

# **Capture One 11.0**

Engineered for your creativity

### Capture One 11 Release Notes

Capture One 11 is a professional RAW converter offering you ultimate image quality with beautiful colors and incredible detail for 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 11 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 11 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 11 is available in four modes (these are notated in the camera grid):

Capture One Pro Capture One DB (Digital Back only) Capture One Pro Sony Capture One Express Sony

The release notes include notes for all releases of Capture One 11. Previous release notes can be found in the Phase One download archive.

Best regards, Team Phase One

### Contents

11.0.1 Camera and Lens Support 11.0.1 Bug Fixes	1 2
11 Feature Summary 11 Feature Walk Through	3 4
System Requirements	7
Installation	8
Recommendations and limitations	9
Known issues	10
File support: Notes and limitations	10

### Camera Support

Fixed Lens Profiles

Dhasa Ora	11
Phase One	11
Phase One Industrial	12
Mamiya Leaf	13
Leaf and Mamiya Legacy	14
Sony	15
Canon	17
Nikon	20
Leica	22
Fuji	23
Olympus	24
Ricoh	26
Panasonic	27
Pentax	29
Samsung	30
Konica Minolta	30
Other	30
Lens support	
Phase One Lens Profiles (645)	31
A-Series and Technical Lens Profiles	31
Mamiya Lens Profiles (645)	31
Hasselblad V and H	32
Contax 645	32
Sony Lens Profiles	33
Canon Lens Profiles	35
Nikon Lens Profiles	37
Olympus Lens Profiles	39
Pentax Lens Profiles	39
Panasonic Lens Profiles	40
Leica Lens Profiles	40

## 11.0.1 Camera Support

• Fuji X-E3

## 11.0.1 Lens Support

- Olympus M.Zuiko Digital ED 17mm f/1.2 PRO
- Olympus M.Zuiko Digital ED 45mm f/1.2 PRO
- Leica Elmarit-M 21mm f/2.8 ASPH.
- Leica Summarit-M 35mm f/2.4 ASPH
- Leica Summaron-M 28mm f/5.6
- Leica Elmarit-M 24mm f/2.8 ASPH
- Leica APO-Summicron-M 50mm f/2 ASPH
- Leica Tri-Elmar-M 28-35-50mm f/4 ASPH

# 11.0.1 Bug Fixes Mac

- Clicking on buy CO leads to broken link
- Apple Script Autocrop command not working
- Importer allows colon even if batch rename does not and it is an illegal character
- Sorting order for rating does not work in Import window
- Migrating a catalog doesn't generate all the right thumbnails
- Aperture importer crashes Capture One in specific environments
- Text wrap in meta data fields not working
- Cursor not updated correctly when having Color Balance selected
- Using Counter token in import renaming does not sync with the displayed sequence
- Inserting camera SD card does not cause importer to open
- Synchronize referenced folders broken when using Import window
- Library tool: Changes collection selection if image to be imported is already referenced
- "." in Next Capture Naming causes Capture Error
- Importer "Open Collection When Import Starts" does not work for Capture Collection
- Read Only / No Permission to edit if DCIM folder exists on external drive
- Advance Search Preset for Color tag not applying for Smart Albums
- Empty Naming format field in Import Images causes import to fail silently
- Session favorite rename not possible
- Cannot Import All until all images are done loading inside the Import Dialogue
- Import an aperture library offsets the crop
- Cannot create keyword library from catalog
- Importing with full screen mode on results in drop out of capture one screens
- Next Capture location opens inside catalog
- Highlighted collection jumps to Recents on every capture
- Phase One 45mm 2.8 profile not working properly with copy from last
- If EXIF data is empty on date, date token does not work
- Cannot move guides in Live View Window
- Favorite folder will not update rename of folder before changing tab
- Moving a favorite folder in the library tool causes it to go missing
- Uniformity values reset when changing layers
- Naming sample ignores Document Name
- Show in library grayed out for file menu, but available for right click on image
- Shutter speed format is decimal not fractal
- Collection does not remain highlighted
- Unable to drag image from browser in 'list/detail' view
- Viewer color readouts not showing up when enabling the "View selected color range" check box in the Color Editor tool
- Lockup using Check for Updates menu item, while Recents window is open.
- Labels turning black
- Show in Finder doesn't do anything for missing folders
- Moving folders on a volume results in copy instead of move operation
- Library tool shows duplicate folders when moving folders

- Browser count disappears on switching collections
- Collection size in Inspector in Library Tool not updated correctly
- Blank Activities window
- Curved sliders in color balance tool are not anti-aliased
- Keyword library tool drawing inconsistencies
- Selected collection stays selected in document when de-selecting collection in Library Tool
- Find missing files Finder pop-up blocks view on file names
- Renaming a parent catalog folder cause folder to collapse
- Update show / hide filters window UI
- Meta data inspector tool expansion arrows blink
- File sizes don't match with file sizes displayed in Finder

### 11.0.1 Bug Fixes Windows

- Filter does not update star rating when rating a recent import using the viewer labels
- White balance is reset when disabling layer
- Edited or adjusted image icon disappears after restart
- Local adjustments tool-tab is misaligned
- Sort favorites/albums by Name missing on Windows
- Workspace Black & White Editing shows horizontal film strip
- "Portrait" string (in orientation filter) not translated to Japanese
- Folders image count is off when removing catalog images and/or synchronizing folders
- Black & White tool does not remember the selected tab
- Gradient mask has no effect on clone/heal layer
- The cursor tool 'Move to Selects Folder' is visible when in Catalog
- Global Filters issue with search bar
- Curves tool does not update values when dragging a non-B/W curve point outside tool
- Shift+Add or Subtract activates / deactivates the layer.
- Layer selection point changes when changing same layer after restart
- Draw/erase/gradient mask undo action always "Draw mask"
- Detached Viewer Window Layer Drop down Only Showed "Background"
- Menu items to import Lightroom/MP catalogs are kept unavailable if canceling a current catalog import
- User receiving message "Unable to open event log database.." after clean install
- Layer tool > "Save Settings as Style" opens "Save Preset" dialog
- Pop-up window is different between Win and Mac
- Naming in Auto Adjust Win/Mac misaligned
- Missing Composition tool-tab in Simplified Tethered Capture workspace
- Missing Overlay tool from Capture tool-tab in Dual Monitor Large Viewer workspace
- Folders in Styles & Presets tool do not expand on single click

## 11 Feature Summary

Capture One 11 is a major release containing new features, performance improvements, bug fixes and new camera and lens support.

### **New Feature Summary**

- Annotations
- Export with Assets
- Improved "Back-up And Restore" mechanism for Catalogs
- Duplicate checker for the Importer
- LAB Readouts
- Levels as a Layer Adjustment
- Color Balance as a Layer Adjustment
- Create new Filled Layer
- Presets for Layer capable tools
- Master Layer Opacity
- Feather Mask
- Refine Mask Edge
- Clear Mask
- Greyscale Mask preview mode
- Expanded AppleScript

### Performance

- Catalog load speed improved
- More responsive sliders for Mac
- Faster masking

### **Miscellaneous Improvements**

- Redesigned Local adjustments concept (now Layers)
- New Custom tool tab icons
- Color editor logic for blending multiple Layer adjustments
- Layer creation options
- Toolbar Auto tool aligned with Tool Auto
- Added Brightness and Contrast parameter to Auto

# 11 Feature Walk Through

### Annotations

This feature enables mark-up and annotation on an image for communication between photographer and retoucher when collaborating on projects. The annotations are stored as part of the settings files and so can be packed easily with EIP. A small pencil icon is used to indicate Annotated images in the Browser. The feature includes:

- Drawing (in several colors)
- Erase
- Tool bar Show/hide button
- Filters (by annotated state)
- Include/exclude options when processing/exporting
- Annotations in a separate Layer (see Export with Assets below)

### Export/Process with Assets

Capture One 11 adds the ability to include elements of the Capture One workflow in the final file. The options to include can be configured in the recipe tab>Meta data. When used as a PSD Export, the asset will be included in its own layer.

Annotations

An output option is added for including the annotations in the final file. When using PSD output these are processed to a layer, providing the notes in a non-destructive overlay.

