



RIA-1 SUP 1.0.0

Software Update Package SUP-RIA-1.0.0_20220720.cmf

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RELEASE NOTES

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A. Introduction

This is the initial software release of the Software Package SUP 1.0.0 for the ARRI Radio Interface Adapter RIA-1.

The RIA-1 is a hub for the Hi-5 ecosystem. It is capable of functioning as a radio receiver, transmitter, or motor controller. The RIA-1 is a high versatile component of the Hi-5 ecosystem. It is compact, robust, and supports ARRI's exchangeable radio modules. Furthermore, it provides multiple connection possibilities to control ARRI or third-party cameras and lenses. In addition, the RIA-1 supports common distance measurers via the serial interface.

The RIA-1 main features are:

- Supports ARRI's exchangeable radio modules:
 - RF-EMIP Radio Module 2400 MHz DSSS
 - RF-2400 Radio Module 2400 MHz FHSS
 - RF-900 Radio Module 900 MHz FHSS* will be released with a later SUP
- Functions as a receiver, transmitter, or motor controller
- Can be used for camera control and lens control
- Compatible with ARRI and third-party cameras
- Wireless expansion for many LBUS and LCS devices
- Serial interface for common distance measurers
- Compact design and rugged build quality

*Approved for use in USA & Canada only

Several devices require an update to be compatible with the RIA-1. We recommend updating the following products to the latest firmware versions and at least to the firmware stated below:

Product	Minimum Firmware Version
Hi-5	1.2.0
SXU-1	2.1.2
WCU-4	3.3.20
Master Grip	2.0.2
OCU-1	2.0.2
Cforce mini RF	2.0.2

Please take your time to go through this document and the operating manual before using the RIA-1. For more information, please visit: <https://www.arri.com/ria-1>

B. Update Instructions

How to get a Software Update Package

You can find the Software Update Package (SUP) in the RIA-1 download section on:

<https://www.arri.com/en/technical-service/firmware/software-updates-ecs/ria-1-software-update>

Download the latest Software Update Package to your computer.

You can also perform the software update via the ARRI ECS Sync App for iOS:

<https://apps.apple.com/au/app/arri-ecs/id1555674483?l=d>

RIA-1 Update Procedure via USB-C

- (1) Download the desired firmware and copy it onto a USB-C drive. Be aware that RIA-1 can only list up to 9 update files in the update menu.
- (2) Power the RIA-1 via a LBUS, CAM or D-TAP connection. Please ensure a stable power supply. Powering the RIA-1 via USB only is not recommended.
- (3) Insert the USB-C flash drive into the USB-C slot of the RIA-1.
- (4) Enter the settings menu and go to SYSTEM > UPDATE and select the update file.
- (5) An info page about the selected firmware will be shown. Proceed by pressing the ROTARY ENCODER.
- (6) Confirm the firmware update by selecting START UPDATE. The update process takes about 90 seconds. The RIA-1 will re-boot two times during the update process.
- (7) Double check the correct software version under SYSTEM > DEVICE INFO > FIRMWARE INFO.

Please note: Do not remove the USB drive while updating the RIA-1!

Update via Hi-5 with USB

Preparing the USB Stick

Copy the RIA-1 Software Update Package onto a USB -A or USB-C memory stick in folder ARRI/ECS/

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.

Precautions

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.

Performing the Update

- (1) Connect the RIA-1 to the Hi-5 via LBUS.
- (2) Insert the USB stick in the corresponding USB slot of the Hi-5
- (3) Turn the Hi-5 on.
- (4) Go to MENU > System > Update > LBUS Device Update.
- (5) Select the RIA-1 as LBUS device.
- (6) Choose the desired Software Update Package and then press select to start the update.

Caution: The update process takes several seconds. Don't remove the USB Stick and do not turn off the Hi-5 during the update!

Update via Hi-5 with ECS Sync App

The ECS Sync App connects to the Hi-5 via Bluetooth.

Performing the Update

- (1) Connect the RIA-1 to the Hi-5 via LBUS.
- (2) Ensure that Bluetooth is enabled on the Hi-5 via MENU > System > Bluetooth.
- (3) 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).
- (4) Open the ECS Sync App. The app is now connected to your Hi-5 hand unit.

- (5) Go to ARRI DEVICE > RIA-1 xxxxx > Update to the latest SUP
- (6) Select Download and proceed the software update

Caution: Do not leave the app during the update!

