



Capture One Pro 9.1

The Professional Choice In Imaging Software

Release notes

Contents

Capture One 9.1 Release Notes	1
9.1 New Features, Camera and Lens Support	2
9.1 Feature Documentation	3
9.1 Bug fixes	6
System Requirements	8
Installation	9
Recommendations and limitations	10
Known issues	11
Supported Cameras	11
Phase One	12
Mamiya Leaf	13
Leaf and Mamiya Legacy	14
Sony	15
Canon	17
Nikon	19
Leica	21
Fuji	22
Olympus	23
Ricoh	25
Panasonic	26
Pentax	27
Samsung	28
Konica Minolta	28
Other	28
Phase One Lens Profiles (645)	29
A-Series and Large Format Lens Profiles	29
Mamiya Lens Profiles (645)	29
Hasselblad V and H	30
Sony Lens Profiles	31
Canon Lens Profiles	32
Nikon Lens Profiles	34
Olympus Lens Profiles	35
Pentax Lens Profiles	35
Panasonic Lens Profiles	35
Leica Lens Profiles	35
Fixed Lens Profiles	36

Capture One 9.1 Release Notes

Capture One Pro 9 is a professional RAW converter offering you ultimate image quality with beautiful colors and incredible detail from more than 400 high-end cameras – straight out of the box. It offers state-of-the-art tethered capture, powerful digital asset management, extensive adjustment tools and a flexible workflow.

With an updated processing engine, market-leading performance and powerful new features, Capture One Pro 9 is the professional choice in imaging software. The highly responsive tools give you the power to create stunning images from your camera's RAW files, in a time-saving workflow that can be customized to fit your needs.

Capture One 9 is made by Phase One (the world's leading manufacturer of high-end digital camera systems) in collaboration with the world's leading professional photographers.

All run modes are included in the one installer and the run mode is determined by the license key used. The trial is also included in the installer and is registered as the full product upon activation. Capture One 9 is available in four modes (these are notated in the camera grid):

- Pro
- DB (digital back only)
- Pro (for Sony)
- Express (for Sony)

The release notes include notes for all releases of Capture One 9.1. Previous release notes can be found in the Phase One download archive.

Best regards,
Team Phase One

9.1 New Features

This is a feature release, with new features, camera and lens support and bug fixes. Highlights include:

Improvements

- Under the hood Library refactor (Mac)
- Canon PTP tethering engine
- Re-factored Next Capture Adjustments for Orientation
- Re-factored Next Capture Adjustments to allow Metadata in adjustments
- Improved handling of Tiff assets that include Alpha channels or Layers (view only)
- Various improvements to Keyboard shortcut menu

New Features

- New: Rotatable live view (as part of Orientation refactor)
- New: Color Editor tools: Saturation, Hue and Lightness uniformity for Color Editor
- New: Export/Output Keyword List restrictions
- New: Shortcuts for Reset Counters
- New: Shortcuts for fill/invert mask and change/cycle layers
- New: Shortcuts for “Select by...”
- New: Shortcuts for “Create album by...”
- New: Shortcuts for “Select by same...”

XF compatible features

- Sequence workflow tools:
- Create albums from Sequence ID
- Filters for sequence types, counts, ID
- Name Tokens for sequence types, counts, ID
- Dynamic locations for sequence types, counts, ID

9.1 Camera Support

- Olympus Pen-F
- Olympus Om-D E-M10 Mk II
- Sony A68
- Sony a6300
- Sony RX1R Mk II (revised implementation)
- Ricoh GR II
- Pentax K-S2
- Panasonic G7
- Leica SL

9.1 Lens Support

- Nikon 24-70E VR
- Nikon AF-S DX NIKKOR 18-135mm f/3.5-5.6G IF-ED
- Sigma 150-600mm F5-6.3 DG OS HSM (Nikon mount)
- Sigma 120-300mm F2.8 DG OS HSM | S (Canon mount)
- Carl Zeiss Sonnar T* FE 35 mm F2.8 ZA
- Carl Zeiss Sonnar T* E 24 mm F1.8 ZA
- Panasonic LUMIX G VARIO 14-42mm F3.5-5.6 ASPH. MEGA O.I.S.
- Sony E PZ 16-50 mm F3.5-5.6 OSS (SEL1650) (improved profile)
- Sony FE 24-70 2.8 GM (SEL2470GM)
- Sony FE 85 1.4 GM

9.1 Feature Documentation

Capture One 9.1 is themed to address workflow efficiency and integration with the Phase One XF Camera System.

Under the hood

- Under the hood Library refactor (Mac)

File handling system under the hood has been overhauled to improve stability and performance. In essence, the changes should be invisible in terms of operation but should provide a more robust and quicker performance when viewing collections.

- Canon PTP

The SDK software supplied by Canon has been replaced with a more modern Phase One developed PTP driver to improve stability and performance. In terms of functionality, it works in exactly the same way as before (plug and play) and there is nothing the user has to do differently.

Next Capture Adjustments tool

Next Capture Adjustments for Orientation and Metadata. Some changes have been made to increase efficiency for tethered shooters:

Next Capture adjustments panel now consists of 5 properties (plus one radio box for Phase One hardware)

- ICC profile: option to use default (can be specified in base characteristics tool), Copy From Last or Copy From Primary
- Orientation: When shooting tethered the user can now specify a forced orientation (default, 0, 90, 180, 270). All subsequent captures will use the chosen setting. This is stored as an adjustment so it can be reset. This is especially useful for shooting still life or if the camera is in an overhead position.
- Metadata: Previously, Capture One excluded metadata from the adjustments in a Copy From Last workflow. Now the user can specify to Copy From Last, Copy From Primary or Copy From Last/Primary Specific. Specific opens the clipboard for metadata and you can specify which fields to bring over to the next Capture, from the last.

- All other: refers to all other visual adjustments (Crop, Exposure etc). Again specific is added to allow the user to manually include whatever they wish – useful in some corner cases where some special adjustments (e.g. spot) were automatically excluded from Copy From Last.
- Styles: Specify a saved style and shoot into a “look”.
- Auto Alignment: For Phase One IQ systems only. Data from the virtual horizon tool in the Digital Back can be used to auto level the image on capture.

Improved Tiff handling

Tiffs saved with Alphas or layers (in apps like Affinity or Photoshop) can now be viewed in the Capture One Viewer. Note while viewable, reprocessing an image with layers made in other apps will ignore the layered adjustments.

New features

- Rotatable live view (as part of Orientation refactor)

Live view orientation can now be changed. Orientation automatically matches the Next Capture Adjustments so the Live view feed is the same as the resulting capture.

- Export/Output keyword restrictions

When converting to final output, a number of exclusions can be made to control what ends up in the final file - e.g. sharpening, crop, metadata. The metadata tab in output now allows for individual control of which keyword lists make it to the final file. Ideal for limiting a global vocabulary for certain uses or stock libraries.

- Color Editor: Saturation and Lightness uniformity added to Skin Tone tool

The Skin Tone tool for the Color Editor has been expanded to allow saturation and lightness uniformity of color (in addition to hue that was in previous releases). Uniformity logic works by making a pick of the color (to base adjustments on) - then expanding the color pick bounds to include the hues to be corrected. As the slider is moved to the right, the hues in the selection are aligned closer to the selected point.

As the Color Editor wheel only represents hue and saturation, UI elements similar to the color balance wheels are added to the Color Editor skin tone tab - These work slightly differently to color balance though, instead allowing adjustment of the lightness and saturation value of the selected point to base adjustments on.

Shortcuts

- Shortcuts for Reset Counters

Edit>Counters menu now contains options for resetting all counters used in Capture One workflow. You can assign shortcuts to these options in the Capture One>Edit Keyboard Shortcuts menu

- Shortcuts for Fill/Invert Mask and Cycle layers

There are no menu options for these shortcuts, but you can assign shortcuts in the Capture One>Edit Keyboard Shortcuts menu under "Other".