• Crop as Path (PSD only)

Available when outputting to PSD, this option (like ignore crop) processes the entire canvas but stores the crop from Capture One in the output file as a path. By storing the crop in a PSD path, the retoucher can reload the Art Directors' original crop from the image at any time after retouching is concluded.

Include Overlay

The overlay used in composition tasks can be included in the file. When working with PSD output, the overlay will be processed to it's own layer.

• Watermark as Layer

Watermarks can also be exported to their own layer when working with PSD output.

### Improved Back-up and Restore Mechanism for Catalogs

Should the catalog need restoring from a back up, following crash or corruption the application can now assist the user in restoring the back up file from the back-ups folder automatically.

### **Duplicate Checker for the Importer**

Designed to solve the problems of importing from reusing a partially full memory card, the importer can check the source against the document for files already imported. Using a super robust caching mechanism against the RAW data means importing the difference from the last import is easy, accurate and efficient.

### Lab Readouts

Due to popular request, the Lab readouts function has been added to the application, giving Lab values at the cursor point in the image. Enable Lab readouts from the View menu.

### Levels as a Layer Adjustment

Levels can now be used in conjunction with layers/masks

### Color Balance as a Layer Adjustment

Color balance can now be used in conjunction with layers/masks

### **Create New Filled Layer**

Click and hold the Create new "+" icon in the Layers tool to reveal the new option - Create new filled mask can be found here. This is useful for creating a quick filled layer for adding an overall master-grade to an image

### Presets for Layer Capable Tools

The preset function (saving a tool setting for later use) is now available when working with Layers. Select the Layer, mask the area to be adjusted and then apply the preset from the

specific tool preset menu. Note only one preset per tool can be used in a single Layer (no stacking of presets). To use multiple presets, use multiple Layers. The result will be additive.

This is particularly useful when used in combination with "Auto Adjust" tool, thereby opening a workflow of "normalization" in the Background Layer and applying a visual "offset" or "master-grade" effect on top of basic adjustments.

Styles can also be applied to the Layer\* by right clicking on the layer>Apply settings from... Where the Style contains adjustments supported by Layers, the settings will be applied to those tools and thus into the mask.

\*Some Styles settings are not supported or may be partially applied depending on if the Style contains an adjustment supported by a mask. As an example, if a Style contains Rotation and Exposure, Rotation will be ignored and only Exposure from the Style will be applied.

#### Master Layer Opacity

Once adjustments (or a Style as described above) are applied in a mask, the "impact" of the layer adjustment can be modified with the Opacity slider. Each layer has a percentage indicator giving an overview of blending when using multiple Layers.

#### **Feather Mask**

Once a Mask is drawn, the edges can be softened by Feathering the Mask. Click the "…" menu in the Layers tool > Feather Mask to open the modal dialog. Adjust and press OK to commit.

#### **Refine Mask Edge**

Used in combination with Auto Mask. Auto Mask the target area as normal, aiming to get a tight a mask as possible. Run "Refine Mask" from the "..." menu in the Layers tool to refine the selection. This is best used in combination with the Greyscale Mask preview (especially with fine selections like hair).

#### **Greyscale Mask Preview**

Converts the preview to a Black and White image to aid masking and fine selections. Black is unmasked, White is masked and everything in between is a shade of Grey (depending on opacity). Like the existing Mask it can be toggled on/off using a short cut (Opt+M mac/ Alt+M Win) or chosen from the Brush cursor sub menu (click-hold the Brush cursor icon

in the cursor palette or Layers tool.) Note, if you enable this tool without a Layer mask present the entire image will be a black. A small warning triangle on the tool bar will indicate Greyscale masking is enabled for the variant.

#### Expanded AppleScript (Mac)

Automation scripting is extended, with the following properties now scriptable:

- Adjustments (Limited to those also available in SDK)
- Layers and Layer functions
- Adding and moving variants between collections
- Exposure Evaluation Tool
- Clones and variants (pick/promote/demote)
- Styles/Presets
- Export Originals
- LCC create/apply/remove
- Filters

#### Refactors

The following changes are made to Token syntax in Capture One 11. Existing scripts will need updating with the new syntax in order to function in Capture One 11.

- The syntax for tokens automation is consolidated across all tools using a new single delimiter type.
- "/" for naming and "|" for path delimiters are no longer accepted.
- All Tokens are now enclosed inside [square brackets] for all fields that accept tokens.
- The field type will automatically handle if the result is a name or path.

#### Other changes

• Minor changes to properties naming

### Performance

- Catalog load speed improved
- More responsive sliders for Mac
- Faster masking

### **Miscellaneous Improvements**

- In moving to a more layer centric theme, the Local Adjustments design and nomenclature is updated to a "Layers" terminology.
- The concept of the small brush icon next to the tool (meaning the tool was working on selected layer) is removed, and now only indicates that the tool CAN be used on a mask if the Layer (i.e. other than Background) is selected.
- A new default workspace is presented without the Local Adjustments tab but the layers tool appears in each tool tab.
- The Custom Tool Tab iconography is updated to be more usable.
- The color editor can now "stack" overlapped layers containing color edits resulting in an additive process. This requires the variant use the 11 Engine, as set in the Base Characteristics.
- Layer creation workflow changed. The auto-select behavior of the layer after creation is removed to prevent accidental naming of the layer. Instead the layer is highlighted after creation to rename a layer press Return key to make the label active, enter the name, then Return again to commit.
- Auto The Exposure tool "Auto" only affects the Exposure slider. Now the Tool bar Auto (the big "A") has the option to split Exposure from Brightness and contrast so that the Tool can function in the same way.

### System Requirements

We recommend that your computer has at least the minimum specifications outlined below to run Capture One 11.

### Microsoft® Windows® minimum requirements

- Intel or AMD CPU with 2 cores
- 8 GB of RAM
- 10 GB of free hard disk space
- Color calibrated monitor with 1280x800, 24-bit resolution at 96dpi screen ruling
- Windows 7<sup>®</sup> SP1 64-bit, Windows 8.1<sup>®</sup> 64-bit, Windows 10<sup>®</sup> 64-bit\*
- Microsoft<sup>®</sup> .NET Framework version 4.7 (will be installed if not present)

\*Support for Capture One 11 on Windows 10 is supported for builds supporting .NET 4.7 -This is currently from Windows 10 Anniversary Update (build 1607) through to Fall Creators Edition (build 1709)

### Apple<sup>®</sup> Macintosh<sup>®</sup> minimum requirements

- Intel CPU with 2 cores
- 8 GB of RAM
- 10 GB of free hard disk space
- Calibrated color monitor with 1280x800, 24-bit resolution at 96dpi
- OS X 10.11.6, macOS 10.12.6, macOS 10.13\*

\*Support for macOS 10.13 is supported for builds up to 10.13.2

### **Recommended system requirements**

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

- Intel CPU with 4+ cores
- 16+ GB of RAM
- Solid State Disk (SSD)
- Dual (matching) Graphics card from NVIDIA or AMD with 4GB+ RAM per card

Note: Due to the significant additional calculation overhead, systems using 4k/5k monitors will require additional resources in addition to the above recommended spec (both in GPU and CPU power). For a Professional experience we recommend at least doubling the specification above for these configurations.





### Installation

Capture One 11 is compatible with previous 10.x, 9.x, 8.x, 7.x and 6.x versions. For existing users it is recommended to migrate images from 5.x and 4.x to at least version 8.x first, before opening in 11.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: <u>http://www.phaseone.com/</u> <u>downloads.aspx</u>
- 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.

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.

### 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: <u>http://www.phaseone.com/</u> <u>downloads.aspx</u>
- 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.



## 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.
- Some cameras provide mutlishot functionality by way of (e.g.) multiple exposure or pixel shifting. In most cases the functionality will not be available in Capture One, however a single RAW file from the "stack" may be viewable and editable in Capture One (as if it was a shot in single Capture mode).

### **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 11 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.
- Plays.TV/Raptr installed along with some AMD devices can cause instability

## File support: Notes and limitations

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 <u>support.phaseone.com</u>

### **Capture One DNG colors**

Capture One has the ability to treat and display camera files that were converted to DNG, as if it was the original RAW. The file in question has to come from a camera we officially support with native RAW support and the RAW data also needs to have been embedded in the DNG at the point of conversion. Note we do not support Adobe Lens or Color Profiles in this workflow.

