standard K445 Default Texture or the MCS0 Texture for the lowest sharpness. If you wish to match existing ALEXA 35 footage, you should use the standard K445 Default Texture.



### Remote Tally Support

The Tally setting has been moved to MENU > SYSTEM > BUTTONS + DISPLAY > TALLY. There is a new menu option here: 'On (Remote/CAP)'. This allows the camera tally and all connected Tally Lights to be remotely controlled via CAP. The existing 'ON' Setting has been renamed to 'On (Recording)'

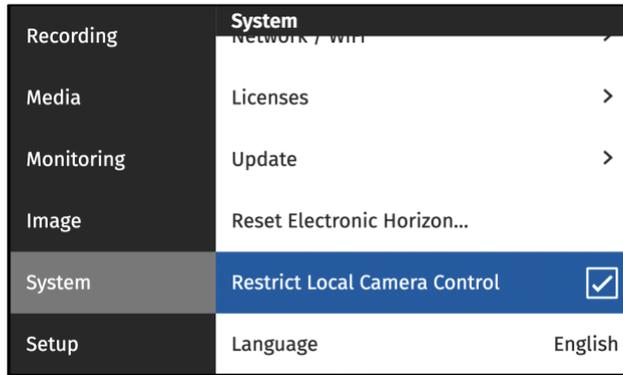
### Restrict Local Camera Control

The setting to restrict local camera control grays out most of the settings in the menu of MVF-2, CCM-1 and the camera's side display and is intended for use in live production environments where most of the camera's settings are controlled remotely. The camera operator can therefore only change settings relating to the viewfinder, but not production-relevant settings.

The menu of the camera's Web Remote is not affected by this setting.



The active restriction is indicated by the "settings locked" icon on the HOME screen.



### Cine License Upgrade for ALEXA 35 Live

The [ARRI Shop](#) now allows to purchase and install a 'Cine License Upgrade for ALEXA 35 Live'. To purchase the license a HW Info file has to be uploaded to the webshop. The HW info file can be exported from the license screen (MENU > SYSTEM > LICENSES) and is placed in the ARRI/ALEXA35/LICENSES folder on an attached USB Stick.

There is currently no way to delete an installed License from an ALEXA 35 and ALEXA 35 Live.

### Cine License Upgrade for ALEXA 35 Live

The 'Cine License Upgrade for ALEXA 35 Live' brings ALEXA 35 Live cameras up to the full feature set of an ALEXA 35. The license includes camera speeds up to 120 fps, ARRIRAW recording, all Open Gate-width and anamorphic recording formats, in-camera anamorphic de-squeeze, and pre-recording. Once the license is installed, the resulting camera has all the features of the ALEXA 35 Live and of the ALEXA 35.



### Support for Tally Light Module TLM-1

The TLM-1 is now fully supported by the ALEXA 35. It attaches to any LBus chain. It reacts according to the Tally Mode set in camera. If Tally is remotely controlled the ID is transmitted by the Fiber Base Station, otherwise the current Camera Letter is shown. Tally and ID Brightness can be separately controlled in MENU > SYSTEM > BUTTONS + DISPLAY >



### Further changes

- The CAP server is now set to ON as a factory default and no longer automatically enabled and disabled depending on the connection of a CCM-1.
- In ARRIRAW Playback the White Balance and EI Values that were active while recording are recalled. The active Look still reflects the current setting.

## **D. Bugfixes and stability improvements in SUP 2.0.0**

This release contains the following major bugfixes (minor bugfixes are not listed):

- Pre-recording duration can be adjusted.
- Assigned Hand Unit User Buttons have labels on the Hi-5.
- Master Magnification is always applied upon loading a setup file.
- Tally Light is off per factory default, therefore enabling the SDI Rec Flag.
- CineRT sensitivity does not get reset to 18 when LCUBE CUB-1 is restarted.
- 1TB CODEX Compact Drives can be updated again.
- Custom Color Management Looks can be transferred via CAP.
- Chinese Translations for some User Buttons were corrected.
- Starting a recording from Playback no longer leads to a sync offset.

## E. Known Issues – Software

### Accessories

#### FPS Preset cannot be used by Camera Control App

Currently, the Camera Control App cannot set frame rates for the “FPS Preset” user button.

#### Not possible to set Enhanced Sensitivity (ES) via Hi-5

Currently it is not possible to select Enhanced Sensitivity exposure indexes via the Hi-5. Those EI values must be selected via user button, Viewfinder or Web Remote.

#### Boot loop on WCU-4 with certain /i Lenses

Attaching certain Lenses that use the Cooke /i Protocol may send the WCU-4 into a boot loop. Please deactivate the Lens Mount and use LDA Tables in that case.

#### RIA-1 Update via CAM Fails

Updating RIA-1 by connecting the RIA-1 CAM port to the ALEXA 35 and then running the update from the camera sometimes fails. Use a LBUS connection in this case.

### Lenses

#### Some /i lenses show missing or incorrect lens scales

For a few lenses using the Cooke /i protocol lens scales are either missing or not displayed correctly. Use LDA tables for these lenses instead.

### Monitoring

#### ProRes 3K 1:1 format does not support 422 3G HD output

The ProRes 3K 1:1 recording format does not support 422 3G HD SDI output. Please use 422 1.5G or 444 3G.

#### Frame lines may be displayed in the surround view when using master magnification

When using surround view in conjunction with master magnification the frame line may be displayed in the surround area for certain magnifications while it should not be visible.

#### External LUTs desaturate camera overlays

A LUT applied to an external monitoring device may desaturate the camera overlays in a way that makes STBY and REC indications hard to distinguish. Reducing the SDI overlay brightness mitigates this issue. The setting is found in: MENU > MONITORING > SDI > SDI 1 PROCESSING > OVERLAYS > OVERLAY BRIGHTNESS

#### MVF-2 OLED may show magenta tint

In rare circumstances the MVF-2 OLED can show a magenta tint that is not observable on SDI. The recorded images are not affected.

