

# ALEXA 35 ALEXA 35 Live

## Software Update Package SUP 2.2.0

### RELEASE NOTES

January 7, 2024



# Overview

We are pleased to announce the release of ALEXA 35 Software Update Package SUP 2.2.0. This update is compatible with all ALEXA 35 cameras (ALEXA 35 and ALEXA 35 Live) and can be downloaded from the [Software Update Packages for Cameras](#) webpage.

The update introduces support for the new ARRI Ensō Prime lenses and ARRI Ensō Vintage Elements, along with a unique Diopter Compensation feature, which calculates the actual focus distance by accounting for how much a Signature Impression V filter, Ensō Vintage Element or front diopter alters the optical properties of the lens. The “EVF Lifted Black” feature makes shooting in very dark environments easier. A calibration of all lens motors can be triggered by a new user button and the “Hand Unit Nudge” feature facilitates silent and efficient communication between camera operator and focus puller. Updated processing status icons on the viewfinder or SDI outputs provide a more detailed account of the chosen image processing settings. Additionally, the SUP includes bug fixes and stability improvements.

Please review these release notes carefully, including the known issues section, and consult the updated user manual for ALEXA 35 SUP 2.2.0 to ensure optimal camera operation. We strongly recommend for all customers to update to this version. However, we advise against performing the update during active production.

## New Features in SUP 2.2.0

- Support for ARRI Ensō Prime lenses and ARRI Ensō Vintage Elements
- Diopter Compensation
- EVF Lifted Black + User Button
- Updated Processing Icons in Status Info
- User Button “Calibrate all Lens Motors”
- User Button “Hand Unit Nudge”

## Peripheral Updates

The following peripheral software and firmware versions are included with SUP 2.2.0:

- |                          |       |
|--------------------------|-------|
| • LPL Mount (LBUS)       | 1.58  |
| • PL Mount (LBUS)        | 1.99  |
| • PL Mount (Hirose)      | 1.99  |
| • EF Mount (LBUS)        | 1.14  |
| • Multi Viewfinder MVF-2 | 3.61  |
| • Camera Access Protocol | 1.13  |
| • MXF Library            | 4.3.5 |

## Software Compatibility

The following software versions for tools and accessories must be used to ensure full compatibility with ALEXA 35 SUP 2.2.0:

- |                                      |   |
|--------------------------------------|---|
| • ARRI Reference Tool:               | 1.7.0                                     |
| • Camera Control Monitor CCM-1:      | 5.5.2                                     |
| • Audio Extension Module AEM-1:      | V1.1G                                     |
| • LPS-1 Fiber Camera Adapter:        | 1.0.0                                     |
| • LPS-1 Fiber Base Station:          | 1.0.0                                     |
| • Skaarhoj RCP Pro:                  | ARRI Core 1.0.3-pre2 / Reactor 2.1.2-pre6 |
| • CODEX Device Manager:              | 7.4.1                                     |
| • Blackmagic Design DaVinci Resolve: | 19.1.1                                    |

A comprehensive list of third-party software and their compatibility with the ALEXA 35 is available on the [ALEXA 35 Workflow](#) webpage. Always ensure you are using the latest version of any third-party software.

## Sample Footage

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

## Registration

If you haven't registered your camera yet, please ensure you do so through our online customer registration. Registering your camera guarantees you'll receive notifications about future software updates as soon as they're released. Additionally, if you register your new camera within one month of purchase, you'll receive a complimentary one-year extended warranty. To register, visit the [Product Registration](#) webpage.

## New Features

### Diopter Compensation (BETA)

Optical filters such as ARRI Ensō Vintage Elements, Signature Impression V filters or front diopters change the optical properties of the lens and thus the actual focus distance. This feature calculates the corrected focus values based on the properties of the lens and filter as well as the original distance data and displays them in the camera and on connected hand units such as the Hi-5. This allows the user to see the actual focus distance instead of the original scale values of the lens, which are inaccurate due to the diopter/filter. All relevant data, including the corrected focus values, original values, and filter type, is stored in the clip metadata.

You can provide feedback on this beta feature at the following address: [betafeedback@arri.de](mailto:betafeedback@arri.de)

System	Lens & ECS	Diopter Compensation	
		Diopter Type	Enso Vintage Element
Setup	Calibrate		
User Butt	LBUS Len	Diopter Selection	VE 350N
	Radio	Shim Thickness	0.00 mm
Metadata	Focus Un	Diopter Compensation	<input type="checkbox"/>
Lens & EC	Diopter C		
Info	Enable L		

### EVF Lifted Black

This feature enhances image visibility in low-light environments by subtly raising black levels in the EVF image. It can be enabled permanently or toggled on and off quickly through a user button, offering flexibility for different shooting conditions

### User Button “Calibrate all Lens Motors”

This user button initiates calibration of all connected focus, iris, and zoom motors simultaneously. Press and hold for 3 seconds to start the calibration; press during the calibration to cancel.