### Other file support

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

PSD: Capture 10.1 onward can support PSD files in the viewer. The PSD can contain any adjustments, layers, text or smart objects but must be saved in Photoshop with "maximise compatibility" enabled. Reprocessing the image from Capture One will ignore layers in the resulting file (flattened image).

### File size limitations:

Smallest supported file for viewing: minimum side of 16px Smallest supported file for editing: minimum side of 512px. 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 Sony = (ProS), Express Sony = (ES)

# PHASEONE

Model	Tethered Support	Live view	File Support	Required run modes	Notes
IQ3 100MP Trichromatic	Yes	Yes	IIQ 16bit/ IIQ L/ IIQ S	DB or Pro (10.2 or later required)	None
IQ3 100MP	Yes	Yes	IIQ 16bit/ IIQ L/ IIQ S	DB or Pro (9.0.2 or later required)	None
IQ3 100MP Achromatic	Yes	Yes	IIQ 16bit/ IIQ L/ IIQ S	DB or Pro (10.1.1 or later required)	None
IQ3 80MP	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ3 60MP	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ3 50MP	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ280	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ260	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ260 Achromatic	Yes	No	IIQ L/IIQ S	DB or Pro	No live view
IQ250	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ1 100MP	Yes	Yes	IIQ 16bit/ IIQ L/ IIQ S	DB or Pro (9.3 or later required)	None
IQ180	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ160	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ160 Achromatic	Yes	No	IIQ L/IIQ S	DB or Pro	No live view
IQ150	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
IQ140	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P65+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P40+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P45+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P30+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P25+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P21+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
P20+	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
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	None
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	None
H 25	Yes	No	IIQ/TIF Uncompressed	DB or Pro	None
H 20	Yes	No	IIQ/TIF Uncompressed	DB or Pro	None
H 101	Yes	No	IIQ/TIF Uncompressed	DB or Pro	None
H 10	Yes	No	IIQ/TIF Uncompressed	DB or Pro	None
Н 5	Yes	No	IIQ/TIF Uncompressed	DB or Pro	None
LightPhase	Yes	No	IIQ/TIF Uncompressed	DB or Pro	None

# PHASEONE

# INDUSTRIAL

Model	Tethered Support	Live view	File Support	Required run modes	Notes
iXG-100MP	Yes	Yes	IIQ 16bit/ IIQ L/ IIQ S	DB or Pro (10.1.1 or later required)	None
iXG-100MP Achro	Yes	Yes	IIQ 16bit/ IIQ L/ IIQ S	DB or Pro (10.2 or later required)	None
iXG-50MP	Yes	Yes	IIQ L/IIQ S	DB or Pro (10.2 or later required)	None
iXU-1000 Achro	Yes	Yes	IIQ L/IIQ S	DB or Pro (10.2 or later required)	None
iXU-RS1000	Yes	Yes	IIQ L/IIQ S	DB or Pro (9.3 or later required)	None
iXU-RS1000 Achro	Yes	Yes	IIQ L/IIQ S	DB or Pro (10.2 or later required)	None
iXU-RS180	Yes	No	IIQ L/IIQ S	DB or Pro (9.3 or later required)	None
iXU-RS160 Achromatic	Yes	No	IIQ L/IIQ S	DB or Pro (9.3 or later required)	No live view
iXU-RS160	Yes	No	IIQ L/IIQ S	DB or Pro (9.3 or later required)	None
iXU-RS150	Yes	Yes	IIQ L/IIQ S	DB or Pro (9.3 or later required)	None
iXU150	Yes	Yes	IIQ L/IIQ S	DB or Pro	None

# Mamiya leaf

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	None
Credo 60	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
Credo 50	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
Credo 40	Yes	Yes	IIQ L/IIQ S	DB or Pro	None
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	None
M22	Yes	No	IIQ L/IIQ S	DB or Pro	None
M18	Yes	No	IIQ L/IIQ S	DB or Pro	None

Model	Tethered Support	Live view	File support	Required run modes	Notes
MZD	No	No	MEF	Pro	None
ZD back	No	No	MEF	Pro	None

# SONY<sub>®</sub>

Model	Tethered Support	Live view	File Support	Required run modes	Notes
a9	Yes*	Yes*	ARW compressed/uncompressed	ES/ProS/Pro (10.1 or later required)	Pro (for Sony)/Pro required for tethering + Live View
a7R III	Yes*	Yes*	ARW compressed/uncompressed	ES/ProS/Pro (10.2.1 or later required)	Pro (for Sony)/Pro required for tethering + Live View
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
a6500	Yes*	Yes*	ARW	ES/ProS/Pro (10.0 or later required)	Pro (for Sony)/Pro required for tethering + Live View
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
a3500	No	No	ARW	ES/ProS/Pro (10.0 or later required)	None
a3000	No	No	ARW	ES/ProS/Pro	None
NEX-F3	No	No	ARW	ES/ProS/Pro	None
NEX-C3	No	No	ARW	ES/ProS/Pro	None
NEX-7	No	No	ARW	ES/ProS/Pro	None
NEX-6	No	No	ARW	ES/ProS/Pro	None
NEX-5T	No	No	ARW	ES/ProS/Pro	None
NEX-5R	No	No	ARW	ES/ProS/Pro	None
NEX-5N	No	No	ARW	ES/ProS/Pro	None
NEX-5	No	No	ARW	ES/ProS/Pro	None
NEX-3N	No	No	ARW	ES/ProS/Pro	None
NEX-F3	No	No	ARW	ES/ProS/Pro	None
NEX-C3	No	No	ARW	ES/ProS/Pro	None
NEX-3	No	No	ARW	ES/ProS/Pro	None
NEX-VG900	No	No	ARW	ES/ProS/Pro	None
NEX-VG30	No	No	ARW	ES/ProS/Pro	None
NEX-VG20	No	No	ARW	ES/ProS/Pro	None
a99 II	Yes*	Yes*	ARW compressed/uncompressed	ES/ProS/Pro (10.0 or later required)	Pro (for Sony)/Pro required for tethering + Live View
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	None
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	None
a58	No	No	ARW	ES/ProS/Pro	None
a57	No	No	ARW	ES/ProS/Pro	None

# SONY

Model	Tethered Support	Live view	File Support	Required run modes	Notes
a55	No	No	ARW	ES/ProS/Pro	None
a37	No	No	ARW	ES/ProS/Pro	None
a35	No	No	ARW	ES/ProS/Pro	None
a33	No	No	ARW	ES/ProS/Pro	None
a900	No	No	ARW	ES/ProS/Pro	None
a850	No	No	ARW	ES/ProS/Pro	None
a700	No	No	ARW	ES/ProS/Pro	None
a580	No	No	ARW	ES/ProS/Pro	None
a560	No	No	ARW	ES/ProS/Pro	None
a550	No	No	ARW	ES/ProS/Pro	None
a500	No	No	ARW	ES/ProS/Pro	None
a450	No	No	ARW	ES/ProS/Pro	None
a390	No	No	ARW	ES/ProS/Pro	None
a380	No	No	ARW	ES/ProS/Pro	None
a350	No	No	ARW	ES/ProS/Pro	None
a330	No	No	ARW	ES/ProS/Pro	None
a300	No	No	ARW	ES/ProS/Pro	None
a290	No	No	ARW	ES/ProS/Pro	None
a230	No	No	ARW	ES/ProS/Pro	None
a200	No	No	ARW	ES/ProS/Pro	None
a100	No	No	ARW	ES/ProS/Pro	None
QX1	No	No	ARW	ES/ProS/Pro	None
RX1RM2	Yes*	Yes*	ARW compressed/uncompressed	ES/ProS/Pro	Pro (for Sony)/Pro required for tethering + Live View
RX1R	No	No	ARW	ES/ProS/Pro	None
RX1	No	No	ARW	ES/ProS/Pro	None
RX10M4	Yes*	Yes*	ARW	ES/ProS/Pro (10.2.1 or later required)	Pro (for Sony)/Pro required for tethering + Live View
RX10M3	Yes*	Yes*	ARW	ES/ProS/Pro (9.1.1 or later required)	Pro (for Sony)/Pro required for tethering + Live View
RX10M2	Yes*	Yes*	ARW	ES/ProS/Pro	Pro (for Sony)/Pro required for tethering + Live View
RX10	No	No	ARW	ES/ProS/Pro	None
RX100M5	Yes*	Yes*	ARW	ES/ProS/Pro (10.0 or later required)	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	None
RX100M2	No	No	ARW	ES/ProS/Pro	None
RX100	No	No	ARW	ES/ProS/Pro	None
R1	No	No	SR2	ES/ProS/Pro	None
RXO	No	No	ARW	ES/ProS/Pro (10.2.1 or later required)	None