- Shortcuts for "Select by..."

Edit>Select by... returns to the workflow. Edit menu now contains options for selecting all variants in a collection by rating or color tag. You can assign shortcuts to these options in the Capture One>Edit Keyboard Shortcuts menu

- Shortcuts for "Create albums from..."
- Shortcuts for "Select by same..."

These two options are context sensitive - i.e. something has to be selected for it to make sense - and so only exist in the right-click contextual menus for the thumbnail browser. 9.1 adds support for color tags and ratings for both these menu items. These menu options do not exist in the application menu but can be shortcut from the Capture One>Edit Keyboard Shortcuts menu under "Other".

New features (XF Camera System only)

Feature Update #2 (for XF Camera System) contains a number of tools for aiding sequence capture.

Images captured when using the new Time-lapse, HDR Sequence tool or Focus Stack tool on the XF Camera System will tag the RAW files. Capture One 9.1 can use these tags in a number of ways to accelerate workflow and organization in the application. As an additional indicator, images captured with a sequence tool will show a small icon in the lower left corner of the thumbnail to indicate it is part of a series of images.

Tags: For supported files, tags can be seen in the vendor specific area of the metadata tab and consist of the following properties:

- Type: (e.g. HDR, Focus, Time-lapse)
- ID: unique identifier made up of serial and unique counter
- Count: shown as position and total - (e.g. 1/3)

These are combined into two strings in the metadata: Sequence ID and Sequence Info.

Working with Sequences:

The application has a number of tools to help you organize sequences into your workflow.

- Filters: any collection can be filtered: by Sequence ID, count, position or type. To see and add the additional filters click the (...) action menu in the Filters tool and then show/hide filters... to open the filter menu.
- Naming Tokens: images can be named automatically using the Token feature (during, Import, Capture, Batch Rename or Output) for any property of the sequence.
- Dynamic Location Tokens: folders can be made and named on Import or Export based on the file's sequence properties. E.g. shoot 10 HDR sequences and then Import with the Sequence ID Dynamic Location Token to have Capture One make an import sub folder for each bracket.
- Select by same > Sequence: Right click on a Variant > Select By Same... allows you to choose other images with a similar property. 9.1 introduces three options: Color Tag, Rating and Sequence ID. If you have a lot of images from an import and need to find all the associated captures of a particular sequence, then this allows quick selection of the images irrespective of sort order.
- Create Album From Sequence ID: Right click on a Variant > Create Albums From... allows you turn a selection into a virtual collection (album). 9.1 introduces three options: Color Tag, Rating and Sequence ID. You can use this feature in conjunction with the above "Select By Sequence" command to make an album from a selection, or just select the entire import and then "Create Albums From > Sequence ID" - this will make an Album for each sequence in the selection, allowing quick partitioning of sequences.

9.1 Bug fixes: Mac

Functionality Bugs:

- Browsing images in the importer window causes setting files to be saved on disk
- Keywords are added when browsing folders or canceling an import operation
- Import and Pack as EIP: imported images show a "1" at the end of their filenames
- Library: various bugs (performance, crashes, Smart Album handling)
- Camera tool: ISO string badly clipped if too long
- Brush size slider does not respond correctly to mouse scrolls
- Live View: pixelated images appear on some occasions
- Color Editor and Curve tool: undo not always working as expected
- Curve tool: cannot edit curves when loupe tool is selected
- Curve tool: pickers do not always get selected when clicked
- Color Editor: color patches are missing in Express (for Sony)
- Keystone: copy/apply buttons always disabled
- UI cosmetics (especially Keywords and Keyword Library tools)
- Fixed a bug in handling styles for Next Capture Adjustments
- Fixed an orientation bug for Next Capture Adjustments
- Library tool performance and minor fixes
- Fixed crash using IQ3 100MP and FireWire
- Keyword Library handling minor fixes
- Fixed moire persistency for layers
- Fixed an issue for naming duplicate files while batch renaming

9.1 Bug fixes: Win

Functionality Bugs:

- Various crashes and hangs
- Search only allowed a single search string
- Session can not be opened over UNC path
- Importing a catalog does not include all images
- IPTC getting garbled when using Chinese characters
- Main window hangs when trying to recursively import many folders
- "Sort selected by Color Tag" does not work.
- Active Filters in the Filters tool would remain active even if hidden
- Film Grain type drop down disabled when Capture One starts
- Pink color Tag improperly mapped to Photoshop urgency
- When replacing a style, Capture One deletes the style without saving a new file with the changes.
- Sorting of Keywords in the Keyword Library tool is case sensitive
- Cannot delete some Keywords from session in Keyword Library
- Error Exporting Keyword Library to paths containing exotic characters
- Camera tool: pending count slow/not updating when shooting continuously
- Selection points on image will move when panning the image
- Linked Zoom using Zoom slider in Multi-view mode not working
- When creating a Mask from the Color Editor it does not get a selection point
- Local Adjustments: Passing over a hidden selection point changes the cursor
- Temporary file is not deleted when importing a catalog inside another catalog
- Cannot stack built-in Curve presets
- Difficult to Crop from bottom of image
- Variant collapsed state affects initial filters counts
- Camera tool: +/- ISO tab changes size
- All Images not updating after image is processed
- Import of a Session into a Catalog doesn't create a collection under "Recent Imports"
- Next Capture Adjustments - only one Style can be added

9.1 Bug fixes continued: Mac

Functionality Bugs:

- Library tool: improve overall UI performance
- Library tool: a number of cosmetic bugs (display of icons, expand/collapse)
- Next Capture Adjustments: fix handling of Rating and Color Tag
- Next Capture Adjustments: fix handling of Crop when Orientation is set to non-default values
- Filters tool: properly add new filters to a group
- Fix reset of lens distortion when resetting a Variant
- Color Editor: fixed undo/redo
- Mask drawing: fixed a flickering issue appearing when drawing masks after an undo operation
- ICC profile menu: fix a bug causing some custom profiles not to be shown in the menu

Crash bugs:

- Fixed a crash when removing a filter
- Fixed a crash in the Curves tool when dragging and entering keyboard shortcuts
- Fixed a crash when clicking in empty areas of the Keyboard Shortcut Editor
- Fixed a crash when creating/moving collections the Library tool.
- Fixed a crash when processing LCC files

9.1 Bug fixes continued: Win

Functionality Bugs:

- Fixed bug where it was sometimes not possible to remove a Keyword from a Session Keyword Library
- ICC-Profile: naming changes when setting it to default for camera
- Dragging a Session favorite to Albums does not create an Album
- Color Editor: Reset selected tab removes all presets regardless of tab
- Improved global modification of Keywords
- Crop tool does not respond correctly if Next Capture Adjustments is set away from default
- Vignette tool does not reset when Amount title is click-hold
- 'Select by Sequence ID' works as 'Select All' if no ID
- Vignetting tool is disabled by default
- Variants not persisted when making Keyword Library changes in another Collection

System Requirements

We recommend that your computer has at least the minimum specifications outlined below to run Capture One.



