

# cforce mini RF SUP 2.1

Software Update Package (SUP) 2.1

RELEASE NOTES

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# A. Introduction

This software update package, cforce mini RF SUP 2.1, contains major changes from the previous cforce mini RF SUP 2.0.3. Those changes and the new features are a result of direct feedback from users. This is an important update for the ECS ecosystem and it provides a big improvement in the overall system stability. We are happy to introduce numerous new features and updates to enhance your on-set experience.

This SUP is released as a combined update with the LCUBE CUB-1 and it is important to also update the CUB-1 to SUP 3.0 when working with this firmware. The latest firmware can be downloaded from the ARRI webpage: <u>arri.com/sups</u>

We recommend updating the following products to the latest firmware versions and at least to the firmware stated below:

Product	Firmware Version
Hi-5	2.1.0
ZMU-4	1.1.0
RIA-1	2.1.0
SXU-1	2.1.2
WCU-4	3.3.20
Master Grip	2.0.2
OCU-1	2.0.2
cforce mini RF	2.1.0
LCUBE CUB-1	3.0.0

Please take your time to go through this document before using the cforce mini RF. For more information about this and previous releases, please visit:

https://www.arri.com/en/technical-service/firmware/software-updates-ecs/software-update-for-cforce-mini-rf

#### **Overview of New Features**

- Focusbug License Support via CUB-1
- Cinefade License Support
- Encoder Mode
- Radio Host support for ALEXA Mini LF and ALEXA 35
- Lens motor calibration via calibrate all

# B. New Features with SUP 2.1

#### Focusbug License Support via CUB-1

A cforce mini RF in Host mode will unlock the full capabilities of the Hi-5 Focusbug license when a Focusbug Cine RT in ARRI Hi-Speed serial setting is connected to the system with the LCUBE CUB-1 running SUP 3.0.

This enables not only the use of the ARRI Hi-Speed serial protocol but in addition enables modification of the following features on a connected Hi-5 with an active Focusbug license:

- Field of View
- $\circ \quad \text{Source Selection} \quad$
- Film Plane Offset
- o Sensitivity
- Limits Set/Disable/Clear
- Lockouts Set/Disable/Clear
- Crossover Distance Value/Toggle
- o 2x View
- Sync Mode

The Focusbug License Key for Hi-5 is available via the ARRI license shop: <u>https://alshop.arri.de/</u>

#### **Cinefade License Support**

Previously only a RIA-1 acting as the radio host was able to forward all data required for the VariND, Rotapola and Cinefade Effect to a Hi-5. All those functions are now available if the cforce mini RF is used as the radio host. On a Hi-5 with an active Cinefade license the following features are now available:

- VariND control via Hi-5 force pad or user buttons
- Rotapola control via Hi-5 force pad or user buttons
- Cinefade Effect trigger on/off and control
- Optical safe range on/off. Limits the range of usable ND filter from 0.4 to 1.9 (5 T-Stops)

The Cinefade License Key for Hi-5 is available via the ARRI license shop: <u>https://alshop.arri.de/</u>

#### **Encoder Mode**

The cforce mini RF motor now features an encoder mode. This mode allows the lens axis held by a lens motor to be rotated manually, by hand, while still allowing lens data from custom lens files to be recorded and displayed. Setup:

- Attach the motor as usual and connect it to the LBUS daisy chain
- Load a Lens File
- Calibrate Motor
  - Calibrate > all via Hi-5<sup>1</sup>
  - Calibrate > all via ARRI ALEXA cameras
  - Calibrate > all via RIA-1
  - Calibrate on motor directly by pressing & holding the motor button until the motor starts calibrating
- Make sure the motor is not controlled by any control device e.g. by deactivating the corresponding axis in the Hi-5

The motor LED will flash red / green if everything is set up properly, indicating that the motor is calibrated, but not assigned to a control axis on a hand unit.

The motor LED will turn solid green and the display shows ENCODER as soon as the lens axis is rotated manually – indicating an active encoder mode.

<sup>1</sup> Calibrate > all via the Hi-5 will only calibrate motors which are currently controlled by a hand unit on ALEXA Mini and older cameras. To calibrate a lens motor in Encoder Mode, use one of the other methods to calibrate the motor or activate the corresponding axis in the Hi-5 for calibrating.