# Canon

Model	Tethered Support	Live view	File support	Required run modes	Notes
1D C	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
1D X Mark II	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro (9.1.2 or later required)	Face detection Auto focus not supported in Live View
1D X	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
1D Mark IV	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
1Ds Mark III	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
1D Mark III	Yes	Yes	CR2	Pro	None
1D Mark II N	No	No	CR2	Pro	None
1Ds Mark II	No	No	CR2	Pro	None
1D Mark II	No	No	CR2	Pro	None
1Ds	No	No	CR2	Pro	None
1D	No	No	CR2	Pro	None
5DS	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
5DS R	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
5D Mark IV	Yes*	Yes*	CR2 - RAW/mRAW/sRAW	Pro (9.3 or later required)	Dual pixel AF adjustment not supported
5D Mark III	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
5D Mark II	Yes	Yes	CR2 - RAW/mRAW/sRAW	Pro	None
5D	No	No	CR2	Pro	None
6D Mark II	Yes	Yes	CR2	Pro (10.2 or later required)	None
6D	Yes	Yes	CR2	Pro	None
7D Mark II	Yes	Yes	CR2	Pro	None
7D	Yes	Yes	CR2	Pro	None
80D	Yes	Yes	CR2	Pro (9.1.2 or later required)	mRAW not supported
77D	Yes	Yes	CR2	Pro (10.2 or later required)	None
70D	Yes	Yes	CR2	Pro	None
60D	Yes	Yes	CR2	Pro	None
50D	Yes	Yes	CR2	Pro	None
40D	Yes	Yes	CR2	Pro	None
30D	No	No	CR2	Pro	None
20D	No	No	CR2	Pro	None
10D	No	No	CRW	Pro	None
800D/	Yes	Yes	CR2	Pro (10.2 or later required)	None
760D/Rebel T6s	Yes	Yes	CR2	Pro	None
750D/Rebel T6i	Yes	Yes	CR2	Pro	None
700D/Rebel T5i	Yes	Yes	CR2	Pro	None
650D/Rebel T4i	Yes	Yes	CR2	Pro	None
600D/Rebel T3i	Yes	Yes	CR2	Pro	None

# Canon

Model	Tethered Support	Live view	File support	Required run modes	Notes
550D/Rebel T2i	Yes	Yes	CR2	Pro	None
500D/Rebel T1i	Yes	Yes	CR2	Pro	None
450D/Rebel XSi	Yes	Yes	CR2	Pro	None
400D/Rebel XTi	No	No	CR2	Pro	None
350D/Rebel XT	No	No	CR2	Pro	None
300D/Rebel	No	No	CRW	Pro	None
200D/	No	No	CR2	Pro (10.2 or later required)	None
1300D	Yes	Yes	CR2	Pro (9.1.2 or later required)	None
1200D/Rebel T5	Yes	Yes	CR2	Pro	None
1100D/Rebel T3	Yes	Yes	CR2	Pro	None
1000D/Rebel XS	Yes	Yes	CR2	Pro	None
100D/Rebel SL1	Yes	Yes	CR2	Pro	None
D60	No	No	CRW	Pro	None
D30	No	No	CRW	Pro	None
M10	No	No	CR2	Pro (9.2 or later required)	None
M6	No	No	CR2	Pro (10.2 or later reqired)	None
M5	No	No	CR2	Pro (10.0.2 or later required)	None
M3	No	No	CR2	Pro	None
Μ	No	No	CR2	Pro	None
Pro 1	No	No	CRW	Pro	None
G7X mk II	No	No	CR2	Pro (9.2 or later required)	None
G7X	No	No	CR2	Pro	None
G1X mk II	No	No	CR2	Pro	None
G1X	No	No	CR2	Pro	None
G16	No	No	CR2	Pro	None
G15	No	No	CR2	Pro	None
G12	No	No	CR2	Pro	None
G11	No	No	CR2	Pro	None
G10	No	No	CR2	Pro	None
G9X	No	No	CR2	Pro (9.2 or later required)	None
G9	No	No	CR2	Pro	None
G6	No	No	CRW	Pro	None
G5X	No	No	CR2	Pro (9.2 or later required)	None
G5	No	No	CRW	Pro	None
G3X	No	No	CR2	Pro	None
G3	No	No	CRW	Pro	None
G2	No	No	CRW	Pro	None
S120	No	No	CR2	Pro	None



Model	Tethered Support	Live view	File support	Required run modes	Notes
S110	No	No	CR2	Pro	None
S100	No	No	CR2	Pro	None
S95	No	No	CR2	Pro	None
S90	No	No	CR2	Pro	None

# Nikon

Model	Tethered Support	Live view	File Support	Required run modes	Notes
D5	Yes	Yes	NEF	Pro (9.1.1 or later required)	12 bit uncompressed not supported
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	None
D3s	Yes	Yes	NEF	Pro	None
D3X	Yes	Yes	NEF	Pro	None
D3	Yes	Yes	NEF	Pro	None
D2Xs	No	No	NEF	Pro	None
D2X	Yes*	No	NEF	Pro	Tethered support for Windows only
D2Hs	No	No	NEF	Pro	None
D2H	No	No	NEF	Pro	None
D1X	No	No	NEF	Pro	None
D1H	No	No	NEF	Pro	None
D850	Yes	Yes	NEF	Pro (10.2 or later required)	12 bit uncompressed not supported
D810	Yes	Yes	NEF	Pro	RAW-S not supported
D810A	Yes	Yes	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	None
D700	Yes	Yes	NEF	Pro	None
D610	Yes	Yes	NEF	Pro	None
D600	Yes	Yes	NEF	Pro	None
D500	Yes	Yes	NEF	Pro (9.2 or later required)	12 bit uncompressed not supported
D300s	Yes	Yes	NEF	Pro	None
D300	Yes	Yes	NEF	Pro	None
D200	Yes*	No	NEF	Pro	Tethered support for Windows only
D100	No	No	NEF	Pro	None
D90	Yes	Yes	NEF	Pro	None
D80	Yes	No	NEF	Pro	None
D70s	No	No	NEF	Pro	None
D70	No	No	NEF	Pro	None
D60	Yes	No	NEF	Pro	None
D50	No	No	NEF	Pro	None
D40X	Yes	No	NEF	Pro	None
D40	Yes	No	NEF	Pro	None
D7500	Yes	Yes	NEF	Pro (10.2 or later required)	None
D7200	Yes	Yes	NEF	Pro	None

# Nikon

Model	Tethered Support	Live view	File Support	Required run modes	Notes
D7100	Yes	Yes	NEF	Pro	None
D7000	Yes	Yes	NEF	Pro	None
D5600	Yes	Yes	NEF	Pro (10.1 or later required)	None
D5500	Yes	Yes	NEF	Pro	None
D5300	Yes	Yes	NEF	Pro	None
D5200	Yes	Yes	NEF	Pro	None
D5100	Yes	Yes	NEF	Pro	None
D5000	Yes	Yes	NEF	Pro	None
D3400	No	No	NEF	Pro (10.1 or later required)	None
D3300	No	No	NEF	Pro	None
D3200	No	No	NEF	Pro	None
D3100	No	No	NEF	Pro	None
D3000	No	No	NEF	Pro	None
P330	No	No	NEF	Pro	None
P340	No	No	NEF	Pro	None
P7800	No	No	NEF	Pro	None
P7700	No	No	NEF	Pro	None
P7100	No	No	NEF	Pro	None
P7000	No	No	NEF	Pro	None
P6000	No	No	NEF	Pro	None
1 AW1	No	No	NEF	Pro	None
J5	No	No	NEF	Pro (10.0.2 or later required)	None
J4	No	No	NEF	Pro	None
J3	No	No	NEF	Pro	None
J2	No	No	NEF	Pro	None
J1	No	No	NEF	Pro	None
V3	No	No	NEF	Pro	None
V2	No	No	NEF	Pro	None
V1	No	No	NEF	Pro	None
S1	No	No	NEF	Pro	None
Coolpix A	No	No	NEF	Pro	None