Microsoft® Windows® minimum requirements

- Intel® Core™ 2 Duo or better
- 4 GB of RAM
- 10 GB of free hard disk space
- Color calibrated monitor with 1280x800, 24-bit resolution at 96dpi screen ruling
- Windows 7® SP1 64-bit, Windows 8® 64-bit, Windows 10® 64-bit
- Microsoft® .NET Framework version 4.6 (will be installed if not present)
- A PDF reader is needed to read the Release Notes
- An Internet connection is needed when activating Capture One



Apple® Macintosh® minimum requirements

- Intel® Core™ 2 Duo or better
- 4 GB of RAM
- 10 GB of free hard disk space
- Calibrated color monitor with 1280x800, 24-bit resolution at 96dpi
- Mac OS X 10.10.5 or 10.11.x
- An Internet connection is needed when activating Capture One

Recommended system requirements

If working with high-resolution images and doing calculation-heavy adjustments we recommend the following:

- Use processors with multiple cores, e.g. Intel Core i7™ or better
- Have 16 GB of RAM or more
- Leave plenty of hard disk space free (100Gb recommended)
- A fast hard disk e.g. a Solid State Disk (SSD)
- A fast Graphics card from NVIDIA or AMD with minimum 2GB RAM

Installation

Capture One is compatible with previous 8.x, 7.x and 6.x versions. It is recommended to migrate images from 5.x and 4.x to version 8.x first, before opening in 9.x

It is generally recommended that you only install one version of Capture One.

Install on Windows

Capture One includes an easy-to-use installer that will install all the software you need to run the application on a Windows based computer.

To install the software, please follow the procedure below:

- Download the application from the Phase One website: <http://www.phaseone.com/downloads.aspx>
- Run the executable software install file (.exe)
- Read and accept the license agreement when presented.
- Follow the on-screen instructions to complete the installation.
- Read and accept the license agreement when presented.

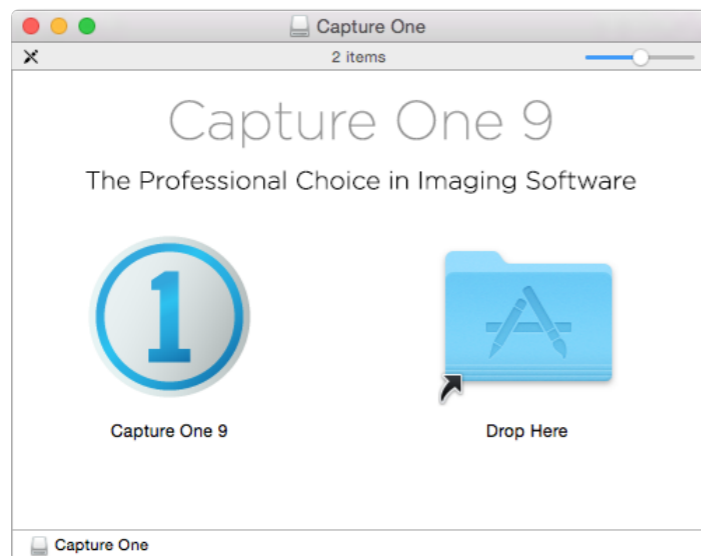
Install on OS X

Capture One includes an easy-to-use installer that will install all the software necessary to run the application on OS X.

To install the software, please follow the procedure below:

- Download the application from the Phase One website: <http://www.phaseone.com/downloads.aspx>
- Open the Capture One disk image (.dmg)
- Drag the Capture One icon to the Applications folder.
- Start the Capture One application from your Applications folder.
- Read and accept the license agreement when presented.

In addition, Leaf and Mamiya DM Back users should install specific Leaf drivers before connecting their back by selecting Install Leaf Drivers from the Capture One menu in the application. We recommend that you quit Capture One and restart the computer after the installation.



Recommendations and limitations

All users

- When you have disconnected a camera do not reconnect a camera until the Camera tool status changes to "No Camera Attached".
- DNG support not optimized for some cameras.

Other camera users

- The following functionality is not supported for Fujifilm X-trans RAW files: processing/exporting to DNG, auto mask, repair Layers, focus mask and LCC.
- The following functionality is not supported for sRAW/mRAW files: LCC analysis and healing with Repair Layers.

Digital Back users

- Battery charging on IQ systems can cause issues with stability over Thunderbolt adapters or in low power devices such as laptops. Switch charging off in the digital back menu if you suffer repeated disconnections.
- For tethered shooting with Phase One or Credo digital backs make sure that your system can either supply at least 10W power via FireWire (more than most laptops can supply) or make sure to activate the "Force Battery" setting on the back. Use the 4.5m Phase One FireWire cable.
- For tethered shooting with Leaf Aptus and Mamiya DM digital backs make sure that your system can supply at least 12W of power via FireWire (more than most laptops can supply). Use a Leaf or Mamiya FireWire cable and repeater.
- Unless otherwise specified for your Phase One camera system, do not open the shutter on the camera prior to opening the Live View window. Doing so will generate errors on the digital back after closing the Live View window. The recommended procedure for using Live View is to first open the Live View window, then open the shutter on the camera, use Live View as desired, when done, close the shutter on the camera, and close the Live View window.
- For Leaf Backs and Mamiya DM systems, the camera body must be selected in application preferences before connecting the back.
- For Leaf Backs and Mamiya DM systems, in the case of a communication error during firmware upload, please wait 10 minutes before disconnecting the FireWire cable.
- Leaf Aptus II 8 only works with black and white Live View.
- Focus controls for iXR and iXA cameras are only supported by IQ and Credo backs.

- Orientation override does not work in live view for Leaf Aptus/AFi backs. Users wishing to lock orientation during live view should use the camera orientation setting.

Known issues

Below you will find a list of known issues for Capture One 9 at the time of shipping:

All users

- Browsing folders containing unsupported image files may affect application performance.
- Previews from earlier versions of Capture One may be updated. In some cases, this can affect the application performance the first time images are viewed in this version of Capture One.
- If using a non US laptop keyboard it might be preferable to change some of the standard keyboard shortcuts.
- Editing images in external applications other than Adobe Photoshop might result in unexpected behavior.
- Operation under virtualization software (e.g. Parallels, Hackintosh etc) may cause instability. We do not recommend you use these OS configurations.

Mac users

- It is only possible to show the Capture One toolbar in “Icon Only” mode.
- Live View over USB can stall without the use of a repeater.

Windows users

- Windows drivers are required for some older models of Canon DSLR cameras to be able to shoot tethered. These drivers are available from Canon’s web site.
- If you have Bonjour 2.0.3 installed you may experience problems with Capture Pilot. Bonjour 2.0.2 (shipping with Capture One 9) and 2.0.4 (shipped with iTunes) have been tested to work with Capture Pilot. To check the version number of Bonjour, go to ‘Control Panel’ and select ‘Programs and Features’.
- Importing a catalog can result in the last picture not getting imported.
- Operation under RAMDisk by Dataram is known to cause issues with disk labeling. Capture One is not supported with this configuration.

Supported Cameras

The appendices below contain the data sheets for supported cameras in Capture One.

The information here is subject to change. Some errors may be omitted. For issues and clarification on any camera listed here, contact Phase One Support via support.phaseone.com

Notes:

Capture One 9 DNG colors

This new feature allows Capture One to treat and display supported camera files that were converted to DNG, as if it was the original format. It must have the original RAW embedded in the DNG. It does not support unsupported formats converted to DNG. Note we do not support Adobe Lens or Color Profiles in this workflow.

Other file support

Tiff: Capture One 9.1 can support Tiff files with alpha channel or layers saved in the file (from other apps like Adobe Photoshop) for viewing purposes only. Reprocessing the image will ignore the alpha channel or layers.

File support limitations:

Smallest supported file: Width and Height must both be larger than 16 px

Largest supported file: Width x Height must be smaller than 40000 x 20000 pixels or sum thereof.