#### Radio Host support for ALEXA Mini LF and ALEXA 35

The cforce mini RF can now be used as a radio host on ALEXA Mini LF (SUP 7.3 or newer) and ALEXA 35 cameras by connecting the cforce mini RF CAM port to the camera LBUS port. Camera control as well as lens metadata transfer is supported by this single connection.

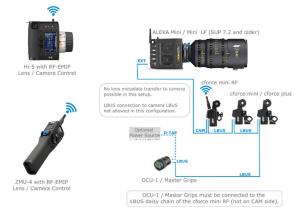
#### Camera Control improvements in Host mode

If a cforce mini RF motor in Host mode is connected to an ALEXA Mini LF (SUP 7.3 or later) or an ALEXA 35 full camera control (Recording parameters and SDI 1 parameters) is now available, regardless of connection method.

#### **Overwrite capability in Host mode**

The cforce mini RF in host mode supports the override functionality of the OCU-1 and Master Grips in the system, but some setup precautions must be considered:

#### ALEXA Mini or ALEXA Mini LF (SUP 7.2 or older)



Please connect the cforce mini RF via the CAM – EXT cable. This ensures all OCU-1 or Master Grip features are working. Don't connect the LBUS side of the motor to the camera LBUS.

Lens Metadata transfer from non LDS or /i lenses to the camera is not supported in this configuration.

#### ALEXA 35 or ALEXA Mini LF (SUP 7.3 or later):



Connect the cforce mini RF to the camera via a CAM – LBUS cable and connect an OCU-1 or Master Grip to the motor LBUS daisy chain. Don't connect the LBUS side of the motor to the camera LBUS. Camera control and lens metadata are already transmitted via the CAM – LBUS connection.

CAM – EXT to camera is theoretically supported in conjunction with an ALEXA Mini LF with the limitations as stated above.

CAM – LBUS connection is recommended.

#### 3<sup>rd</sup> Party Camera with Cine Lens



Connect the cforce mini RF to the camera via the according CAM cable and connect an OCU-1 or Master Grip to the motor LBUS daisy chain.

Camera control for Sony Venice and RED cameras is supported with the Hi-5 license and the existing camera control CAM cables.

Please see the cforce mini RF manual or the ARRI website for more setups and configurations.

#### Lens motor calibration via calibrate all

A *calibrate all* command triggered from an ECS hand unit now calibrates all F / I / Z motors connected to the ALEXA Mini LF or ALEXA 35. This includes motors that are assigned to another control unit, that are completely unassigned, or in encoder mode. In the past, only the lens motors that were actively controlled by the corresponding ECS hand unit were calibrated. An AUX motor must always be calibrated manually and will not be calibrated via *calibrate all*.

# C. Bugfixes and stability improvements

This release contains many bugfixes and stability improvement, including the following:

- Connecting two hand units on the same radio channel to cforce mini RF and assigning them to the same axis will no longer lead to motor jitter
- When using the cforce mini RF in combination with a CUB-1 and a distance measure device, in some cases the measured value was multiplied massively
- An axis change could freeze the camera or leave the motor unresponsive. This has been resolved.

# D. cforce mini RF known issues

This is a current list of known issues of the cforce mini RF.

Please make sure to check section F for known issues related to the ECS ecosystem.

#### cforce mini RF in radio host mode on ALEXA Mini with CAM – EXT and optional LBUS – LBUS connection

If 3 or more lens motors are used in the system, there can be unstable motor control issues or reoccurring new motor pop ups when using a cforce mini RF in radio host mode on an ALEXA Mini camera in case the optional LBUS – LBUS for lens metadata transfer is connected.

Workaround: Don't connect the optional LBUS – LBUS on an ALEXA Mini when using 3 or more lens motors.

#### Manual calibration issues

Manual calibration is only possible in combination with an ECS motor controller and not, when connected to an ALEXA camera directly.

When using the manual calibration feature on the Hi-5, it might happen that after the manual calibration the scales are greyed out or in override catch mode while having full control of the motor.

Workaround: Perform another manual calibration or reboot the ESC system.

#### No camera control via LBUS-to-LBUS connection to cameras

The RIA-1 and cforce mini RF don't support camera control and playback features over LBUS. Always use the CAM connector when connecting to a camera.