Model	Tethered Support	Live view	File Support	Required run modes	Notes
Leica SL	No	No	DNG native	Pro (9.1 or later required)	None
М (Тур 240)	No	No	DNG native	Pro	None
Leica M Monochrome	No	No	DNG native	Pro (10.2 or later required)	None
Leica M10	No	No	DNG native	Pro (10.2 or later required)	Preliminary in 10.2
Leica M-P	No	No	DNG native	Pro (10.2 or later required)	None
X1	No	No	DNG native	Pro	None
С (Тур 112)	No	No	RWL	Pro	None
D-Lux 5	No	No	RWL	Pro	None
М (Тур 220)	No	No	DNG native	Pro	None
M-Monochrom	No	No	DNG native	Pro	None
X (Typ 113)	No	No	DNG native	Pro	None
X2	No	No	DNG native	Pro	None
X Vario	No	No	DNG native	Pro	None
M9	No	No	DNG native	Pro	None
M8	No	No	DNG native	Pro	None
Т (Тур 701)	No	No	DNG native	Pro	None
V-Lux 4	No	No	RWL	Pro	None
D-Lux (Typ 109)	No	No	RWL	Pro	None
D-Lux 6	No	No	RWL	Pro	None
Q (Typ 116)	No	No	DNG native	Pro	None
D-Lux 4	No	No	RW2	Pro	None
Digilux 3	No	No	RAW	Pro	None
Digital Module R	No	No	RAW	Pro	None

# FUJIFILM

Model	Tethered Support	Live view	File Support	Required run modes	Notes
X-Pro2	No	No	RAF	Pro (9.1.1 or later required)	Export to DNG not supported
X-T2	No	No	RAF	Pro (9.3 or later required)	Export to DNG not supported
X-T1	No	No	RAF	Pro	Export to DNG not supported
X-Pro1	No	No	RAF	Pro	Export to DNG not supported
X100F	No	No	RAF	Pro (10.0.2 or later required)	Export to DNG not supported
X100T	No	No	RAF	Pro	Export to DNG not supported
X100S	No	No	RAF	Pro	Export to DNG not supported
X100	No	No	RAF	Pro	None
X-T20	No	No	RAF	Pro (10.1 or later required)	Export to DNG not supported
X-A10	No	No	RAF	Pro (10.1 or later required)	Export to DNG not supported
XT10	No	No	RAF	Pro	Export to DNG not supported
X10	No	No	RAF	Pro	Export to DNG not supported
XQ2	No	No	RAF	Pro (10.1 or later required)	Export to DNG not supported
XQ1	No	No	RAF	Pro	Export to DNG not supported
X-A3	No	No	RAF	Pro (10.0.2 or later required)	Export to DNG not supported
X-A2	No	No	RAF	Pro	Export to DNG not supported
X-A1	No	No	RAF	Pro	Export to DNG not supported
X-M1	No	No	RAF	Pro	Export to DNG not supported
X-S1	No	No	RAF	Pro	Export to DNG not supported
X-E3	No	No	RAF	Pro (11.0.1 or later required)	Export to DNG not supported
X-E2s	No	No	RAF	Pro (9.3 or later required)	Export to DNG not supported
X-E2	No	No	RAF	Pro	Export to DNG not supported
X-E1	No	No	RAF	Pro	Export to DNG not supported
XF1	No	No	RAF	Pro	Export to DNG not supported
X70	No	No	RAF	Pro (9.3 or later required)	Export to DNG not supported
X30	No	No	RAF	Pro	Export to DNG not supported
X20	No	No	RAF	Pro	Export to DNG not supported
S5 Pro	No	No	RAF	Pro	Export to DNG not supported
S3 Pro	No	No	RAF	Pro	Export to DNG not supported
S2 Pro	No	No	RAF	Pro	Export to DNG not supported

### **OLYMPUS**

Model	Tethered Support	Live view	File Support	Required run modes	Notes
E-M1 mkll	No	No	ORF	Pro (10.0 or later required)	None
E-1	No	No	ORF	Pro	None
E-M1	No	No	ORF	Pro	None
E-M5 II	No	No	ORF	Pro	High res mode not supported
E-M5	No	No	ORF	Pro	None
E-M10	No	No	ORF	Pro	None
E-M10 Mk II	No	No	ORF	Pro (9.1 or later required)	None
Pen-F	No	No	ORF	Pro (9.1 or later required)	Pixel shift mode not supported
Stylus 1	No	No	ORF	Pro	None
E-5	No	No	ORF	Pro	None
E-P5	No	No	ORF	Pro	None
E-PL7	No	No	ORF	Pro	None
E-PL6	No	No	ORF	Pro (10.0.2 or later required)	None
E-PL5	No	No	ORF	Pro	None
E-PL3	No	No	ORF	Pro	None
E-PL2	No	No	ORF	Pro	None
E-PM2	No	No	ORF	Pro	None
E-PM1	No	No	ORF	Pro	None
XZ-2 iHS	No	No	ORF	Pro	None
XZ-1	No	No	ORF	Pro	None

### **OLYMPUS**

Model	Tethered Support	Live view	File Support	Required run modes	Notes
XZ-10	No	No	ORF	Pro	None
E-620	No	No	ORF	Pro	None
E-3	No	No	ORF	Pro	None
E-520	No	No	ORF	Pro	None
E-510	No	No	ORF	Pro	None
E-450	No	No	ORF	Pro	None
E-P3	No	No	ORF	Pro	None
E-P2	No	No	ORF	Pro	None
E-P1	No	No	ORF	Pro	None
E-420	No	No	ORF	Pro	None
E-410	No	No	ORF	Pro	None
E-500	No	No	ORF	Pro	None
E-10	No	No	ORF	Pro	None
E-20	No	No	ORF	Pro	None
E-30	No	No	ORF	Pro	None
E-330	No	No	ORF	Pro	None
E-300	No	No	ORF	Pro	None
E-400	No	No	ORF	Pro	None
C-7070	No	No	ORF	Pro	None
C-8080	No	No	ORF	Pro	None
TG-5	No	No	ORF	Pro (10.2 or later required)	None
TG-4	No	No	ORF	Pro	None

# **RICOH**

Model	Tethered Support	Live view	File Support	Required run modes	Notes
GR	No	No	DNG native	Pro	None
GR II	No	No	DNG native	Pro (9.1 or later required)	None
GR DIGITAL II	No	No	DNG native	Pro	None
GX200	No	No	DNG native	Pro	None
GXR A16	No	No	DNG native	Pro	None
GR DIGITAL IV	No	No	DNG native	Pro	None
GR DIGITAL III	No	No	DNG native	Pro	None
GR DIGITAL	No	No	DNG native	Pro	None
GX100	No	No	DNG native	Pro	None
GRX S10	No	No	DNG native	Pro	None
GXR P10	No	No	DNG native	Pro	None
GXR A12	No	No	DNG native	Pro	None

# **Panasonic**.

Model	Tethered Support	Live view	File Support	Required run modes	Notes
GX8	No	No	RW2	Pro	None
GX80	No	No	RW2	Pro (9.3 or later required)	None
GX85	No	No	RW2	Pro (9.3 or later required)	None
G7 Mk II	No	No	RW2	Pro (9.3 or later required)	None
GX7	No	No	RW2	Pro	None
GX1	No	No	RW2	Pro	None
GF7	No	No	RW2	Pro	None
GF6	No	No	RW2	Pro	None
GF5	No	No	RW2	Pro	None
GF3	No	No	RW2	Pro	None
GF2	No	No	RW2	Pro	None
GF1	No	No	RW2	Pro	None
GM5	No	No	RW2	Pro	None
GM1	No	No	RW2	Pro	None
GH5	No	No	RW2	Pro (10.1 or later required)	None
GH4	No	No	RW2	Pro	None
GH3	No	No	RW2	Pro	None
GH2	No	No	RW2	Pro	None
GH1	No	No	RW2	Pro	None
G8/G80/G81/G85	No	No	RW2	Pro (10.0.2 or later required)	None
G7/ DMC-G70	No	No	RW2	Pro (9.1.2 or later required)	None
G6	No	No	RW2	Pro	None
G5	No	No	RW2	Pro	None
G3	No	No	RW2	Pro	None
G2	No	No	RW2	Pro	None
G1	No	No	RW2	Pro	None