### User Button “Hand Unit Nudge”

This user button triggers a vibration on all connected Hi-5 hand units, providing a silent, tactile nudge or cue for seamless communication during operation. This functionality is useful for discreet communication on set, allowing the camera operator to signal focus pullers or other crew members without verbal or visual cues.

### Updated Processing Icons in Status Info

The processing icon in the status info of the EVF and SDI1/2 outputs has been enhanced. Previously, the icon only indicated whether the output processing was set to “Look” or “LogC4”. It now provides more precise information, such as displaying the exact color space (e.g., 709, 2020, HLG, PQ) for SDI outputs.

## Bug Fixes and Stability Improvements

As always, this release contains many bug fixes and stability improvements, the most important ones being:

- 144° are now included as a default preset in the shutter list
- Fixed a bug that prevented to select Enhanced Sensitivity via the Hi-5
- Fixed a bug related to boot-up issues with certain 290Wh batteries
- Fixed a bug related to Look Intensity not being saved in clip metadata
- Fixed bug related to frame grabs in UHD having faulty lines with vertical mirroring
- Fixed a bug that resulted in corrupted DPX frame grabs
- Resolved an issue where pressing the 'M' button on the CCM-1 unintentionally triggered the menu on the MVF-2 monitor

- Resolved an issue where closing the menu on the CCM-1 would cause the menu to open on the MVF-2

## Update Procedure

The camera is updated via a USB-C memory stick and the process can be initiated either through the MVF-2 viewfinder menu or the camera Web Remote. When the MVF-2 viewfinder and the lens mount are connected to the camera, they will automatically update during the camera update. If they were not connected at that time, they can be updated individually through the camera later. If you are using the camera Web Remote to perform the update, it is recommended to use a 'private' or 'incognito' browser window to avoid potential issues or unexpected behavior.

1. After downloading the update file from the [Software Update Packages for Cameras](#) webpage, double-click the downloaded .zip file to unpack it, or unpack it manually. This will extract two update files to your computer (\*.SWU and \*.lic).
2. If not done beforehand, prepare the USB-C memory stick for use with the ALEXA 35 by connecting it to the camera. Then, go to *MENU > Media > Prepare USB Medium...* on the MVF-2 viewfinder menu or the Web Remote and press *CONFIRM*. This will create the required folder structure on the USB-C stick.
3. Connect the USB-C stick to your computer.  
Place the downloaded \*.SWU file in the *ARRI/ALEXA35/SUP* folder.  
Place the downloaded \*.lic file in the *ARRI/ALEXA35/LICENSES* folder.
4. The camera Software Update Package includes updates not only for the camera body but also for the MVF-2 viewfinder and the lens mount. Therefore, ensure that the MVF-2 viewfinder and the lens mount are connected to the camera during the update process.
5. Ensure the camera is connected to a power supply or powered by a fully charged battery to prevent power loss during the update.
6. Perform a factory reset on the camera with the menu item *MENU > Setup > Factory Reset...*
7. Connect the USB-C stick to the camera and navigate to the menu item *MENU > System > Update > Update Camera...*
8. Select the SUP file from the list and start the installation.  
The MVF-2 as well as the camera side display will show a screen displaying the update progress. Please note, that the update can take up to 20 minutes.  
The MVF-2 viewfinder may turn off during the update process and will not provide continuous visual feedback, refer to the camera side display for the update status in this case.  
Do not power off or unplug the camera until it has rebooted.  
After the update process has finished, a success message is displayed.
9. Ensure that the correct time zone is set in *MENU > System > System Time & Date*.
10. If the MVF-2 viewfinder or lens mount were not connected during the update, the camera will still store the updated software for these devices. The next time they are connected and have an older software version than the one stored in the camera, the camera will prompt you to update them.

In the rare event of an interrupted or failed update the camera may enter a state where the MVF-2 is unresponsive. In this situation, use the side display to enable Wi-Fi, connect to the camera, and reinstall the update using the Web Remote.

### Update of Accessories

The camera update does not update the following devices, which must be updated separately. Update files for these devices must be downloaded individually from the ARRI [Software Packages](#) webpage.

Camera Control Monitor (CCM-1):

Download the update file, copy it to a USB-C stick (root folder), and connect the stick to the CCM-1. Disconnect the CCM-1 from the camera, then navigate to *Menu>Firmware>Update* on the CCM-1 and select the file to start the update.