ALEXA 35: Connect via CAM to LBUS.

ALEXA Mini LF: Connect via CAM to LBUS.

ALEXA Mini / AMIRA: Connect via CAM to EXT.

ALEXA Plus cameras: Connect via CAM to LCS.

Please check the ECS configuration guides on our website for more info.

#### Lens motor direction change

The standard lens motor direction of ALEXA cameras is left and it can happen that the lens motor direction is automatically changed to left when connecting an ALEXA camera to the RIA-1 or cforce mini RF LBUS or CAM port. Please check the motor direction after connecting an ALEXA camera.

# **E. Update Instructions**

#### How to get a Software Update Package

You can find the Software Update Package (SUP) in the cforce mini RF download section on:

https://www.arri.com/en/technical-service/firmware/software-updates-ecs/software-update-for-cforce-mini-rf

Download the latest Software Update Package to your computer.

#### **Update Procedure**

The cforce mini RF can be updated as LBUS device via Hi-5 (USB or ECS Sync App), WCU-4, UMC-4, ALEXA Mini, ALEXA Mini LF and ALEXA 35 cameras.

The following section provides details about updating the cforce mini RF via Hi-5 and an ARRI camera. Please refer to the owner's manual of the other devices for more details.

Caution: Update via CAM interface is not supported for cforce mini RF motors. Please update via the LBUS interface.

#### Update with Hi-5 via USB

#### The software can be updated using a USB-A or USB-C drive.

The USB-A slot is located below the display on the bottom of the Hi-5, covered by a plastic cap. Press the release pin to open the cover.

The USB-C slot is located above the display on the top side of the Hi-5, covered by a rubber cap. Lift and turn the rubber cap gently to access the USB-C slot.

Make sure the power supply of the Hi-5 is stable, e.g. by using a fully charged battery. Please note that power over USB is not recommended.

#### Preparing the USB Stick:

Copy the Software Update Package onto an USB memory stick in the folder ARRI/ECS/

#### Performing the Update:

- (1) Connect the cforce mini RF LBUS port to the Hi-5 via LBUS. (updating via CAM port is not supported!)
- (2) Connect the cforce mini RF to a power source (e.g. via CAM interface).
- (3) Turn the Hi-5 on.
- (4) Insert the USB stick in the corresponding USB slot of the Hi-5
- (5) Go to MENU > System > Update > LBUS Device Update.
- (6) Select the cforce mini RF motor you wish to update. The serial number is printed on the side of the motor.
- (7) Choose the desired Software Update Package and then press select to start the update.
- (8) Wait until the update process is finished.
- (9) Power cycle the cforce mini RF motor by disconnecting it from the power source.

Do not remove the USB Stick, unplug the motor or turn off the Hi-5 during the update.

#### Update with Hi-5 via ECS Sync App

The ECS Sync App connects to the Hi-5 via Bluetooth. The Bluetooth dongle must be connected to the lower USB-A port of the Hi-5.

#### Performing the Update:

- (1) Connect the cforce mini RF LBUS port to the Hi-5 via LBUS. (updating via CAM port is not supported!)
- (2) Connect the cforce mini RF to a power source (e.g. via CAM interface).
- (3) Ensure that Bluetooth is enabled on the Hi-5 via MENU > System > Bluetooth.

(4) Activate Bluetooth on your iOS device and add the Hi-5 to your device list (Hi-5 is shown as hi-5-xxxxx, with xxxxx being the serial number).

(5) Open the ECS Sync App. The app is now connected to your Hi-5 hand unit.

(6) Go to ARRI DEVICE > cforce mini RF xxxxx > Update to the latest SUP. The serial number is printed on the side of the motor.

- (7) Select Download and proceed the software update
- (8) Wait until the update process is finished.
- (9) Power cycle the cforce mini motor by disconnecting it from the power source.

Caution: Do not leave the app during the update!

#### Update with ALEXA Mini, ALEXA Mini LF and ALEXA 35

#### Precautions:

Have the ALEXA running with a stable power source during the update.