# **Panasonic**.

Model	Tethered Support	Live view	File Support	Required run modes	Notes
G10	No	No	RW2	Pro	None
TZ85/ZS60/TZ80	No	No	RW2	Pro (10.1 or later required)	None
TZ100/ZS100/TZ101	No	No	RW2	Pro (10.1 or later required)	None
FZ2000/FZH1	No	No	RW2	Pro (10.1 or later required)	None
LX100	No	No	RW2	Pro	None
LX9/LX10/LX15	No	No	RW2	Pro (10.0.2 or later required)	None
LX7	No	No	RW2	Pro	None
LX5	No	No	RW2	Pro	None
LX3	No	No	RW2	Pro	None
FZ72	No	No	RW2	Pro	None
FZ45	No	No	RW2	Pro	None
FZ200	No	No	RW2	Pro	None
FZ150	No	No	RW2	Pro	None
FZ1000	No	No	RW2	Pro	None
FZ100	No	No	RW2	Pro	None
LF1	No	No	RW2	Pro	None



Model	Tethered Support	Live view	File Support	Required run modes	Notes
K-1	No	No		Pro (9.2 or later required)	Pixel shift mode not supported
K-01	No	No		Pro	None
K-30	No	No		Pro	None
K110D	No	No		Pro	None
MX-1	No	No		Pro	None
K-3	No	No	PEF	Pro	PEF only
K-3 II	No	No		Pro	Pixel shift mode not supported
K-5 IIs	No	No		Pro	None
K-5 II	No	No		Pro	None
K-5	No	No		Pro	None
KP	No	No		Pro (10.1 or later required)	None
K-70	No	No		Pro (10.1 or later required)	None
K50	No	No		Pro	None
K-S2	No	No		Pro (9.1 or later required)	None
K-r	No	No		Pro	None
K20D	No	No		Pro	None
K10D	No	No		Pro	None
K7	No	No		Pro	None
KX	No	No		Pro	None
K200D	No	No		Pro	None
K100D Super	No	No		Pro	None
K100D	No	No		Pro	None
K2000/K-m	No	No		Pro	None
*istD	No	No		Pro	None
*istDL2	No	No		Pro	None
*istDL	No	No		Pro	None
*istDS2	No	No		Pro	None
*istDS	No	No		Pro	None
Q10	No	No		Pro	None
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	None
NX11	No	No	SRW	Pro	None
NX3000	No	No	SRW	Pro	None
NX2000	No	No	SRW	Pro	None
NX30	No	No	SRW	Pro	None
NX20	No	No	SRW	Pro	None
NX10	No	No	SRW	Pro	None
NX5	No	No	SRW	Pro	None
NXMini	No	No	SRW	Pro	None
NX300	No	No	SRW	Pro	None
NX210	No	No	SRW	Pro	None
NX200	No	No	SRW	Pro	None
NX100	No	No	SRW	Pro	None
NX1000	No	No	SRW	Pro	None
EX2F	No	No	SRW	Pro	None



Model	Tethered Support	Live view	File Support	Required run modes	Notes
Alpha 5 D	No	No	MRW	Pro	None
Alpha 7 D	No	No	MRW	Pro	None
A1	No	No	MRW	Pro	None
A2	No	No	MRW	Pro	None

# Other

Model	Tethered Support	Live view	File Support	Required run modes	Notes
Cinema DNG	N/A	N/A	N/A	Pro	None
Linear DNG	N/A	N/A	N/A	Pro	None
DNG 1.4	N/A	N/A	N/A	Pro	None
Epson RD1	No	No	DNG	Pro	None
Epson RD1s	No	No	DNG	Pro	None
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 45mm f/3.5
Digital AF 150mm f/2.8 IF	LS 55mm f/2.8
Digital AF 150mm (2x Tele) f/5.6	LS 75-150mm f/4-5.6
Digital AF 120mm f/4 Macro	LS 80mm f/2.8
Digital Zoom AF 75-150mm f/4.5	LS 110mm f/2.8
Schneider-Kreuznach 120mm TS f/3.5	LS 120mm Macro f/4
MF 120mm f/4 Macro	LS 150mm f/2.8
	LS 150mm 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		
Mamiya Sekor Fisheye ULD C 24mm 1:4		

## A-Series and Technical 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
HR Digaron-SW 5.6/90 mm/Aerial
ALPA HR Alpagon 5.6/90mm
RS-32mm/Aerial
RS-40mm/Aerial
RS-50mm/Aerial
RS-70mm/Aerial

RS-90mm/Aerial

### A - Series

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

#### Schneider Kreuznach

Schneider RS 120mm iXG Schneider RS 72mm iXG Schneider Kreuznach RS-110mm/Aerial Schneider Kreuznach RS-150mm/Aerial

# Hasselblad V and H

### Carl Zeiss (Hasselblad V)

Distagon T* 4/40 IF CFE	
Distagon T* 3.5/60 CF	
Distagon T* 2.8/80	
Makro-Planar T* 4/120 CFE	

### Hasselblad H

C 3.5/35
C 2.8/80
C 2.2/100
C 3.2/150
C 3.5-4.5/50-110
C 4/120
CD 4/28

# Contax 645

### Contax 645

Carl Zeiss Distagon T* 2.8/45
Carl Zeiss Distagon T* 3.5/35
Carl Zeiss Distagon T* 3.5/55
Carl Zeiss Planar T* 2/80
Carl Zeiss Apo-Makro-Planar T* 4/120
Carl Zeiss Sonnar T* 2.8/140
Carl Zeiss Sonnar T* 4/210

# Sony Lens Profiles

### Sony (E- Mount)

FE 24-70mm F2.8 GM (SEL2470GM)
FE 85mm F1.8 (SEL85F18)
FE 100mm F2.8 STF GM OSS (SEL100STFGM)
FE 70-200mm F2.8 GM OSS (SEL70200GM)
FE 70-200mm F4 G OSS (SEL70200G)
FE 70-200mm F2.8 GM OSS + Sony 1.4x Teleconverter (SEL14TC)
FE 70-200mm F2.8 GM OSS + Sony 2x Teleconverter (SEL20TC)
FE 70-300mm F4.5-5.6 G OSS (SEL70300G)
FE 85mm F1.4 GM (SEL85F14GM)
Zeiss Sonnar T* E 24 mm F1.8 ZA (SEL24F18Z)
Zeiss Vario-Tessar T* FE 16-35 mm F4 ZA OSS (SEL1635Z)
Zeiss Vario-Tessar T* E 16-70mm F4 ZA OSS (SEL1670Z)
Zeiss Vario-Tessar T* FE 24-70 mm F4 ZA OSS (SEL2470Z)
Zeiss Sonnar T* FE 35 mm F2.8 ZA (SEL35F28Z)
Zeiss Planar T* FE 50mm F1.4 ZA (SEL50F14Z)
Zeiss Sonnar T* FE 55mm F1.8 ZA (SEL55F18Z)
FE 12-24mm f4 G (SEL1224G)
FE 16-35mm f2.8 GM (SEL1635GM)
FE 24-240 F3.5-6.3 OSS (SEL24240)
FE 28mm F2 (SEL28F20)
FE 28mm F2 (SEL28F20) + Ultra wide converter (SEL075UWC)
FE 28mm F2 (SEL28F20) + Fisheye converter (SEL057FEC)
FE 28-70mm F3.5-5.6 OSS (SEL2870)
FE 35 mm F1.4 ZA (SEL35F14Z)
FE 50mm F1.8 (SEL50F18F)
FE 50mm F2.8 Macro (SEL50M28)
FE 100-400mm f/4.5-5.6 GM OSS (SEL100400GM)
E 16mm F2.8 (SEL16F28)
E 20mm F2.8 (SEL20F28)
E 10-18mm F4 OSS (SEL1018)
E 18-55mm F3.5-5.6 OSS (SEL1855)
E PZ 16-50mm F3.5-5.6 OSS (SELP1650)
E PZ 18-105mm F4 G OSS (SELP18105G)
E 18-200mm F3.5-6.3 OSS (SEL18200)
E 18-200 mm F3.5-6.3 OSS LE (SEL18200LE)
E 30mm F3.5 Macro (SEL30M35)
E 35mm F1.8 OSS (SEL35F18)
E 50mm F1.8 OSS (SEL50F18)
E 55-210mm F4.5-6.3 OSS (SEL55210)