RAW support:

RAW files support is limited to the full camera RAW format unless specified in the table below. Special or auxiliary modes only supported where noted: Pro = (Pro), DB (digital back only) = (DB), Pro (for Sony) = (ProS), Express (for Sony) = (ES)

PHASEONE

Model	Tethered Support	Live view	File Support	Required run modes	Notes
IQ3 100MP	Yes	Yes	IIQ 16bit, IIQ L, IIQ S	DB or Pro (9.0.2 or later required)	
IQ3 80MP	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ3 60MP	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ3 50MP	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ280	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ260	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ260 Achromatic	Yes	No	IIQ L, IIQ S	DB or Pro	No live view
IQ250	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ180	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ160	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ160 Achromatic	Yes	No	IIQ L, IIQ S	DB or Pro	No live view
IQ150	Yes	Yes	IIQ L, IIQ S	DB or Pro	
IQ140	Yes	Yes	IIQ L, IIQ S	DB or Pro	
iXU150	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P65+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P40+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P45+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P30+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P25+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P21+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
P20+	Yes	Yes	IIQ L, IIQ S	DB or Pro	
Achromatic+	Yes	No	IIQ L, IIQ S	DB or Pro	No live view
P45	Yes	Yes*	IIQ L, IIQ S	DB or Pro	Live view upgrade required
P30	Yes	Yes*	IIQ L, IIQ S	DB or Pro	Live view upgrade required
P25	Yes	No	IIQ L, IIQ S, Uncompressed	DB or Pro	
P21	Yes	Yes*	IIQ L, IIQ S	DB or Pro	Live view upgrade required
P20	Yes	No	IIQ L, IIQ S, Uncompressed	DB or Pro	
H 25	Yes	No	IIQ/TIF Uncompressed	DB or Pro	
H 20	Yes	No	IIQ/TIF Uncompressed	DB or Pro	
H 101	Yes	No	IIQ/TIF Uncompressed	DB or Pro	
H 10	Yes	No	IIQ/TIF Uncompressed	DB or Pro	
H 5	Yes	No	IIQ/TIF Uncompressed	DB or Pro	
LightPhase	Yes	No	IIQ/TIF Uncompressed	DB or Pro	

Model	Tethered Support	Live view	Supported file and compression types	Required run modes	Notes
Credo 80	Yes	Yes	IIQ L, IIQ S	DB or Pro	
Credo 60	Yes	Yes	IIQ L, IIQ S	DB or Pro	
Credo 50	Yes	Yes	IIQ L, IIQ S	DB or Pro	
Credo 40	Yes	Yes	IIQ L, IIQ S	DB or Pro	
Aptus-II 12R	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 12	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 10R	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 10	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 8	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 7	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 6	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
Aptus-II 5	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
AFi-II 12	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
AFi-II 10	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
AFi-II 7	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered
AFi-II 6	Yes	Yes	MOS compressed/uncompressed	DB or Pro	Only compressed when tethered

Leaf and Mamiya Legacy

Model	Tethered Support	Live view	Supported file and compression types	Required run modes	Notes
Aptus 75S	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
Aptus 65S	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
Aptus 54S	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
AFi 7	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
AFi 6	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
AFi 5	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
Aptus 75	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
Aptus 65	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
Aptus 22	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
Aptus 17	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered

Model	Tethered Support	Live view	File Support	Required run modes	Notes
DM56	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
DM40	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
DM33	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
DM28	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
DM22	Yes	Yes	MOS compressed/uncompressed	Pro	Only compressed when tethered
M31	Yes	No	IIQ L, IIQ S	DB or Pro	
M22	Yes	No	IIQ L, IIQ S	DB or Pro	
M18	Yes	No	IIQ L, IIQ S	DB or Pro	

Model	Tethered Support	Live view	File support	Required run modes	Notes
MZD	No	No	MEF	Pro	
ZD back	No	No	MEF	Pro	



Model	Tethered Support	Live view	File Support	Required run modes	Notes
a7R II	Yes*	Yes*	ARW compressed/uncompressed	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
a7R	Yes*	No*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering
a7S II	Yes*	Yes*	ARW compressed/uncompressed	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
a7S	Yes*	Yes*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
a7 II	Yes*	Yes*	ARW compressed/uncompressed	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
a7	Yes*	No*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering
a99	Yes*	No*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering
a77 II	Yes*	Yes*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
a77	No	No	ARW	ES, ProS, Pro	
a68	Yes*	Yes*	ARW	ES, ProS, Pro (9.1 or later required)	Pro (for Sony)/Pro required for tethering + Live View
a65	No	No	ARW	ES, ProS, Pro	
a58	No	No	ARW	ES, ProS, Pro	
a57	No	No	ARW	ES, ProS, Pro	
a55	No	No	ARW	ES, ProS, Pro	
a37	No	No	ARW	ES, ProS, Pro	
a35	No	No	ARW	ES, ProS, Pro	
a33	No	No	ARW	ES, ProS, Pro	
a900	No	No	ARW	ES, ProS, Pro	
a850	No	No	ARW	ES, ProS, Pro	
a700	No	No	ARW	ES, ProS, Pro	
a580	No	No	ARW	ES, ProS, Pro	
a560	No	No	ARW	ES, ProS, Pro	
a550	No	No	ARW	ES, ProS, Pro	
a500	No	No	ARW	ES, ProS, Pro	
a450	No	No	ARW	ES, ProS, Pro	
a390	No	No	ARW	ES, ProS, Pro	
a380	No	No	ARW	ES, ProS, Pro	
a350	No	No	ARW	ES, ProS, Pro	
a330	No	No	ARW	ES, ProS, Pro	
a300	No	No	ARW	ES, ProS, Pro	
a290	No	No	ARW	ES, ProS, Pro	
a230	No	No	ARW	ES, ProS, Pro	
a200	No	No	ARW	ES, ProS, Pro	
a100	No	No	ARW	ES, ProS, Pro	
a6300	Yes*	Yes*	ARW	ES, ProS, Pro (9.1 or later required)	Pro (for Sony)/Pro required for tethering + Live View
a6000	Yes*	No*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering
a5100	Yes*	No	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering
a5000	Yes*	No*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering



Model	Tethered Support	Live view	File Support	Required run modes	Notes
a3000	No	No	ARW	ES, ProS, Pro	
RX1RM2	Yes*	Yes*	ARW compressed/uncompressed	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering (revised 9.1)
RX1R	No	No	ARW	ES, ProS, Pro	
RX1	No	No	ARW	ES, ProS, Pro	
R1	No	No	ARW	ES, ProS, Pro	
RX10	No	No	ARW	ES, ProS, Pro	
RX10M2	Yes*	Yes*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
RX100M4	Yes*	Yes*	ARW	ES, ProS, Pro	Pro (for Sony)/Pro required for tethering + Live View
RX100M3	No	No	ARW	ES, ProS, Pro	
RX100M2	No	No	ARW	ES, ProS, Pro	
RX100	No	No	ARW	ES, ProS, Pro	
NEX-7	No	No	ARW	ES, ProS, Pro	
NEX-6	No	No	ARW	ES, ProS, Pro	
NEX-5T	No	No	ARW	ES, ProS, Pro	
NEX-5R	No	No	ARW	ES, ProS, Pro	
NEX-5N	No	No	ARW	ES, ProS, Pro	
NEX-5	No	No	ARW	ES, ProS, Pro	
NEX-3N	No	No	ARW	ES, ProS, Pro	
NEX-F3	No	No	ARW	ES, ProS, Pro	
NEX-C3	No	No	ARW	ES, ProS, Pro	
NEX-3	No	No	ARW	ES, ProS, Pro	
NEX-VG20	No	No	ARW	ES, ProS, Pro	
NEX-VG30	No	No	ARW	ES, ProS, Pro	
NEX-VG900	No	No	ARW	ES, ProS, Pro	
NEX-VG900E	No	No	ARW	ES, ProS, Pro	
QX-1	No	No	ARW	ES, ProS, Pro	