### Playback

#### In-camera playback problems

In a live environment, when changing the look during recording certain codec/framerate combinations can cause playback issues. The recorded clip is not affected.

#### Small playback image

When using Magnification and Surround view the playback image may show less than monitored during recording and standby.

#### Limited clips available via CAP

When Playback is controlled via CAP only the first 270 clips on the card are available. To access later clips, use the side display.

#### After leaving playback or check last clip, camera momentarily doesn't respond to inputs

After leaving any playback mode, whether started via 'Check last clip' or 'Plackback' User Button the camera may occasionally not react to inputs for a few moments. The camera will return to normal state after a maximum of four seconds.

## Remote Control

### Prerecording can only be turned off with a User Button

Prerecording can only be deactivated with a User Button assigned to that function. If you happen to lose access to the device that has the user button assigned start a recording and pull the drive from the camera. The recording will fail, and prerecording will be deactivated.

### OCU-1 wired to camera via ZMU-4 cannot exit override

Override is not always possible if an OCU-1 or Master Grip are used in combination with a ZMU-4:

- Override is not supported for wireless control units. It is therefore not possible to use the override function of an OCU-1 or Master Grip if they are connected to a ZMU-4 in client mode.
- It is currently not possible to use the override function when the ZMU-4 is connected remotely to an ALEXA Mini or ALEXA Mini LF camera and a cabled MG-1 or OCU-1 at the camera.

Workaround: Connect the ZMU-4 to the camera only via CAM to EXT or set up the system that the corresponding axis is only controlled via the OCU-1 (disable that lens axis in the Hi-5 Menu > Control Setup).

## Usability

### Closing menu on the CCM-1 opens menu on MVF-2

When a CCM-1 and a MVF-2 are in simultaneous use every time the menu is closed on the CCM-1 the MVF-2 will display the menu.

### Pressing 'M' on the CCM-1 opens menu on the MVF-2

When a CCM-1 and a MVF-2 are in simultaneous use pressing 'M' on the CCM-1 will open the menu on the MVF-2 monitor first. Press 'M' a second time to access the menu on the CCM-1.

### Camera doesn't boot with certain 290Wh Batteries

There have been rare reports of cameras not booting with certain 290Wh batteries regardless of charge levels. We are actively investigating the issue and have found that this problem does not occur on SUP 1.2.3. To downgrade to SUP 1.2.3 the camera must be downgraded to SUP 1.3.0 first.

### Webremote does not show all options

In some menus not all or no selectable options in drop down lists are visible. Click on the empty list to reveal the options.

## Workflow & Tools

### Look Intensity not saved in Look Metadata

Since SUP 1.2.0 a modified Look intensity is not saved in the Clip metadata and will therefore always show the Look intensity at 100%.

### Framegrabs in UHD have faulty lines with vertical mirroring

In all UHD recording modes, if vertical mirroring is turned on, framegrabs contain faulty lines. This does not affect the recording or any image outputs. If necessary take screengrabs without vertical mirroring.

## F. Known Issues – Hardware

### BNC connectors breaking

Some BNC connectors on the ALEXA 35 can break off when the cable is pulled out at too much of an angle. Please make sure to pull out cables straight to avoid this. Please note: Only cameras with serial numbers between 62000 and 62400 are affected by this issue.

Broken connectors can be replaced by the customer/rental/dealer or by ARRI service. To be prepared, replacement connectors can be ordered from ARRI service free of charge. This video shows how to replace connectors:

<https://arri.academy/SE-replacing-bnc-connectors-alexa35>

## G. 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 35 software is updated from a USB memory stick. The Software Update package (SUP) will update the ALEXA 35 camera along with the Viewfinder (MVF-2) and the lens mount – provided they are connected to the camera.

If you are also updating the Camera Control Monitor CCM-1 (it has its own Software Update Packages that are installed separately from the camera), please update the CCM-1 before updating 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://alexa35-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.

1. After the download, please double click the downloaded file (\*.zip) to unpack it or unpack it manually. This will place two update files (\*.SWU and \*.lic) onto your computer.
2. Format your USB Stick using the exFAT file system.
3. If not done beforehand, prepare the USB memory stick for use with ALEXA 35 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.
4. Connect the USB stick to your computer and place the downloaded \*.SWU file in the folder ARRI/ALEXA35/SUP on the USB stick. Then place the downloaded \*.lic file in the folder ARRI/ALEXA35/LICENSES on the USB stick.
5. SUPs contain not only updates for the camera body but also for the MVF-2 viewfinder and the lens mounts. Therefore, the MVF-2 viewfinder and the lens mount should be attached to the camera when performing an update.
6. 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.
7. Perform a factory reset on the camera with the menu item *Menu > Setup > Factory Reset...*
8. Connect the USB stick to the camera and navigate to the menu item *Menu > System > Update > Update Camera...*
9. Select the SUP file from the list and click the item.
10. In the following message, press INSTALL to start the installation.
11. Press CONFIRM to start the installation.
12. The camera will present a screen presenting the update progress. Please do not shutdown the camera or unplug power until the camera reboots.
13. After the update process has finished, a success message is displayed. Please note, that the update can take up to 20 minutes.
14. Please execute steps 8 – 13 a second time.
15. Make sure you set the correct time zone in *Menu > System > System Time & Date*.
16. 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.

In the rare case of an interrupted or failed update or a severe camera error the camera may enter a state where the MVF-2 is not responsive, and the camera does not display proper images. In this case use the side display to enable WiFi, connect to the camera and reinstall the update using the Web Remote.