### Sony (A-Mount)

70-200mm F2.8 G SSM II (SAL70200G2)
70-200mm F2.8 G (SAL70200G)
300MM F2.8 G SSM II (SAL300F28G2)
70-300mm F4.5-5.6 G SSM (SAL70300G)
70-300mm F4.5-5.6 G SSM II (SAL70300G2)
70-400mm F4-5.6 G SSM (SAL70400G)
70-400mm F4-5.6 G SSM II (SAL70400G2)
Zeiss Vario-Sonnar T* 16-35 mm F2.8 ZA SSM II (SAL1635Z2)
Zeiss Vario-Sonnar T* 16-35mm F2.8 ZA SSM (SAL1635Z)
Zeiss Vario-Sonnar T DT 16-80 mm F3.5-4.5 ZA (SAL1680Z)
Zeiss Vario-Sonnar T* 24-70mm F2.8 ZA SSM II (SAL2470Z2)
Zeiss Vario-Sonnar T* 24-70mm F2.8 ZA SSM (SAL2470Z)
Zeiss Distagon T* 24mm F2 ZA SSM (SAL24F20Z)
Zeiss Planar T* 85 mm F1.4 ZA (SAL85F14Z)
Zeiss Sonnar T* 135mm F1.8 ZA (SAL135F18Z)
16mm F2.8 Fisheye (SAL16F28)
20mm F2.8 (SAL20F28)
35mm F1.4G (SAL 35F14G)
50mm F1.4 (SAL50F14)
50mm F2.8 Macro (SAL50M28)
85mm F2.8 SAM (SAL85F28)
100mm F2.8 Macro (SAL100M28)
DT 11-18mm F4.5-5.6 (SAL1118)
DT 16-50mm F2.8 SSM (SAL1650)
DT 18-55mm F3.5-5.6 SAM II (SAL18552)
DT 18-250mm F3.5-6.3 (SAL18250)
DT 30mm F2.8 Macro SAM (SAL30M28)
DT 35mm F1.8 SAM (SAL35F18)
DT 50mm F1.8 SAM (SAL50F18)
DT 55-200mm F4-5.6 (SAL55200)
DT 55-200mm F4-5.6 SAM (SAL55200-2)
28-75mm F2.8 SAM (SAL2875)
135mm F2.8 [T4.5] STF (SAL135F28)

# Sony Lens Profiles

### Zeiss

Zeiss Batis 2.8/18
Zeiss Batis 2/25
Zeiss Batis 1.8/85
Zeiss Batis 2.8/135
Zeiss Touit 2.8/12
Zeiss Touit 1.8/32
Zeiss Touit 2.8/50
Zeiss Loxia 2.8/21
Zeiss Loxia 2/35
Zeiss Loxia 2/50
Zeiss Loxia 2.4/85