Model	Tethered Support	Live view	File support	Required run modes	Notes
1D C	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
1D X	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
1D Mark IV	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
1Ds Mark III	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
1D Mark III	Yes	Yes	CR2	Pro	
1D Mark II N	No	No	CR2	Pro	
1Ds Mark II	No	No	CR2	Pro	
1D Mark II	No	No	CR2	Pro	
1Ds	No	No	CR2	Pro	
1D	No	No	CR2	Pro	
5DS	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
5DS R	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
5D Mark III	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
5D Mark II	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	
5D	No	No	CR2	Pro	
6D	Yes	Yes	CR2	Pro	
7D	Yes	Yes	CR2	Pro	
7D Mark II	Yes	Yes	CR2	Pro	
70D	Yes	Yes	CR2	Pro	
60D	Yes	Yes	CR2	Pro	
50D	Yes	Yes	CR2	Pro	
40D	Yes	Yes	CR2	Pro	
30D	No	No	CR2	Pro	
20D	No	No	CR2	Pro	
10D	No	No	CRW	Pro	
760D/Rebel T6s	Yes	Yes	CR2	Pro	
750D/Rebel T6i	Yes	Yes	CR2	Pro	
700D/Rebel T5i	Yes	Yes	CR2	Pro	
650D/Rebel T4i	Yes	Yes	CR2	Pro	
600D/Rebel T3i	Yes	Yes	CR2	Pro	
550D/Rebel T2i	Yes	Yes	CR2	Pro	
500D/Rebel T1i	Yes	Yes	CR2	Pro	
450D/Rebel XSi	Yes	Yes	CR2	Pro	
400D/Rebel XTi	No	No	CR2	Pro	
350D/Rebel XT	No	No	CR2	Pro	
300D/Rebel	No	No	CRW	Pro	



Model	Tethered Support	Live view	File support	Required run modes	Notes
100D/Rebel SL1	No	No	CR2	Pro	
1200D/Rebel T5	Yes	Yes	CR2	Pro	
1100D/Rebel T3	Yes	Yes	CR2	Pro	
1000D/Rebel XS	Yes	Yes	CR2	Pro	
100D/Rebel SL1	Yes	Yes	CR2	Pro	
D60	No	No	CRW	Pro	
D30	No	No	CRW	Pro	
M	No	No	CR2	Pro	
M3	No	No	CR2	Pro	
Pro 1	No	No	CRW	Pro	
G7X	No	No	CR2	Pro	
G1 X mk II	No	No	CR2	Pro	
G1 X	No	No	CR2	Pro	
G16	No	No	CR2	Pro	
G15 (preliminary)	No	No	CR2	Pro	
G12	No	No	CR2	Pro	
G11	No	No	CR2	Pro	
G10	No	No	CR2	Pro	
G9	No	No	CR2	Pro	
G6	No	No	CRW	Pro	
G5	No	No	CRW	Pro	
G3	No	No	CRW	Pro	
G2	No	No	CRW	Pro	
S120	No	No	CR2	Pro	
S110	No	No	CR2	Pro	
S100	No	No	CR2	Pro	
S95	No	No	CR2	Pro	
S90	No	No	CR2	Pro	



Model	Tethered Support	Live view	File Support	Required run modes	Notes
D4s	Yes	Yes	NEF (12bit/14bit/Comp/Uncomp), RAW-M)	Pro	RAW-S not supported
D4	Yes	Yes	NEF (12bit/14bit/Comp/Uncomp), RAW-M)	Pro	RAW-S not supported
DF	Yes	Yes	NEF	Pro	
D3s	Yes	Yes	NEF	Pro	
D3X	Yes	Yes	NEF	Pro	
D3	Yes	Yes	NEF	Pro	
D2Xs	No	No	NEF	Pro	
D2X	Yes*	No	NEF	Pro	Tethered support for Windows only
D2Hs	No	No	NEF	Pro	
D2H	No	No	NEF	Pro	
D1X	No	No	NEF	Pro	
D1H	No	No	NEF	Pro	
D810	Yes	Yes	NEF	Pro	
D810A	No	No	NEF (12bit/14bit/Comp/Uncomp), RAW-M)	Pro	RAW-S not supported
D800	Yes	Yes	NEF (12bit/14bit/Comp/Uncomp), RAW-M)	Pro	RAW-S not supported
D800E	Yes	Yes	NEF (12bit/14bit/Comp/Uncomp), RAW-M)	Pro	RAW-S not supported
D750	Yes	Yes	NEF	Pro	
D700	Yes	Yes	NEF	Pro	
D610	Yes	Yes	NEF	Pro	
D600	Yes	Yes	NEF	Pro	
D300s	Yes	Yes	NEF	Pro	
D300	Yes	Yes	NEF	Pro	
D200	Yes*	No	NEF	Pro	Tethered support for Windows only
D100	No	No	NEF	Pro	
D90	Yes	Yes	NEF	Pro	
D80	Yes	No	NEF	Pro	
D70s	No	No	NEF	Pro	
D70	No	No	NEF	Pro	
D60	Yes	No	NEF	Pro	
D50	No	No	NEF	Pro	
D40X	Yes	No	NEF	Pro	
D40	Yes	No	NEF	Pro	
D7200	Yes	Yes	NEF	Pro	
D7100	Yes	Yes	NEF	Pro	
D7000	Yes	Yes	NEF	Pro	
D5500	Yes	Yes	NEF	Pro	



Model	Tethered Support	Live view	File Support	Required run modes	Notes
D5300	Yes	Yes	NEF	Pro	
D5200	Yes	Yes	NEF	Pro	
D5100	Yes	Yes	NEF	Pro	
D5000	Yes	Yes	NEF	Pro	
D3300	No	No	NEF	Pro	
D3200	No	No	NEF	Pro	
D3100	No	No	NEF	Pro	
D3000	No	No	NEF	Pro	
P330	No	No	NEF	Pro	
P340	No	No	NEF	Pro	
P7800	No	No	NEF	Pro	
P7700	No	No	NEF	Pro	
P7100	No	No	NEF	Pro	
P7000	No	No	NEF	Pro	
P6000	No	No	NEF	Pro	
1 AW1	No	No	NEF	Pro	
J4	No	No	NEF	Pro	
J3	No	No	NEF	Pro	
J2	No	No	NEF	Pro	
J1	No	No	NEF	Pro	
V3	No	No	NEF	Pro	
V2	No	No	NEF	Pro	
V1	No	No	NEF	Pro	
S1	No	No	NEF	Pro	
Coolpix A	No	No	NEF	Pro	



Model	Tethered Support	Live view	File Support	Required run modes	Notes
Leica SL	No	No	DNG native	Pro (9.1 or later required)	
M (Typ 240)	No	No	DNG native	Pro	
X1	No	No	DNG native	Pro	
C (Typ 112)	No	No	RWL	Pro	
D-Lux 5	No	No	RWL	Pro	
M (Typ 220)	No	No	DNG native	Pro	
M-Monochrom	No	No	DNG native	Pro	
X (Typ 113)	No	No	DNG native	Pro	
X2	No	No	DNG native	Pro	
X Vario	No	No	DNG native	Pro	
M9	No	No	DNG native	Pro	
M8	No	No	DNG native	Pro	
T (Typ 701)	No	No	DNG native	Pro	
V-Lux 4	No	No	RWL	Pro	
D-Lux (Typ 109)	No	No	RWL	Pro	
D-Lux 6	No	No	RWL	Pro	
Q (Typ 116) (prelim)	No	No	DNG native	Pro	
D-Lux 4	No	No	RW2	Pro	
Digilux 3	No	No	RAW	Pro	
Digital Module R	No	No	RAW	Pro	