Audio Extension Module (AEM-1):

Download the update, copy it to a USB-C stick (root folder), and connect the stick to the AEM-1. On the AEM-1, initiate the update via *MENU>SETUP>UPDATE* and confirm with YES.

LBUS Devices (e.g., Lens Motors):

Download the corresponding update file and copy it to the ARRI/ECS/ folder on a USB-C stick.

Insert the stick into the camera, connect the LBUS device via the LBUS connector, and initiate the update through *MENU>System>Update>Update LBUS Devices*.

### **Downdating the Camera**

It is possible to downgrade an ALEXA 35 to a previous software release. However, please note that ALEXA 35 Live is not compatible with any software version earlier than SUP 2.0.0.

## **Known Issues in SUP 2.2.0**

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

The Camera Control App does not support to specify the frame rate for the “FPS Preset” user button.

### **Boot Loop on WCU-4 with Certain /i Lenses**

Connecting certain lenses using the Cooke /i protocol may cause the WCU-4 to enter a boot loop.

To resolve this issue, deactivate the lens mount and use lens tables instead.

### **Missing or Incorrect Lens Scales with Certain /i Lenses**

Some lenses using the Cooke /i protocol may fail to transmit lens data or lens data is displayed inaccurately.

To resolve this issue, deactivate the lens mount and use lens tables instead.

### **Radio Interface Adapter RIA-1 Update via CAM Connector Fails**

When updating the RIA-1 by connecting its CAM port to the ALEXA 35 and running the update from the camera, the process may occasionally fail. In such cases, the update can instead be performed via an LBUS connection.

### **Hand Unit Nudge only functional via built-in radio**

The Hand Unit Nudge function does not work if the hand unit is connected to the camera in any way other than through the camera's built-in white radio.

### **Incorrect Diopter Compensation When Enabled on Both Hi-5 and ALEXA 35**

When using a Hi-5 hand unit with an ALEXA 35, enabling diopter compensation on both the Hi-5 and the camera simultaneously will result in incorrect calculations. To avoid this, activate diopter compensation only on the ALEXA 35. The camera will calculate the corrected values and transmit them directly to the hand unit.

### **SDI Format Limitation with ProRes 3K 1:1**

The ProRes 3K 1:1 sensor mode does not support SDI output in 422 3G HD. Instead, please use 422 1.5G or 444 3G as alternative output formats.

### **Frame Lines Displayed in Surround View with Master Magnification**

When using master magnification in conjunction with surround view, frame lines may appear in the surround area at certain magnifications, even though they 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.

### **Cut-off Playback Image when using Magnification**

When using magnification with surround view enabled, the playback image may display a cropped version of the original capture. This means that the playback view may show less than what was recorded and visible on the outputs during recording or standby.

### **Limited Clip Availability via Camera Access Protocol (CAP)**

When playback is controlled via CAP, only the first 270 clips on the card can be selected. To access additional clips, use the MVF-2, the camera's side display, or the Web Remote.

### **Temporary Unresponsiveness After Playback or 'Check Last Clip'**

After exiting playback, whether initiated via the PLAY button, 'Check Last Clip,' or the 'Playback' User Button, the camera may momentarily become unresponsive to inputs. This issue typically resolves within a maximum of four seconds, and the camera will return to its normal state.

**Lower Headphone Output in Playback**

When playing back a clip with audio, the headphone output on the MVF-2 is 3dB lower than during live recording.

**Prerecording Requires a User Button**

Prerecording can only be toggled on or off using a User Button. If the device with the assigned User Button is unavailable and prerecording remains active, start a regular recording and then remove the drive from the camera. This will cause the recording to fail, deactivating prerecording in the process.

**Web Remote Missing Some Options**

In some menus, drop-down lists may not display all available options. To access them, click on the empty list to make the options appear.

**LPS-1 Camera Channel Number Resets to Camera Index After Reboot**

In an LPS-1 environment, rebooting the camera/fiber camera adapter, or Fiber Base Station causes the camera channel number to reset and display the camera index instead. To restore the correct camera channel number, reassign it via the Fiber Base Station menu or the LPS-1 Web Interface.

**CCM-1 Timecode Options**

The timecode menu of the camera has been updated; however, these updates have not yet been implemented in the CCM-1. As a result, it is not possible to set the LPS-1 System as the timecode source via the CCM-1.

**BNC Connectors Breaking**

Some BNC connectors on the ALEXA 35 may break off if the cable is removed at too steep of an angle. To prevent this, ensure cables are pulled out straight.

Please note: This issue affects cameras with serial numbers between 62000 and 62400.

If a connector breaks, it can be replaced by the customer, rental company, dealer, or ARRI service.

Replacement connectors can be ordered free of charge from ARRI service.

For guidance on replacing connectors, please refer to this video:

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