



XF Feature Update #4 Firmware Release Note

This release note describes the new features of Feature Update #4 for the XF Camera System.

Downloading and installing Feature Update #4 (Camera package file CP4.00.55.fwp) will update your XF Camera System and/or Digital Back to the most recent Camera Operating System, including all features and corrections from previous releases.

Installing XF Feature Update #4

To install Feature Update #4, simply download and copy the camera package file (CP4.00.55.fwp) to the root folder of a CF card.

1. Place the IQ Digital Back on the XF Camera Body with attached Viewfinder.
2. Make sure the installed batteries are fully charged on both the XF Camera Body and IQ Digital Back.
3. Insert the CF card into the IQ Digital Back.
4. From the IQ Digital Back home screen select Menu > Firmware > Update Firmware.
5. The XF Camera System will now update with all relevant firmware updates. Updating the IQ, XF and Viewfinder.

Please do not interrupt the updating process. Should this happen by mistake, the update will fail and you will have to run the update again.

Feature Update #4 Features:

Feature Update #4 introduces the groundbreaking new **Autofocus & Recompose** mode (AFr), providing the ability to focus on a subject and then recompose the frame while retaining the original focus point. This feature is further supported by the **Zoom to Focus** preview mode on the IQ Digital Back, automatically zooming the image preview to your intended focus point for verification.

Feature Update #4 improves advanced autofocus calibration, auto focus control and performance through the new **Focus Trim Tool**, **Focus Nudge** control from camera dials, as well as the optional **Honeybee Autofocus Platform 2.0 (HAP-2)** upgrade.

**Note: Updating to Feature Update #4 will require new Focus Trim values be created.*

Feature Update #4 includes additional UI tools and control. **Vibration Analysis** is a visual tool which displays a graph outlining vibrations measured by the camera during the exposure. This tool can be chosen, amongst other options, to display immediately after capture from the new **Capture Analysis Popup Control**.

Furthermore, Feature Update #4 provides several workflow tools and functionality improvements, including the **Automatic Focus Stack Calculator** for the Focus Stack Tool which automatically selects the appropriate frame count depending on sensor resolution, aperture and focusing distance; **Profoto Remote Shutter Release** which gives the ability to trigger the XF Camera System wirelessly via Profoto Air remote; **Infinite Vibration Delay**, which allows the camera to wait for the optimal conditions to capture; **External Release for the Electronic Shutter**; and **Image Browse** which gives the ability to browse images on the IQ Digital Back using the XF Camera Body dial.

Feature Update #4 camera package contents:

- Autofocus & Recompose mode (AFr)
 - Automatic compensation of focus when the camera axis/angle is repositioned after initial focus is achieved. **Currently supported on the Schneider Kreuznach Blue Ring:*
 - 80mm LS f/2.8
 - 110mm LS f/2.8
 - 150mm LS f/2.8
- Zoom to Focus (IQ Preview option)
 - IQ Digital Back image preview mode, used in connection with AFr
- Focus Trim Tool
 - For Focus Trim Calibration of all AF lenses
- Automatic Focus Stack Calculator
 - Suggesting the number of frames for a given focus stack, evaluating resolution, aperture and focus distance.
 - *Currently supported on the Schneider Kreuznach Blue Ring:*
 - 80mm LS f/2.8
 - 120mm LS f/4.0 Macro
 - and Phase One 120mm AF Macro f/4.0
- Focus Nudge
 - Dial control for focus control/autofocus override
- Vibration Analysis
 - Visual display on the XF Top Screen of vibration data measured during the exposure.
- Infinite Vibration Delay
 - Allowing the camera to wait indefinitely for conditions that provide a vibration free capture
- Profoto Remote Shutter Release
 - Trigger the XF Shutter using a Profoto Air Remote **B/T mode not supported*
- Capture Analysis Popup Control
 - Customize which of the several visual feedback options displays on the XF Top Screen following a capture.
- External Release for the Electronic Shutter (ES)
 - Used with supported external release cables
- Image Browse
 - Assign an XF Dial to browse images on the IQ Digital Back screen
- External two-shot release
 - Providing a Mirror Up on first press followed by capture on the second press of the B.O.B external shutter release cable