#### Preparing the USB Stick:

Copy the Software Update Package onto an USB memory stick in the folder ARRI/ECS/

#### Performing the Update:

- (1) Connect the cforce mini RF LBUS port to the camera LBUS port. (updating via CAM port is not supported!)
- (2) Connect camera to a stable power source (e.g. AC power supply and on-board battery).
- (3) Connect the USB stick to the camera.
- (4) In the camera menu, go to MENU > System > Update > LBUS.

(5) Select the cforce mini RF that you wish to update and press the jog wheel. A confirmation screen is displayed. Press CONFIRM to start the update.

(6) Choose the desired Software Update Package and then press the two UPDATE soft buttons simultaneously to start the update.

- (7) Wait until the update process is finished.
- (8) Power cycle the cforce mini RF motor by disconnecting it from the power source.

Caution: Do not remove the USB stick or turn off the camera during the update!

## F. ECS Ecosystem Known Issue Data Base

This list shall be a data source for known issues of the ARRI ECS ecosystem and help during trouble shooting. Please make sure that each device is updated to the latest firmware and always make sure to read the corresponding release notes and manual of each device.

The latest firmware can be downloaded from the ARRI webpage: arri.com/sups

#### **Hi-5 General Issues**

#### ALEXA 35: Not possible to set Enhanced Sensitivity (ES) via Hi-5

Currently it is not possible to select Enhanced Sensitivity Modes on the Hi-5. Those El values must be selected on the camera via User Button, Viewfinder or Webremote.

#### Radio state shows "REJ" shortly with RF-2400

When using a RF-2400 module for the first time or after a factory reset, the radio state is shortly displayed as "REJ". This is part of the initialization sequence of the Radio Module and only a visual irritation without further impact.

#### SDI status information can't be set to "safe"

This SDI setting is currently not settable via hand units as it is not transmitted by ALEXA Mini/Mini LF. For ARRI ALEXA models, SDI "safe" does not exist. Please set the "safe" option on the camera.

#### No lens scale via LDA

In rare cases, a camera does not load a LDA file properly, resulting in no lens scales on the Hi-5. Clear and reload the lens file in that case.

<u>A calibration process is briefly indicated, when skipping calibration</u> When skipping a calibration request the hand unit might briefly indicate a calibration. This does not affect operation.

#### Blinking iris motor trail and depth of field bar

In some cases when connected to a RIA-1, it could happen that the iris motor trail bar is blinking sporadically, which results in a very wide depth of field bar. Turning the focus knob resets the depth of field bar to its actual depth.

#### Hi-5 can't connect to camera with EMIP radio module

It rarely happens that the Hi-5 can't connect to a camera via the EMIP radio module. The Hi-5 shows the radio connection indication bars greyed out. Unplug the radio module and reconnect it to the Hi-5 in this case.

#### Calibration cannot be skipped, when switching between LDA and LDS

In some cases, after calibrating an LDS lens, a subsequent switching to an LDA file results in a non-skippable calibration request. This can't be fixed on the Hi-5, as some cameras handle this like a lens change and request a mandatory motor calibration.

#### Global Unit of camera is not synchronized with Hi-5 when using LDA

With some lens files the "Global unit" on the camera may differ from the unit shown at the Hi-5, as some LDA files don't contain both scales (meters and/or feet).

Switching the global unit in the camera menu, will only switch the camera's display unit, but this change will not be passed on to the Hi-5.

Change the unit on the Hi-5 in the menu LENS > DISPLAY UNIT.

#### USB-A doesn't always work

Occasionally it happens that a USB stick is not recognized by the Hi-5 hand unit (USB indication missing on the LDD screen). Remove and reconnect the USB device in that case. Make sure that no USB device is connected to the other USB slot of the Hi-5.

#### Editing a lens-file from 'recent' list not possible

It is currently not possible to edit a lens file when it is selected from the 'recent' list. Please select the file from the browser instead.

#### Starting Recording from Playback does not exit playback

On an ALEXA 35 when a recording is started while the camera is in Playback the Playback mode may not be exited. Always leave playback before starting a recording.

#### OCU-1 User Buttons do not work when hardwired to Hi-5

When a OCU is wired to a Hi-5, the assigned User Buttons cannot be used.

#### After LBUS update via Hi-5, external device may need to be power cycled to reconnect

After performing a wired update to a LBUS device from the Hi-5 sometimes the connection is not reestablished after the update has concluded. Power cycle the device to establish a connection.

