cforce mini RF SUP 2.0.2
Software Update Package cforce-minRf-2.0.2_r14000.cmf

RELEASE NOTES

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A. Introduction

We hereby announce the release of the Software Update Package (SUP) 2.0.2 for the cforce mini RF. This is an important update, providing several new features and bugfixes.

Below is a brief overview of new features and bug fixes in cforce mini RF SUP 2.0.2:

New features with SUP 2.0.2

- Hi-5 license support for Sony and RED camera control
  
  *Note: Licenses for the Hi-5 will be available with the release of the Radio Interface Adapter RIA-1*
- AUX axis
- Manual motor calibration
- Stealth mode
- Extended calibration range
- LDS Extender support
- Iris control and metadata feed via EF Lens mount
- CAM cable support for ARRI LCS and Sony Venice/F55

Bug fixes with SUP 2.0.2

- LDA File handling and accuracy – Now LDA files created via WCU-4 or Hi-5 behave the same for cameras and the cforce mini RF.
- LDA random offset with premarked focus ring – An issue has been fixed where an unwanted offset suddenly appeared on the focus axis when using a premarked ring.
- Wrong new motor popups have been fixed.
- New calibration requests for already calibrated motors have been fixed.
- Unintentional motor calibration has been fixed.
- Manual focus offset handling has been fixed.
- Issues with inaccurate or deleted offsets after restarts have been fixed.
- Input Voltage up to 34V as specified is now fully supported.
- An issue has been fixed where the motor jumped when used as focus motor in combination with premarked rings with WCU-4.
- Fixed an issue where in some cases the update over LBUS would fail.
- The issue with cforce mini RF calibration via Master Grips has been fixed.
- Constant red pre-marked ring indication with Hi-5 has been fixed.

We highly recommend updating the cforce mini RF unit to this Software Update Package. Please take your time to go through this document before using the cforce mini RF. For more information, please visit [https://www.arri.com/en/technical-service/firmware/software-updates-ecs/software-update-for-cforce-mini-rf](https://www.arri.com/en/technical-service/firmware/software-updates-ecs/software-update-for-cforce-mini-rf)
B. 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:
Download the latest Software Update Package to your computer.

cforce mini RF 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 and ALEXA 35 cameras. The following section provides details about updating the cforce mini RF via Hi-5 and WCU-4. Please refer to the owner’s manual of the other devices for more details.

Caution: Update via CAM interface might not work for cforce mini RF motors with a Serial Number 2500 or lower! We therefore recommend updating via 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.

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.

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

Performing the Update
1. Connect the cforce mini RF to the Hi-5 via LBUS interface.
2. Connect cforce mini RF to a power source 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 as LBUS device.
7. 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 with Hi-5 via ECS Sync App**

The ECS Sync App connects to Hi-5 via Bluetooth. To add your Hi-5 to the list of Bluetooth devices on your iOS device, do the following:

1. Connect the cforce mini RF to the Hi-5 via LBUS interface.
2. Connect cforce mini RF to a power source 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 xxxx > Update to the latest SUP
7. Select Download and proceed the software update

**Caution: Do not leave the app during the update!**

**Update with WCU-4**

**Precautions**

During the update, supply the cforce mini RF with >12V Voltage, e.g. by using an LBUS to D-Tap cable (e.g. K2.0006758 Cable LBUS to D-Tap) connected to a battery with D-Tap interface.

**Preparing the SD Card**

Have a FAT16 or FAT32 formatted SD/SDHC card up to 32GB for updating. Copy the cforce mini RF Software Update Package into the root folder of the SD/SDHC card.

**Performing the Update**

1. Connect WCU-4 and cforce mini RF via LCS to LBUS cable.
2. Connect cforce mini RF to power source via CAM interface.
3. Turn the WCU-4 on.
4. Insert the SD card into the SD card slot of the WCU-4.
5. Go to MENU > FIRMWARE > LBUS Update.
6. Select the cforce mini RF as a LBUS device.
7. Choose the desired Software Update Package and then press the two UPDATE soft buttons simultaneously to start the update.

**Caution: The update takes several seconds. Do not remove the SD card during the update!**
C. New Features

This software update package consists of the following new features:

**Hi-5 license support for Sony and RED camera control**
(Available with the release of the RIA-1)
The cforce mini RF supports the Hi-5 Sony camera control and the Hi-5 RED camera control licenses. Supported features depend on camera model and camera settings. Please see the Hi-5 license page for more info.

**AUX axis support**
The cforce mini RF can now be assigned as AUX axis via the upper soft button and controlled by the Hi-5.

**Manual motor calibration**
When using the cforce mini RF in host mode, it is now possible to manually calibrate the cforce mini RF and all cforce motors attached to it by Hi-5.
For Manual calibration:
1) Select the corresponding axis in the Hi-5 via CAL > Manual Calibration.
2) Use the Force Pad to control the motor
3) Move the motor to the first limit and press set
4) Move the motor to the second limit and press set
The corresponding axis is successfully calibrated manually

**Extended calibration range**
The calibration range on automatic calibration has been extended by about 50%, now supporting even the biggest diameter lenses.