Feature Update #4 camera package improvements:

- Remote Trigger from Capture Pilot in ES Mode
 - It is now possible to use Capture Pilot to remotely trigger the Electronic Shutter of the IQ3 Digital Back
 - * Supported on the IQ3 100MP, IQ3 100MP Achromatic and IQ3 100MP Trichromatic*
- Focus Stack and Timelapse from Capture One
 - It is now possible to initiate the XF Focus Stack tool and TimeLapse tool from the shutter button of Capture One
- Focus Nudge from Capture One
 - Calibration tools such as the Hyperfocal Tool and Focus Stack tool can now benefit from Focus Nudge control via Capture One
- TimeLapse Tool Black Ref. Control
 - The black reference can now be customized to 1 of 4 options in the TimeLapse Tool, Normal, Always, Suppress, and 1st.

Please check www.phaseone.com to learn more about the XF Feature Update #4.

Feature Update #4 Optional Hardware Upgrade:

HAP-2 Upgrade:

In connection with the announcement of XF Feature Update #4, all Phase One XF Camera owners have the option of upgrading their existing Honeybee Auto Focus Platform (HAP-1) to the newly introduced HAP-2 module.

This optional hardware upgrade replaces the existing HAP-1 with a new version of the physical Autofocus Sensor. The new HAP-2 sensor has increased light sensitivity and improved dynamic range, making it superior to the HAP-1 sensor in low light situations and when used on low contrast targets.

Apart from the increased sensitivity, all AF functionalities and features in the XF Camera (including those found in XF Feature Update #4) are available on the XF Camera with either the HAP-1 or the HAP-2 AF sensor.

Please contact your local [Phase One Partner](#) to learn more about the HAP-2 upgrade.

XF Feature Update #4 FAQ

Questions and answers on installation of XF Feature Update #4

Can I update any XF Camera Body or IQ Digital Back with the Feature Update #4 camera package?

- Yes - When the firmware update process is started, it runs an assessment of what firmware resources are needed - after this assessment, the firmware update is started and will update all units with relevant corresponding firmware.

Can I download Feature Update #4 and update a stand-alone IQ1, IQ2 or IQ3 Digital Back, or an IQ Digital Back that is used on a technical camera or equipped with another camera mount?

- Yes - If you disconnect the Digital Back from the XF Camera Body, the camera package will install on the Digital Back only. If, at a later time, you connect the Back to an XF Camera Body you can run the update process again in order to install XF Feature Update #4 on the XF Camera Body.

*Please note that if the firmware on the IQ Digital Back is updated alone, some features on the XF camera body might not function correctly and it will be necessary to repeat the firmware update process to enable all features.

Questions and answers on Autofocus & Recompose (AFr)

Can I use AFR mode with all of my autofocus lenses?

- Currently the AFR mode feature is supported on the following Schneider Kreuznach Blue Ring lenses; 80mm f/2.8, 110mm f/2.8 and 150mm f/2.8.

How does AFR mode work?

- AFR mode works by shifting the focus of the lens ever-so-slightly to a closer focal plane after the photographer confirms focus and recomposes the frame. The XF Camera evaluates the movement of the camera from the previous exposure to anticipate which direction the focus should be changed. In this way, the camera learns the behavior of the photographer and can adapt quickly to ensure optimal performance.

How do I know if AFR mode has successfully adjusted my focus?

- AFR mode can be coupled with one or more feedback options. An audible beep can be turned on to indicate the success, or failure, of the camera to anticipate your movement. The focus marks (Prism or XF) will also indicate success or failure by flashing following the capture. It is also recommended to use the Zoom to Focus preview option of the IQ Digital Back, which will automatically zoom to the original location that you confirmed your focus.