#### RF-2400 Radio Module not working after using them in an ARRI TRINITY 2 RCP-3

If the RF-2400 have been used in an ARRI TRINITY 2 Remote Control Panel RCP-3, they must be reconfigured to be ARRI ECS compatible. This is easily done by attaching them to a Hi-5 and waiting for about 10 seconds. As soon as they start working with the Hi-5 again, they are reconfigured and can be used in the Hi-5 ecosystem. This process must be done via the Hi-5 as the RIA-1 and ZMU-4 can't reconfigure the radio modules.

#### **Hi-5 Power Issues**

#### Hi-5 reboots endlessly when powered via USB-C

In very rare cases the Hi-5 screen and blue status LED starts flickering, and the Hi-5 tries to reboot without success. This can occur when the Hi-5 is supplied via USB-C from a device with insufficient power rating. (e.g. when connected to a PC USB-port.)

Remove the USB-C cable and restart the Hi-5 with a battery inserted.

#### Power only via USB-C - Hi-5 vibration stops working

In some cases, when using the Recording beeper, the Hi-5 will not vibrate but beeps instead, when supplied only via the USB-C port. Power the Hi-5 with a battery in that case.

#### Hi-5 doesn't start (stuck on ARRI logo) when powered via USB-C

In very rare cases, powering the Hi-5 via USB may cause a corrupted file system on the Hi-5, which results in a stuck booting phase when unplugging.

If possible, shut off the Hi-5 before unplugging the USB-C Cable. If the issue occurs, boot into recovery mode (center and right soft button), wait for the display to light up and then reboot. If this doesn't work, remove the battery, and wait for the Hi-5 to shut down.

#### Wrong capacity indication of new battery pack

When using a brand-new smart battery for the first time (Li-Ion Battery Pack LBP-3500), the battery capacity status indicates a wrong percentage on the Hi-5 display.

This is a normal behavior for a smart battery. The real capacity is determined during its first discharge cycle.

#### **RIA-1 General Issues**

#### Override issues with OCU-1 or Master Grips

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

- 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 RIA-1 in client mode.
- It is currently not possible to use the override function when the RIA-1 is connected to an ALEXA Mini with the optional LBUS LBUS connection.
  Workaround: Connect the RIA-1 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).

#### Manual calibration issues

Manual calibration is only possible in combination with an ECS motor controller and not, when connected to an ALEXA camera directly.

When using the manual calibration feature on the Hi-5, it might happen that after the manual calibration the scales are greyed out or in override catch mode while having full control of the motor.

Workaround: Perform another manual calibration or reboot the ESC system.

#### No camera control via LBUS-to-LBUS connection to cameras

The RIA-1 and cforce mini RF don't support camera control and playback features over LBUS. Always use the CAM connector when connecting to a camera.

ALEXA 35: Connect via CAM to LBUS.

ALEXA Mini LF: Connect via CAM to LBUS.

ALEXA Mini / AMIRA: Connect via CAM to EXT.

ALEXA Plus cameras: Connect via CAM to LCS.

Please check the ECS configuration guides on our website for more info.

#### Lens motor direction change

The standard lens motor direction of ALEXA cameras is left and it can happen that the lens motor direction is automatically changed to left when connecting an ALEXA camera to the RIA-1 or cforce mini RF LBUS or CAM port. Please check the motor direction after connecting an ALEXA camera.

#### Blocked lens axis when using OCU-1 or Master Grips

Please ensure that the OCU-1 or Master Grips are updated at least to SUP 2.0.2. When using an OCU-1 or Master Grip in a wireless configuration on a ZMU-4 or RIA-1 (client), please ensure that no User Button is assigned to F/I or FIZ toggle.

#### RF-2400 Radio Module not working after using them in an ARRI TRINITY 2 RCP-3

If the RF-2400 radio modules had been used in an ARRI TRINITY 2 Remote Control Panel RCP-3, they must be reconfigured to be ARRI ECS compatible. This is easily done by attaching them to a Hi-5 and waiting for about 10 seconds. As soon as they start working with the Hi-5 again, they are reconfigured and can be used in the Hi-5 ecosystem. This process must be done via the Hi-5 as the RIA-1 and ZMU-4 can't reconfigure the radio modules.