Model	Tethered Support	Live view	File Support	Required run modes	Notes
X-T1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-Pro1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X100T	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X10	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
XQ1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-A1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-A2	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-M1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-S1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-E2	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X-E1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
XF1	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X100S	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X100	No	No	RAF	Pro	
X30	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
X20	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
XT10	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
S5 Pro	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
S3 Pro	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported
S2 Pro	No	No	RAF	Pro	LCC, auto mask, export DNG, repair layers: Not supported

Model	Tethered Support	Live view	File Support	Required run modes	Notes
E-1	No	No	ORF	Pro	
E-M1	No	No	ORF	Pro	
E-M5 II	No	No	ORF	Pro	High res mode not supported
E-M5	No	No	ORF	Pro	
E-M10	No	No	ORF	Pro	
E-M10 Mk II	No	No	ORF	Pro (9.1 or later required)	
Pen-F	No	No	ORF	Pro (9.1 or later required)	
Stylus 1	No	No	ORF	Pro	
E-5	No	No	ORF	Pro	
E-P5	No	No	ORF	Pro	
E-PL7	No	No	ORF	Pro	
E-PL5	No	No	ORF	Pro	
E-PL3	No	No	ORF	Pro	
E-PL2	No	No	ORF	Pro	
E-PM2	No	No	ORF	Pro	
E-PM1	No	No	ORF	Pro	
XZ-2 iHS	No	No	ORF	Pro	
XZ-1	No	No	ORF	Pro	
XZ-10	No	No	ORF	Pro	

Model	Tethered Support	Live view	File Support	Required run modes	Notes
E-620	No	No	ORF	Pro	
E-3	No	No	ORF	Pro	
E-520	No	No	ORF	Pro	
E-510	No	No	ORF	Pro	
E-450	No	No	ORF	Pro	
E-P3	No	No	ORF	Pro	
E-P2	No	No	ORF	Pro	
E-P1	No	No	ORF	Pro	
E-420	No	No	ORF	Pro	
E-410	No	No	ORF	Pro	
E-500	No	No	ORF	Pro	
E-10	No	No	ORF	Pro	
E-20	No	No	ORF	Pro	
E-30	No	No	ORF	Pro	
E-330	No	No	ORF	Pro	
E-300	No	No	ORF	Pro	
E-400	No	No	ORF	Pro	
C-7070	No	No	ORF	Pro	
C-8080	No	No	ORF	Pro	
TG-4	No	No	ORF	Pro	



Model	Tethered Support	Live view	File Support	Required run modes	Notes
GR	No	No	DNG native	Pro	
GR II	No	No	DNG native	Pro (9.1 or later required)	
GR DIGITAL II	No	No	DNG native	Pro	
GX200	No	No	DNG native	Pro	
GXR A16	No	No	DNG native	Pro	
GR DIGITAL IV	No	No	DNG native	Pro	
GR DIGITAL III	No	No	DNG native	Pro	
GR DIGITAL	No	No	DNG native	Pro	
GX100	No	No	DNG native	Pro	
GRX S10	No	No	DNG native	Pro	
GXR P10	No	No	DNG native	Pro	
GXR A12	No	No	DNG native	Pro	

Model	Tethered Support	Live view	File Support	Required run modes	Notes
GX8	No	No	RW2	Pro	
GX7	No	No	RW2	Pro	
GX1	No	No	RW2	Pro	
GF7	No	No	RW2	Pro	
GF6	No	No	RW2	Pro	
GF5	No	No	RW2	Pro	
GF3	No	No	RW2	Pro	
GF2	No	No	RW2	Pro	
GF1	No	No	RW2	Pro	
GM5	No	No	RW2	Pro	
GM1	No	No	RW2	Pro	
GH4	No	No	RW2	Pro	
GH3	No	No	RW2	Pro	
GH2	No	No	RW2	Pro	
GH1	No	No	RW2	Pro	
G7	No	No	RW2	Pro (9.1 or later required)	
G6	No	No	RW2	Pro	
G5	No	No	RW2	Pro	
G3	No	No	RW2	Pro	
G2	No	No	RW2	Pro	
G1	No	No	RW2	Pro	
G10	No	No	RW2	Pro	
LX100	No	No	RW2	Pro	
LX7	No	No	RW2	Pro	
LX5	No	No	RW2	Pro	
LX3	No	No	RW2	Pro	
FZ72	No	No	RW2	Pro	
FZ45	No	No	RW2	Pro	
FZ200	No	No	RW2	Pro	
FZ150	No	No	RW2	Pro	
FZ1000	No	No	RW2	Pro	
FZ100	No	No	RW2	Pro	
LF1	No	No	RW2	Pro	

PENTAX

Model	Tethered Support	Live view	File Support	Required run modes	Notes
K-01	No	No		Pro	
K-30	No	No		Pro	
K110D	No	No		Pro	
MX-1	No	No		Pro	
K-3	No	No	PEF	Pro	PEF only
K-3 II	No	No		Pro	Pixel shift mode not supported
K-5 II	No	No		Pro	
K-5 II	No	No		Pro	
K-5	No	No		Pro	
K50	No	No		Pro	
K-S2	No	No		Pro (9.1 or later required)	
K-r	No	No		Pro	
K20D	No	No		Pro	
K10D	No	No		Pro	
K7	No	No		Pro	
KX	No	No		Pro	
K200D	No	No		Pro	
K100D Super	No	No		Pro	
K100D	No	No		Pro	
K2000/K-m	No	No		Pro	
*istD	No	No		Pro	
*istDL2	No	No		Pro	
*istDL	No	No		Pro	
*istDS2	No	No		Pro	
*istDS	No	No		Pro	
Q10	No	No		Pro	
Q7	No	No		Pro	(FW 1.0.0 Only)
Q	No	No	PEF	Pro	PEF only



Model	Tethered Support	Live view	File Support	Required run modes	Notes
NX1	No	No	SRW	Pro	
NX11	No	No	SRW	Pro	
NX3000	No	No	SRW	Pro	
NX2000	No	No	SRW	Pro	
NX30	No	No	SRW	Pro	
NX20	No	No	SRW	Pro	
NX10	No	No	SRW	Pro	
NX5	No	No	SRW	Pro	
NXMini	No	No	SRW	Pro	
NX300	No	No	SRW	Pro	
NX210	No	No	SRW	Pro	
NX200	No	No	SRW	Pro	
NX100	No	No	SRW	Pro	
NX1000	No	No	SRW	Pro	
EX2F	No	No	SRW	Pro	



Model	Tethered Support	Live view	File Support	Required run modes	Notes
Alpha 5 D	No	No	MRW	Pro	
Alpha 7 D	No	No	MRW	Pro	
A1	No	No	MRW	Pro	
A2	No	No	MRW	Pro	

Other

Model	Tethered Support	Live view	File Support	Required run modes	Notes
Cinema DNG	N/A	N/A	N/A	Pro	
Linear DNG	N/A	N/A	N/A	Pro	
DNG 1.4	N/A	N/A	N/A	Pro	
Epson RD1	No	No	DNG	Pro	
Epson RD1s	No	No	DNG	Pro	
DxO One	No	No	DNG	Pro (9.0.1 or later required.)	Multi shoot mode not supported.