**Stealth mode support**
The cforce mini RF supports the stealth mode feature, which can be activated by a handunit like the Hi-5.
With stealth mode active, LBUS devices like cforce motors and the cforce mini RF turn off their illumination.
Stealth mode can be activated in the Hi-5 Menu > Motor Setup > Stealth Mode.

**LDS Extender support**
Now also supports the use of LDS extender. With an upcoming Hi-5 SUP, the extender data will be displayed on the Hi-5.

**Iris control and metadata feed via EF Lens mount**
Allows Iris control and metadata feed with a cforce mini RF motor connected to the EF Lens mount.
Require cable: K2.0015759 Cable CAM (7p) – ENG (12p) (0.3m/1ft)

**CAM cable support for ARRI LCS and Sony Venice/F55**
The following cables are supported with the Hi-5 with this SUP:
K2.0034580 Cable CAM (7p) - LCS (5p) (0.8m/2.6ft)
K2.0018814 Cable CAM (7p) - Sony Venice/F55 CTRL/D-Tap (0.6m/2ft)
D. Bug Fix
This Software Update Package consists of the following bug fixes:

Bugfixes

- LDA File handling and accuracy – Now LDA files created via WCU-4 or Hi-5 behave the same for cameras and the cforce mini RF.
- LDA random offset with premarked focus ring – An issue has been fixed where an unwanted offset suddenly appeared on the focus axis when using a premarked ring.
- Wrong new motor popups have been fixed.
- New calibration requests for already calibrated motors have been fixed.
- Unintentional motor calibration has been fixed.
- Manual focus offset handling has been fixed.
- Issues with inaccurate or deleted offsets after restarts have been fixed.
- Input Voltage up to 34V as specified is now fully supported.
- An issue has been fixed where the motor jumped when used as focus motor in combination with premarked rings with WCU-4.
- Fixed an issue where in some cases the update over LBUS would fail.
- The issue with cforce mini RF calibration via Master Grips has been fixed.
- Constant red pre-marked ring indication with Hi-5 has been fixed.

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

Lens Source Switch–No Scale Present on WCU-4
Switching the lens data source from LDA (cforce mini RF) to LDS (camera) on cameras not providing lens data via CAM connector (RED, SONY) leads to lens data artefacts (numeric iris vales) or no lens data at all.
Workaround: Reboot of the WCU-4 solves the issues.

Offset Issue with ALEXA EV
Applying a focus offset on WCU-4 may not work correctly with the cforce mini RF connected to ALEXA EV’s EXT port and an LDS lens.

ALEXA EV Unavailable ND Filter Is Displayed
When connecting a cforce mini RF motor to the EXT connector on an ALEXA EV camera (11.1.1) and checking EI in the camera setup, the middle-top user button displays the assignment ND ON/OFF even if there is no ND filter in the camera.

Double Assignment
Connecting two hand units on the same radio channel to cforce mini RF and assigning them to the same axis can very rarely lead to severe motor jitter.
Workaround: Please make sure to not assign two hand units to the same axis, e.g. by disabling iris on WCU-4 if iris is controlled from an SXU-1.

Temperature Shutdown
Continuously operating the motor at high friction for a several minutes will cause a temperature shutdown, manifesting in reduced motor speed. Cooling down the motor will solve the issue.
No camera control via cforce mini RF connected to the camera LBUS
The cforce mini RF currently doesn’t support camera control and playback features over LBUS.
**Workaround:** Use CAM to EXT connection from the motor to the camera.

RED RAPTOR pre-record doesn’t work from Hi-5
When using the cforce mini RF with the Hi-5 on a RED RAPTOR camera, the pre-record function of the raptor is not supported by the Hi-5.

RED HELIUM Playback control issues
When using the cforce mini RF with a Hi-5 on a RED HELIUM camera, the playback control might not work properly or the camera might stay in playback mode.
**Workaround:** Exit Playback via camera.

CUB-1: Distance value wrong
When using the cforce mini RF in combination with a CUB-1 and a distance measure device, in some cases the measured value is wrong and multiplied massively
**Workaround:** Repower the CUB-1 and/or power cycle the cforce mini RF.

Manual calibration with active cal request
When using the cforce mini RF in combination with a Hi-5 and using the manual calibration feature for motors, it might happen that after the manual calibration the scales get greyed out with a RED cross above the scale, while having full control of the motor.
**Workaround:** Perform another manual calibration.

Hardwired no AUX axis control via cforce mini RF (in active radio mode)
The cforce mini RF currently doesn’t support AUX control when Hi-5 is connected via cable.
**Workaround:** Put cforce RF in client mode, or control AUX axis wirelessly.

Clip count in excess of 100 clips per card can lead to power cycle
The cforce mini RF currently may not support a clip count in excess of 100 clips per card.
**Workaround:** Change card in time.