Questions and answers on the Focus Trim Tool

Can I use the Focus Trim Tool to trim all of my Autofocus Lenses?

- The Focus Trim Tool supports all AF lenses compatible with the XF Camera.

How do I properly use this calibration tool?

- The Focus Trim Tool itself will evaluate if you have setup the calibration conditions to an optimal degree and displays the results of this evaluation when the tool is used. The steps for setting up proper calibration conditions are available in the XF Manual.

Questions and answers on Automatic Focus Stack Calculator

Can I use the Automatic Focus Stack Calculator with all of my Autofocus lenses?

- Currently the Automatic Focus Stack Calculator is supported on the following Schneider Kreuznach Blue Ring lenses; 80mm f/2.8, 120mm f/4.0 Macro. Additionally, the Phase One AF Macro f/4.0 lens is supported.

How is Automatic Focus Stack Calculator determining the number of frames?

- The Automatic Focus Stack Calculator evaluates the resolution of the Digital Back, aperture selected, distance to the subject (close focus distance), as well as the desired travel of the lens (far focus distance) to determine how many captures will result in a perfect focus stack.

Can I focus stack the images in the camera/in Capture One Pro?

- No – The XF Camera is capable of capturing a sequence of images for use in a Focus Stack software of your choosing. Phase One recommends the use of Helicon Focus from Helicon Soft.

Questions and answers on Vibration Analysis

Where and when can I access the Vibration Analysis?

- Vibration Analysis is available on the XF Top Screen immediately following an exposure.

When should I use Vibration Analysis?

- With the high resolution of the IQ Digital Backs, it is important to ensure that a capture is vibration-free to avoid a loss of image sharpness. This visual tool will display any vibrations that were incurred during the exposure and communicate to the photographer after an image is captured if the image quality is likely affected by vibration.

Questions and answers on Profoto Remote Shutter Release

Which accessories are supported by the Profoto Remote Shutter Release on the XF Camera System?

- All Profoto Air Remote/Air Remote TTL and Profoto Air Sync will function with corresponding Profoto Air features on the XF Camera System. In most instances, the TEST button of these devices can be used to trigger the XF Camera shutter.

Can the Profoto Air in the XF Camera trigger my lights at the same time that I use the Profoto Remote Shutter Release from the Profoto Air Remote?

- Yes – The Profoto Air can use one channel to trigger the Profoto Lights and a separate channel to receive a signal for the Shutter Release.

Questions and answers on Focus Nudge

When can I use Focus Nudge?

- You can use Focus Nudge anytime that autofocus on the lens is enabled.

Can I adjust my focus after using autofocus?

- Yes – The Focus Nudge is intended as a very fine-tuned “autofocus override” to manually adjust your focus after the camera has confirmed an autofocus point.

When should I use Focus Nudge?

- Focus Nudge is intended to be used only when necessary for very specific and fine focus control. If you find that you must always use Focus Nudge, please consider trimming your autofocus for the specific lens in use with the Focus Trim Tool.

XF Feature Update #4 Firmware Specifications

Camera Package Overview

The following is an overview of the specific firmware versions available for each component, included within Feature Update #4 (Camera package file CP4.00.55.fwp)

CP4.00.55.fwp

- **8.05.36.FWR** -
 - Applicable to - IQ140, IQ160, IQ180, Q260, IQ280, IQ260 Achromatic
- **5.09.49.FWR** -
 - Applicable to - IQ150, IQ250, IQ3 50MP, IQ3 100MP, IQ1 100MP, IQ3 100MP Achromatic, IQ3 100MP Trichromatic
- **3.05.36.FWR** -
 - Applicable to - IQ3 60MP, IQ3 80MP
- **4.00.55.FWR** -
 - Applicable to - XF Camera Body and Prism Viewfinder

The XF Camera Manual and technical specifications are available from www.phaseone.com