#### Deactivate Smart Focus Ring Auto Detection when connecting via RS to Sony Venice cameras

As the Sony Venice cameras don't send the REC / tally status via RS, it could happen that a smart focus ring becomes deactivated during REC.

Therefore, it is recommended to deactivate the automatic smart ring detection in the Hi-5 when connecting to a Sony Venice camera with a CAM – RS cable.

There is no issue when using the CAM – Sony Ctrl cable.

#### **RIA-1 Updating**

Update via LBUS is not possible with a connected USB-C stick

Currently RIA-1 can only be updated via LBUS if no USB stick is connected to the RIA-1. **Workaround:** Remove the USB-C stick before updating via LBUS or update RIA-1 per USB.

#### Update via LBUS triggers failure warning

When updating the RIA-1 via LBUS with an ALEXA camera, it might happen that the update fails, and the camera shows an update failed warning. Workaround: Update the RIA-1 via USB-C.

#### **RIA-1 Update duration via LBUS**

If using a camera or a hand unit to update the RIA-1 over LBUS, the update duration is slower compared to the USB-C update and takes 2-3 minutes.

**Workaround:** Update the RIA-1 via USB-C.

<u>Update via LBUS triggers failure warning</u> When updating the RIA-1 via LBUS with an ALEXA camera, it might happen that the update fails, and the camera shows an update failed warning. **Workaround**: Update the RIA-1 via USB-C.

#### Update file not found on USB-C drive

The RIA-1 can only see up to 9 update files on the USB drive. Please make sure to clear old SUP versions or use an empty USB-C drive.

#### cforce mini RF

#### cforce mini RF in host mode on ALEXA Mini with CAM – EXT and optional LBUS – LBUS connection

If 3 or more lens motors are used in the system, there can be unstable motor control issues or reoccurring new motor pop ups when using a cforce mini RF in radio host mode on an ALEXA Mini camera in case the optional LBUS – LBUS for lens metadata transfer is connected.

Workaround: Don't connect the optional LBUS – LBUS on an ALEXA Mini when using 3 or more lens motors.

#### Manual calibration issues

Manual calibration is only possible in combination with an ECS motor controller and not, when connected to an ALEXA camera directly.

When using the manual calibration feature on the Hi-5, it might happen that after the manual calibration the scales are greyed out or in override catch mode while having full control of the motor.

Workaround: Perform another manual calibration or reboot the ESC system.

#### No camera control via LBUS-to-LBUS connection to cameras

The RIA-1 and cforce mini RF don't support camera control and playback features over LBUS. Always use the CAM connector when connecting to a camera.

ALEXA 35: Connect via CAM to LBUS.

ALEXA Mini LF: Connect via CAM to LBUS.

ALEXA Mini / AMIRA: Connect via CAM to EXT.

ALEXA Plus cameras: Connect via CAM to LCS.

Please check the ECS configuration guides on our website for more info.

#### Lens motor direction change

The standard lens motor direction of ALEXA cameras is left and it can happen that the lens motor direction is automatically changed to left when connecting an ALEXA camera to the RIA-1 or cforce mini RF LBUS or CAM port. Please check the motor direction after connecting an ALEXA camera.

#### Legacy ARRI cameras

#### General advice when using an ECS motor controller with ALEXA cameras

Always wait until ALEXA cameras are fully booted before using ARRI ECS. The ECS motor controllers boot much faster than an ALEXA camera which might lead to inconsistencies, if lens files are transferred or motors are calibrated during the camera boot up phase.

In addition, clip list handling requires lots of wireless data and the clip list transfer and clip list handling can be slow if more than 50 clips are stored on the CODEX drive. Please avoid long clip lists if possible.

#### No codec information with legacy cameras

There is no codec information with ARRI legacy cameras. This issue can't be fixed and was apparent also with the WCU-4, as ARRI legacy cameras don't transmit this information to hand units.

#### Truncated custom tint with legacy cameras

ARRI legacy cameras (e.g. ALEXA LF) do not support decimal values for custom tint. The custom tint will instead get truncated to the closest value.