Phase One Lens Profiles (645)

Phase One

Focal plane lenses	Leaf shutter lens profiles
Digital AF 28mm f/4.5 Aspherical	LS 28mm f/4.5 Aspherical
Digital AF 35mm f/3.5	LS 35mm f/3.5 (Blue Ring)
Digital AF 45mm f/2.8	LS 40-80mm f/4.0-5.6
Digital AF 80mm f/2.8	LS 55mm f/2.8
Digital AF 150mm f/2.8 IF	LS 75-150mm f/4-5.6
Digital AF 150mm (2x Tele) f/5.6	LS 80mm f/2.8
Digital AF 120mm f/4 Macro	LS 110mm f/2.8
Digital Zoom AF 75-150mm f/4.5	LS Macro 120mm f/4.0 (Blue Ring)
MF 120mm f/4 Macro	LS 150mm f/3.5
Schneider-Kreuznach 120mm TS f/3.5	LS 150mm (2x Tele) f/7.0
	LS 240mm f/4.5
	LS 240mm (2x Tele) f/9.0

Mamiya Lens Profiles (645)

Mamiya

Focal plane lenses	Leaf shutter lens profiles
Sekor MF 120mm f/4.0 Macro	Sekor LS 55mm f/2.8 D
Sekor AF 150mm f/2.8 IF D	Sekor LS 80mm f/2.8 D
Sekor AF 150mm IF D (2x Tele) f/5.6	Sekor LS 110mm f/2.8 D
Sekor AF 28mm f/4.5 Aspherical D	Sekor LS 150mm f/3.5
Sekor AF 80mm f/2.8 D	Sekor LS 150mm (2x Tele) f/7.0
A 200mm f/2.8 APO	Sekor LS 240mm f/4.5
A 300mm f/2.8 APO	Sekor LS 240mm (2x Tele) f/9.0
A 500mm f/4.5 APO	
AF 35mm f/3.5	
AF 45mm f/2.8	

A-Series and Large Format Lens Profiles

Rodenstock

HR Digaron - S 5.6/23 mm
HR Digaron - W 4.0/32 mm
HR Digaron - S 4.0/35 mm
HR Digaron - W 4.0/40 mm
HR Digaron - W 4.0/50 mm
HR Digaron - W 4.0/40mm/Aerial
HR Digaron - W 4.0/50mm/Aerial
HR Digaron - W 5.6/70mm/Aerial
HR Digaron - W 5.6/70 mm

A - Series

Alpagon 5.6/23 mm
Alpar 4.0/35 mm
Alpagon 5.6/70mm

Hasselblad V and H

Carl Zeiss (Hasselblad V)

Distagon T* 3.5/60 CF

Distagon T* 4/40 IF CFE

Makro-Planar T* 4/120 CFE

Carl Zeiss (Contax 645)

Distagon T* 2.8/45

Distagon T* 3.5/35

Distagon T* 3.5/55

Distagon T* 2.8/80 CF

Planar T* 2/80

Apo-Makro-Planar T* 4/120

Sonnar T* 4/210

Hasselblad H

HC 3.5/35

HC 2.8/80

HC 2.2/100

HC 3.2/150

HC 3.5-4.5/50-110

HC 4/120

HCD 4/28

Sony Lens Profiles

Sony

E 18-55mm f/3.5-5.6 OSS (SEL1855)

E PZ 16-50 mm F3.5-5.6 OSS (SELP1650)

E 30mm F3.5 Macro (SEL30M35)

E 16mm F2.8 (SEL16F28)

FE 28-70mm F3.5-5.6 OSS (SEL2870)

FE 85 1.4 GM

A 50 mm F2.8 Macro (SAL50M28)

A Carl Zeiss Distagon T* 24mm F2 ZA SSM (SAL24F20Z)

A Carl Zeiss Vario-Sonnar T* 24-70 mm F2.8 ZA SSM (SAL 2470Z)

A Carl Zeiss Planar T* 85 mm F1.4 ZA (SAL85F14Z)

A 70-300mm F4.5-5.6 G SSM (SAL 70300G)

E 50mm F1.8 OSS (SEL50F18)

A 100mm F2.8 Macro (SAL100M28)

A 85 mm F2.8 SAM (SAL85F28)

A 35 mm F1.4G (SAL 35F14G)

A Carl Zeiss Vario-Sonnar T* 16-35mm F2.8 ZA SSM (SAL1635Z)

A Carl Zeiss Sonnar T* 135 mm F1.8 ZA (SAL 135F18Z)

A DT 11-18 mm F4.5-5.6 (SAL1118)

A DT 16-50mm F2.8 SSM (SAL1650)

Sony DT 18-55mm F3.5-5.6 SAM II

FE 24-70 2.8 GM (SEL2470GM)

Carl Zeiss (Sony E)

Zeiss Batis 1.8/85

Zeiss Batis 2/25

Carl Zeiss Sonnar T* FE 35 mm F2.8 ZA

Carl Zeiss Sonnar T* E 24 mm F1.8 ZA

Sigma (Sony E)

30mm F2.8 EX DN

60mm F2.8 DN A

A 50mm F1.4 (SAL50F14)

Canon Lens Profiles

Canon

EF 16-35mm f/2.8L II USM

EF 17-40mm f/4L USM

EF 20mm f/2.8 USM

EF 24-70mm f/2.8L USM

EF 24-70mm f/2.8L II USM

EF 24-70mm f/4L IS USM

EF 24-105mm f/4L IS USM

EF 24mm /1.4L II USM

EF 35mm f/1.4L USM

EF 40mm f/2.8 STM

EF 50mm f/1.2L USM

EF 50mm f/1.4 USM

EF 50mm f/1.8 II

EF 70-200mm f/2.8L IS II USM

EF 70-200mm f/2.8L IS USM

EF 70-200mm f/4 L IS USM

EF 85mm f/1.2L II USM

EF 85mm f/1.8 USM

EF 100mm f/2.8 Macro USM

EF 100mm f/2.8L Macro IS USM

EF 100-400mm f/4.5-5.6L IS USM

EF 135mm f/2L USM

EF 300mm f/4L IS USM

EF-S 10-22mm f/3.5-4.5 USM

EF-S 17-55mm f/2.8 IS USM

EF-S 17-85mm f/4-5.6 IS USM

EF-S 18-135mm f/3.5-5.6 IS STM

EF-S 18-55mm f/3.5-5.6 IS STM

EF-S 18-55mm f/3.5-5.6 IS

Sigma (Canon EF)

8-16mm F4.5-5.6 DC HSM

10-20mm F3.5 EX DC HSM

105mm F2.8 EX DG OS HSM Macro

120-400mm F4.5-5.6 DG APO OS HSM

120-300mm F2.8 DG OS HSM | S

150-500mm F5-6.3 APO DG OS HSM

150mm F2.8 EX DG OS HSM APO Macro

17-50mm F2.8 EX DC OS HSM

17-70mm F2.8-4 DC Macro OS HSM | C

18-200mm F3.5-6.3 II DC OS HSM

18-250mm F3.5-6.3 DC MACRO OS HSM

18-35mm F1.8 DC HSM | A

24-105mm F4 DG OS HSM | Art

24-70mm F2.8 IF EX DG HSM

24mm F1.8 EX DG ASP Macro

28mm F1.8 EX DG ASP Macro

30mm F1.4 EX DC HSM

50mm F1.4 EX DG HSM

50mm F2.8 EX DG Macro

85mm F1.4 EX DG HSM

APO 50-150mm F2.8 EX DC OS HSM

APO 70-200mm F2.8 EX DG OS HSM

10-20mm F4-5.6 EX DC HSM

50- 500mm F4.5-6.3 APO DG OS HSM

70-300mm F4-5.6 APO DG Macro

APO Macro 180mm F2.8 EX DG OS HSM

EF-S 17-85mm f/4-5.6 IS USM

EF-S 18-135mm f/3.5-5.6 IS STM

EF-S 18-55mm f/3.5-5.6 IS STM

EF-S 18-55mm f/3.5-5.6 IS

Canon Lens Profiles

Sigma (Canon EF)

Sigma 24-35mm F2 DG HSM | A

Sigma 50mm F1.4 DG HSM | A

Zeiss (Canon EF)