C. Hi-5 License Support

This software supports the following Hi-5 licenses:

RED camera control license

The RED Camera Control License Key for Hi-5 is now available via the ARRI license shop: <https://alshop.arri.de/>

- Works with RIA-1 and cforce mini RF
- Requires K2.0015758 Cable CAM (7p) – RED CTRL/D-Tap (0.6m/2ft)
- Supports DSMC2 and DSMC3 (breakout box required) cameras
- On DSMC2 cameras, set RED Command Protocol in Menu > Settings > Setup > Communication > Serial
- 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

More details can be found in the license section on the Hi-5 web page:

<https://www.arri.com/en/camera-systems/electronic-control-system/hi-5>

Sony camera control license

The Sony Camera Control License Key for Hi-5 is now available via the ARRI license shop: <https://alshop.arri.de/>

- Works with RIA-1 and cforce mini RF
- Supports Venice 1 and Venice 2
- Requires K2.0047268 Cable CAM (7p) - Sony Remote (8p)/D-Tap (0.8m/2.6ft)

More details can be found in the license section on the Hi-5 web page:

<https://www.arri.com/en/camera-systems/electronic-control-system/hi-5>

Focusbug license

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

- Works with RIA-1
- Enables dedicated full Focusbug menu/control through ARRI high speed protocol
- Requires CINE RT (RA) to ARRI RIA-1/ALEXA 35 (ST) cable from Focusbug (See also <https://www.focusbug.com/arrifocusbugsupport>)

More details can be found in the license section on the Hi-5 web page:

<https://www.arri.com/en/camera-systems/electronic-control-system/hi-5>

D. Known Issues

This is a list of known issues for this software update package.

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 or ALEXA Mini LF camera 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).

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

The RIA-1 currently doesn'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 / ALEXA Mini LF / AMIRA: Connect via CAM to EXT.

ALEXA Plus cameras: Connect via CAM to LCS.

For more information, please visit: www.arri.com/ria-1-config-guide

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

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

Workaround: Activate pre-recording via camera or assign a user button on the RED camera to Start/Stop.

RED HELIUM playback control issues

When using the RIA-1 with a Hi-5 on a RED HELIUM camera, the playback control might not work properly, or the camera might stay in playback.

Workaround: Leave Playback via camera.

RED Komodo playback manipulation not possible

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

LCUBE CUB-1: Wrong distance value

When using the Hi-5 in combination with a RIA-1, LCUBE CUB-1 and a distance measure device, in some cases a wrong distance value is shown.

Workaround: Use the integrated serial interface of the RIA-1 for distance measure devices or power cycle the RIA-1 & CUB-1.

Manual calibration with active cal request

When using the Hi-5 in combination with a RIA-1 or cforce mini RF and when using the manual motor calibration feature, it might happen that after the manual calibration the scales are greyed out with a RED cross above the scale, while having full control of the motor.

Workaround: Perform another manual calibration or reboot the RIA-1/cforce mini RF.

Manual calibration not working over LBUS

Currently the manual calibration feature can only be used over a radio connection, like EMIP, RF-2400 or RF-900 to the RIA-1 or when connected to a cforce mini RF.

It is not functional if the Hi-5 is hardwire connected via LBUS to the RIA-1 or to the LBUS motor daisy chain.

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

The camera does not transfer the whole clip list table via the remote interface and 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 camera screen in between clips

When browsing or changing clips in playback mode, the Sony Venice camera sends a standby signal in between clips. Due to this, the hand unit jumps back to the camera 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.

Workaround: Set FPS to variable on the camera.

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.

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.

Workaround: Repower the RIA-1 and the setting availability should get updated properly by the Hi-5.

ECS Sync App - RIA symbol shown as WCU-4

In the current ECS Sync App version 1.0.1(883) the RIA-1 symbol is displayed as a WCU-4. The device itself is recognized correctly as a RIA-1. This issue will be fixed with the next ECS Sync App version.

RIA-1 client mode: Cmotion steady zoom motors show RIA-1 ID

If a Cmotion steady zoom is being used to control motors remotely with a client RIA-1, the LBUS motors all show the RIA-1 ID and can't be distinguished from each other.

Workaround: Distinguish motors by assigned axis.

Permanently blocked lens axis when using OCU-1 or Master Grips in client setup

Please ensure that the OCU-1 or Master Grips are updated at least to SUP 2.0.2

RIA-1 restarts when connected to an ALEXA Mini / ALEXA Mini LF

In rare cases, the RIA-1 restarts when connected to an ALEXA Mini or ALEXA Mini LF via CAM / EXT and at the same time via the optional LBUS / LBUS connection. If this is the case, connect the RIA-1 only via CAM - EXT.

E. Troubleshooting

No or wrong lens scales on the Hi-5, even with active LDS on camera:

Check if the correct Data Source is set on the Hi-5 in the LENS menu. The Data Source menu is only available on the Hi-5 when an ARRI camera with integrated motor controller, as well as an external motor controller are used in parallel.

Data Source > Camera: Standard setting when working with an ARRI Camera with an integrated motor controller. Lens files are sent to the ARRI camera and the Hi-5 receives the lens data from the camera. Mandatory setting if LDS or other smart lenses are used.

Data Source > Controller: Lens files are sent to the external motor controller (RIA-1, cforce mini RF, etc). Controller is automatically set when a 3rd party camera is detected or if an ARRI camera without integrated motor controller is used.

No distance value shown on the Hi-5

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 CineRT via ARRI Hi-Speed protocol. Make sure that the ARRI Hi-Speed protocol is activated in the CineRT handset.