#### Legacy Cameras - No LDA file transfer

LDA transfer to a legacy camera (ALEXA LF / SXT) is not possible. Use an SD Card to transfer the LDA files to the camera

#### **RED cameras**

#### General advice:

For the RED camera control license, depending on the type of RED camera (DSMC2, DSMC3), a specific baud rate must be selected in the camera settings. Please see the following table for baud rate setting for specific RED cameras:

	Baud rate
DSMC2: Dragon / Gemini / Helium / Monstro	115200
DSMC3: Komodo, V-Raptor	460800

#### RED cameras: pre-record doesn't work from Hi-5

When using a cforce mini RF or RIA-1 with the Hi-5, the pre-record function of RED cameras is not supported by the Hi-5.

Please activate pre-recording via camera or assign a user button on the RED camera to Start/Stop.

#### RED Komodo: Playback manipulation not possible

FFW and FBW in playback mode is not supported by RED Komodo.

#### Sony cameras

#### Sony Venice 1&2 no clip list, no progress bar

The camera does not transfer the whole clip list table via the remote interface, only one clip is shown at a time. The progress bar has no function as the current time of the clip is not transferred either.

#### Sony Venice 1&2 Hi-5 jumps to cam screen in between clips

When browsing or changing clips in playback mode, the camera sends a standby signal in between clips, for this reason the hand unit jumps back to the cam screen in between clips.

#### Sony Venice 1&2 user buttons not supported

The camera user buttons are not accessible via Hi-5, as the camera does not support this feature via the remote interface.

#### Sony Venice 1&2: FPS setting accessible with active "fixed FPS"

The FPS setting is always accessible via Hi-5, as the camera does not transport information about a fixed FPS over the remote interface. Changing the frame rate on the Hi-5 in fixed FPS has no effect on the FPS setting in the camera! **Workaround**: Set FPS to variable in the camera.

#### Sony Venice 1&2 camera info not supported

The camera info is not accessible via Hi-5, as the camera does not transport this information over the remote interface.

#### Sony Venice 1&2: Settings greyed out even when RCP mode is toggled

In some cases, it can occur that camera settings on a Hi-5 are greyed out and cannot be changed by the hand unit, even with active RCP mode. Power cycle the ECS system to regain settings control.

#### Deactivate Smart Focus Ring Auto Detection when connecting via RS to Sony Venice cameras

As the Sony Venice cameras don't send the REC / tally status via RS, it could happen that a smart focus ring becomes deactivated during REC.

Therefore, it is recommended to deactivate the automatic smart ring detection in the Hi-5 when connecting to a Sony Venice camera with a CAM – RS cable.

There is no issue when using the CAM – Sony Ctrl cable.

#### Focusbug Cine RT

#### Clear All Focusbug CineRT marks via RIA-1

There is an issue that the Clear All > All marks command doesn't clear Focusbug Cine RT marks.

**Workaround:** Focusbug marks can be cleared on the Hi-5 via Clear All > Focusbug or individually by rotating the focus knob to the mark position and pressing the *Mark F* Display button. It is also possible to use the Cine RT handset to clear Focusbug Cine RT marks.

#### Deactivated Focus Ring when using Focusbug Cine RT and Cinefade in one setup

Currently, an active Focus Ring becomes deactivated when engaging focus tracking in a setup with Focusbug Cine RT and a Cinefade device being connected to the RIA-1 LBUS port.

Workaround: Set focus ring to blank ring to avoid a mismatch of the focus ring and focus scale.

#### No distance value shown on the Hi-5 or Focusbug license not working

If a distance measure device is connected to the RIA-1, but no distance value is shown, check if the correct serial mode is set in the RIA-1.

**Serial Mode > UDM:** Use this setting when connected to a ARRI's Ultrasonic Distance Measure (UDM-1) or a CineTape Measure Control.

**Serial Mode > Focusbug**: Use this setting when connected to a Focusbug Cine RT via ARRI Hi-Speed protocol. Make sure that the ARRI Hi-Speed protocol is also activated in the Cine RT handset.

#### Cinefade

#### Cinefade: Filter slightly jittering with LDS lenses

In some setups with LDS lenses, the Cinefade might jitter slightly on its own, while not being controlled. The issue does not occur when using a LDA table.

#### Cinefade Vari ND mode does not respect optical safe range

When using the Cinefade in Vari ND mode the optical safe range is not considered.