Zeiss Milvus 21mm F2.8

Zeiss Milvus 35mm F2

Zeiss Milvus 50mm F1.4

Zeiss Milvus 50mm F2

Zeiss Milvus 85mm F1.4

Zeiss Milvus 100mm F2

Nikon Lens Profiles

Nikon

AF NIKKOR 20mm f/2.8D
AF NIKKOR 28-105mm f/3.5-4.5 D IF
AF NIKKOR 35-70mm f/2.8D
AF NIKKOR 35mm f/2D
AF NIKKOR 50mm f/1.8D
AF-S NIKKOR 20mm f/1.8G ED
AF-S DX NIKKOR 16-85mm f/3.5-5.6G ED VR
AF-S DX NIKKOR 18-70mm f/3.5-4.5G IF-ED
AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR
Nikon AF-S DX NIKKOR 18-135mm f/3.5-5.6G IF-ED
AF-S DX NIKKOR 18-200mm f/3.5-5.6G ED VR
AF-S DX NIKKOR 18-300mm f/3.5-5.6G ED VR
AF-S DX NIKKOR 18-55mm f/3.5-5.6G VR
AF-S DX NIKKOR 35mm f/1.8G
AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED
AF-S NIKKOR 14-24mm f/2.8G ED
AF-S NIKKOR 16-35mm f/4G ED VR
AF-S NIKKOR 17-35mm f/2.8 ED
AF-S NIKKOR 24-120mm f/4G ED VR
AF-S NIKKOR 24-70mm f/2.8E ED VR
AF-S NIKKOR 24-70mm f/2.8G ED
AF-S NIKKOR 24-85mm f/3.5-4.5G ED VR
AF-S NIKKOR 24mm f/1.4G ED
AF-S NIKKOR 28-300mm f/3.5-5.6G ED VR
AF-S NIKKOR 28-70mm f/2.8D IF-ED
AF-S NIKKOR 35mm f/1.4G
AF-S NIKKOR 50mm f/1.4G
AF-S NIKKOR 50mm f/1.8G
AF-S NIKKOR 70-200mm f/2.8G ED VR II
AF-S NIKKOR 70-200mm f/2.8G ED VR
AF-S NIKKOR 70-200mm f/4G ED VR
AF-S NIKKOR 85mm f/1.4G
AF-S NIKKOR 85mm f/1.8G
AF-S NIKKOR 58 mm 1.4G
AF-S NIKKOR 35mm f/1.8G ED
AF-S NIKKOR 28mm f2.8ED
AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED
AF-S Micro-Nikkor 60mm f/2.8GED

Nikon

AF-S VR Zoom 70-300mm f/4.5-5.6G IF- ED
AF DC-Nikkor 135mm f/2D
1 NIKKOR 11-27.5mm f/3.5-5.6
1 NIKKOR VR 10-30mm f/3.5-5.6
1 NIKKOR AW 11-27.5mm f/3.5-5.6
1 NIKKOR AW 10mm f/2.8

Sigma (Nikon F)

19mm f2.8 EX DN
20mm F1.8 EX DG ASP RF
24mm F1.4 DG HSM | A
30mm F1.4 DC HSM | A
35mm F1.4 DG HSM | A
70mm F2.8 EX DG Macro
12-24mm F4.5-5.6 DG HSM II
70-300mm F4-5.6 DG OS
120-300mm F2.8 EX DG OS APO HSM
150-600 F5-6.3 DG OS HSM

Carl Zeiss (Nikon F)

Otus 55mm f1.4
Otus 85mm f1.4
Distagon T* 2/35mm ZF.2
Distagon T* 1.4/35mm ZF.2
Zeiss Distagon T* 3.5/18mm ZF.2
Zeiss Distagon T* 2.8/21mm ZF.2
Zeiss Distagon T* 2.8/15mm ZF.2
Zeiss Distagon T* 2/28mm ZF.2
Zeiss Distagon T* 3.5/18mm ZF.2
Zeiss Distagon T* 2.8/25mm ZF.2
Zeiss Distagon T* 2/25mm ZF.2
Zeiss Distagon T* 2.8/25mm ZF.2
Planar T* 1,4/50mm ZF.2
Makro Planar T* 2/50mm ZF.2
Planar T* 1.4/85mm ZF.2
Makro Planar 2/100mm ZF.2
Apo Sonnar T* 2/135mm ZF.2

Olympus Lens Profiles

Olympus

M.ZUIKO DIGITAL 17mm 1:2.8 Pancake
M.ZUIKO DIGITAL 25mm 1:1.8
M.ZUIKO DIGITAL 45mm 1:1.8
M.ZUIKO DIGITAL ED 7-14mm f2.8 PRO
M.ZUIKO DIGITAL ED 12-40mm 1:2.8
M.ZUIKO DIGITAL ED 40-150mm f/2.8 Pro
M.ZUIKO DIGITAL ED 12-50mm 1:3.5- 6.3 EZ
M.ZUIKO DIGITAL ED 12mm 1:2.0
M.ZUIKO DIGITAL ED 17mm 1:1.8
M.ZUIKO DIGITAL ED 60mm 1:2.8 Macro
M.ZUIKO DIGITAL ED 75-300mm 1:4.8-6.7
M.ZUIKO DIGITAL ED 75mm 1:1.8
M.ZUIKO DIGITAL ED 9-18mm 1:4.0-5.6
ZUIKO DIGITAL ED 7-14mm 1:4.0
ZUIKO DIGITAL ED 9-18mm 1:4.0-5.6
ZUIKO DIGITAL 11-22mm 1:2.8-3.5
ZUIKO DIGITAL ED 12-60mm 1:2.8-4.0 SWD
ZUIKO DIGITAL ED 14-35mm 1:2.0 SWD
ZUIKO DIGITAL 14-54mm 1:2.8-3.5 II
ZUIKO DIGITAL ED 50mm 1:2.0 Macro
ZUIKO DIGITAL ED 150mm 1:2.0
ZUIKO DIGITAL ED 300mm 1:2.8.
ZUIKO DIGITAL ED 50-200mm 1:2.8-3.5 SWD
ZUIKO DIGITAL ED 90_250mm 1:2.8
ZUIKO DIGITAL ED 35_100mm 1:2.0

Pentax Lens Profiles

Pentax

SMC-DA 15mm F4 AI Limited
SMC-DA 18-55mm F3.5-5.6 AL WR
SMC-DA 21mm F3.2 AI Limited
SMC-FA 31mm F1.8 Limited
SMC-FA 43mm F1.9 Limited
SMC-DA 70mm F2.4 Limited
SMC-D FA 100mm F2.8 WR

Panasonic Lens Profiles

Panasonic

LUMIX G 14mm F2.5 ASPH.
LUMIX G 20mm F1.7 ASPH.
LUMIX G X VARIO 12-35mm F2.8 ASPH. POWER O.I.S
LUMIX G VARIO 14-42 f3.5-5.6 II ASPH. O.I.S.
M.ZUIKO DIGITAL 14-42mm 1:3.5-5.6 II R
LUMIX G VARIO 14-42mm F3.5-5.6 ASPH. MEGA O.I.S.

Leica Lens Profiles

Leica

50mm f.2 Summicron-M

Fixed Lens Profiles

Fixed Lens cameras

Canon PowerShot G1 X

Canon PowerShot G12

Canon PowerShot G15

Canon PowerShot G16

Canon PowerShot S100/S110

Canon PowerShot S120

Fujifilm FinePix X100

Leica D-Lux (Typ 109)

Leica X (Typ 113)

Nikon COOLPIX A

Nikon COOLPIX P340

Nikon COOLPIX P7700

Nikon COOLPIX P7800

Olympus XZ 6-24mm

Olympus XZ-10

Panasonic LX100

Ricoh GR

Sony Cyber-shot DSC-RX100 II

Sony Cyber-shot DSC-RX100

Sony Cyber-shot DSC-RX10

Sony RX1/RX1R