### Sigma

30mm F2.8 EX DN 60mm F2.8 DN A

### Voigtländer

Voigtländer 10mm/F5.6 Hyper Wide Heliar

Voigtländer 15mm/F4.5 Super Wide Heliar III

## Canon Lens Profiles

### Canon EF

\_

EF 11-24mm f/4L USM         EF 14mm f/2.8 II USM         EF 16-35mm f/2.8L II USM         EF 16-35mm f/2.8L III USM         EF 16-35mm f/2.8L III USM         EF 16-35mm f/2.8L USM         EF 24-70mm f/4L USM         EF 24-70mm f/2.8L USM         EF 24-70mm f/4. IS USM         EF 24-70mm f/4.L IS USM         EF 35mm f/1.4.USM         EF 35mm f/1.4.USM         EF 50mm f/1.8.STM         EF 50mm f/2.8.USM         EF 70-200mm f/2.8.USM         EF 70-200mm f/2.8.USM         EF 70-200mm f/2.8.L IS II USM         EF 70-200mm f/1.4.USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 80mm
EF 16-35mm f/2.8L II USM         EF 16-35mm f/2.8L III USM         EF 16-35mm f/4L IS 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/2.8L II USM         EF 24-70mm f/4L IS USM         EF 24-70mm f/4L IS USM         EF 24-105mm f/4L IS USM         EF 24mm /1.4L II USM         EF 28mm f/2.8 IS USM         EF 35mm f/1.4L USM         EF 40mm f/2.8 USM         EF 40mm f/2.8 USM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.2 USM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.8 STM         EF 50mm f/1.8 USM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS USM         EF 70-200mm f/2.8 LIS USM         EF 70-200mm f/1.4 LIS USM         EF 85mm f/1.8 USM
EF 16-35mm f/2.8L III USM         EF 16-35mm f/4L IS 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/4. IS USM         EF 24-70mm f/4. IS USM         EF 24-105mm f/4L IS USM         EF 24-105mm f/4L IS USM         EF 24-105mm f/4. IS USM         EF 24-105mm f/4. IS USM         EF 24-105mm f/4. IS USM         EF 24mm /1.4L II USM         EF 28mm f/2.8 IS USM         EF 35mm f/1.4L USM         EF 40mm f/2.8 STM         EF 40mm f/2.8 STM         EF 50mm f/1.4 USM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS USM         EF 70-200mm f/1.4 LIS USM         EF 70-200mm f/1.4 LIS USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 80mm f/1.8 USM         EF 100mm f/2.8 Macro USM
EF 16-35mm f/4L IS 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 USM         EF 24-70mm f/4. IS USM         EF 24-105mm f/4. IS USM         EF 24mm /1.4L II USM         EF 28mm f/2.8 IS USM         EF 35mm f/1.4L USM         EF 35mm f/1.4L USM         EF 40mm f/2.8 STM         EF 50mm f/1.4 USM         EF 50mm f/1.8 STM         EF 50mm f/2.8 LUSM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS USM         EF 70-200mm f/2.8 LIS USM         EF 70-200mm f/1.4 LIS USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 100mm f/2.8 Macro 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/4. IS USM         EF 24-105mm f/4. IS USM         EF 25mm f/1.4L USM         EF 35mm f/1.4L USM         EF 35mm f/1.4L USM         EF 35mm f/1.4L USM         EF 40mm f/2.8 STM         EF 50mm f/1.4 USM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS II USM         EF 70-200mm f/2.8 LIS USM         EF 70-200mm f/4. LIS USM         EF 70-200mm f/4. LIS USM         EF 85mm f/1.8 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/4. IS USM         EF 24-105mm f/4. IS USM         EF 24mm /1.4L II USM         EF 28mm f/2.8 IS USM         EF 35mm f/1.4L USM         EF 35mm f/1.4 II USM         EF 35mm f/1.4 II USM         EF 40mm f/2.8 STM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.8 STM         EF 50mm f/2.8 USM         EF 70-200mm f/2.8 LIS USM         EF 85mm f/1.8 USM         EF 100mm f/2.8 Macro 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 24-105mm f/4L IS USM EF 24-105mm f/4.5.6 IS STM EF 24-105mm f/2.6 IS STM EF 24mm /1.4L II USM EF 28mm f/2.8 IS USM EF 35mm f/1.4L USM EF 35mm f/1.4L USM EF 35mm f/1.4 USM EF 40mm f/2.8 STM EF 50mm f/1.4 USM EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.8L USM EF 70-200mm f/2.8L USM EF 70-200mm f/2.8L IS II USM EF 70-200mm f/2.8L IS USM EF 70-200mm f/2.8L IS USM EF 70-200mm f/2.8L IS USM EF 85mm f/1.2L II USM EF 85mm f/1.2L II USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM
EF 24-70mm f/2.8L II USM         EF 24-70mm f/4L IS USM         EF 24-105mm f/4L IS USM         EF 24-105mm f/4L IS USM         EF 24-105mm f/4. IS USM         EF 24-105mm f/4. IS USM         EF 24mm /1.4L II USM         EF 28mm f/2.8 IS USM         EF 35mm f/1.4L USM         EF 35mm f/1.4L USM         EF 35mm f/1.4 USM         EF 40mm f/2.8 STM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.4 USM         EF 50mm f/1.8 STM         EF 50mm f/2.8 LIS II         EF 50mm f/2.8 LIS II         EF 70-200mm f/2.8L IS II USM         EF 70-200mm f/2.8L IS II USM         EF 70-200mm f/2.8L IS II USM         EF 70-200mm f/2.8L IS USM         EF 85mm f/1.2L II USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM
EF 24-70mm f/4L IS USM EF 24-105mm f/4L IS USM EF 24-105mm f/4L IS USM EF 24-105mm f/4-5.6 IS STM EF 24-105mm f/4-5.6 IS STM EF 24mm /1.4L II USM EF 28mm f/2.8 IS USM EF 28mm f/1.4L USM EF 35mm f/1.4L USM EF 35mm f/1.4L USM EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.8 STM EF 50mm f/1.8 STM EF 50mm f/2.8L USM EF 70-200mm f/2.8L IS II USM EF 70-200mm f/2.8L IS II USM EF 70-200mm f/2.8L IS USM EF 85mm f/1.2L II USM EF 85mm f/1.2L II USM EF 85mm f/1.2L II USM
EF 24-105mm f/4L IS USM EF 24-105mm f4-5.6 IS STM EF 24mm /1.4L II USM EF 28mm f/2.8 IS USM EF 35mm f/1.4L USM EF 35mm f/1.4L USM EF 35mm f/1.4 II USM EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.2L USM EF 50mm f/1.8 STM EF 50mm f/2.8 Compact Macro EF 70-200mm f/2.8L IS II USM 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/1.2L II USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM
EF 24-105mm f4-5.6 IS STM EF 24mm /1.4L II USM EF 28mm f/2.8 IS USM EF 35mm f/1.4L USM EF 35mm f/1.4 II USM EF 40mm f/2.8 STM EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.4 USM EF 50mm f/1.4 USM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM EF 70-200mm f/2.8L IS USM EF 70-200mm f/2.8L IS USM EF 70-200mm f/2.8L IS USM EF 85mm f/1.2L II USM EF 85mm f/1.8L USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM
EF 24mm /1.4L II USM         EF 28mm f/2.8 IS USM         EF 35mm f/1.4L USM         EF 35mm f/1.4 II USM         EF 40mm f/2.8 STM         EF 40mm f/2.8 STM         EF 50mm f/1.2L USM         EF 50mm f/1.4 USM         EF 50mm f/2.8 STM         EF 50mm f/2.8 USM         EF 70-200mm f/2.8L USM         EF 70-200mm f/2.8L IS USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM         EF 85mm f/1.8 USM
EF 28mm f/2.8 IS USM EF 35mm f/1.4L USM EF 35mm f/1.4 II USM EF 40mm f/2.8 STM EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM EF 70-200mm f/2.8L IS II USM EF 70-200mm f/2.8L IS 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 85mm f/1.8 USM
EF 35mm f/1.4L USM EF 35mm f/1.4 II USM EF 40mm f/2.8 STM EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM EF 70-200mm f/2.8L IS II USM EF 70-200mm f/2.8L IS 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 85mm f/1.8 USM
EF 35mm f/1.4 II USM EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM 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 70-200mm f/4 L IS USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM
EF 40mm f/2.8 STM EF 50mm f/1.2L USM EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM 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 70-200mm f/4 L IS USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM
EF 50mm f/1.2L USM EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.8 Compact Macro EF 70-200mm f/2.8L USM 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 70-200mm f/4 L IS USM EF 85mm f/1.2L II USM EF 85mm f/1.8 USM EF 85mm f/1.8 USM
EF 50mm f/1.4 USM EF 50mm f/1.8 STM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM 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 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 50mm f/1.8 STM EF 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM 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 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 50mm f/2.5 Compact Macro EF 70-200mm f/2.8L USM 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 85mm f/1.8 USM
EF 70-200mm f/2.8L USM 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 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 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 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 85mm f/1.2L II USM EF 85mm f/1.8 USM EF 100mm f/2.8 Macro USM
EF 85mm f/1.8 USM EF 100mm f/2.8 Macro USM
EF 100mm f/2.8 Macro USM
EE 100mm f/2 81 Macro IS LISM
EF 100-400mm f/4.5-5.6L IS USM
EF 100-400mm f4.5-5.6L IS II USM
EF 135mm f/2L USM
EF 180mm f/3.5L Macro USM
EF 200mm f/2L IS USM
EF 300mm f/2.8L IS II USM

### Canon EF-S

EF-S 24mm f2.8 STM
EF-S 10-22mm f/3.5-4.5 USM
EF-S 15-85mm f/3.5-5.6 IS USM
EF-S 17-55mm f/2.8 IS USM
EF-S 17-85mm f/4-5.6 IS USM
EF-S 18-135 f3.5-5.6 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
EF-M15-45mm f/3.5-6.3 IS STM

## Canon Lens Profiles

### Sigma (Canon EF)

Sigma 24-35mm F2 DG HSM   A
Sigma 50mm F1.4 DG HSM   A
Sigma 18-300mm F3.5-6.3 DC MACRO OS HSM   C #886
Sigma 50-100mm F1.8 DC HSM   Art #693
Sigma 85mm F1.4 DG HSM   A #321

### Zeiss (Canon EF)

Zeiss Otus 1.4/28
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

### Tamron (Canon EF)

 SP 15-30mm F/2.8 Di VC USD

 SP 24-70mm F/2.8 Di VC USD

 SP 150-600mm F/5-6.3 Di VC USD

 SP 150-600mm F/5-6.3 Di VC USD G2

### 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	

## 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 16-80mm f/2.8-4E ED VR
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 28mm f2.8ED
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 35mm f/1.8G ED
AF-S NIKKOR 50mm f/1.4G
AF-S NIKKOR 50mm f/1.8G
AF-S NIKKOR 58 mm 1.4G
AF-S NIKKOR 70-200mm f/2.8E FL ED VR
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

### Nikon

	AF-S NIKKOR 105mm f/1.4E ED
	AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED
	AF-S Micro-Nikkor 60mm f/2.8GED
	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
	AF-P DX NIKKOR 70-300mm f/4.5-6.3G ED VR
	1 Nikkor VR 6.7-13 mm F/3.5-5.6

### Sigma (Nikon F)

19mm f2.8 EX DN
20mm F1.8 EX DG ASP RF
24mm F1.4 DG HSM   A
Sigma 24mm F1.4 DG HSM   A #401
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

## Nikon Lens Profiles

### Carl Zeiss (Nikon F)

Otus 55mm fl.4
Otus 85mm fl.4
Zeiss Milvus 2.8/15
Zeiss Milvus 2.8/18
Zeiss Milvus 2/135
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 ED 17mm f/1.2 PRO
M.ZUIKO DIGITAL 25mm 1:1.8
M.ZUIKO DIGITAL 45mm 1:1.8
M.ZUIKO DIGITAL ED 45mm f/1.2 PRO
M.ZUIKO DIGITAL ED 7-14mm f2.8 PRO
M.ZUIKO DIGITAL ED 9-18mm 1:4.0-5.6
M.ZUIKO DIGITAL ED 12-40mm 1:2.8
M.ZUIKO DIGITAL ED 12-100mm f/4 IS PRO
M.ZUIKO DIGITAL 14-42mm 1:3.5-5.6 II R
M.ZUIKO DIGITAL ED 14-150mm 1:4.0-5.6 II
M.ZUIKO DIGITAL ED 40-150mm f/2.8 Pro
M.ZUIKO DIGITAL ED 40-150mm 1:4.0-5.6 R
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 25mm f/1.2 PRO
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
ZUIKO DIGITAL ED 7-14mm 1:4.0
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
ZUIKO DIGITAL ED 8mm Fisheye 1:3.5
M ZI IIKO ED 9mm E19 Eichava DDO

#### M.ZUIKO ED 8mm F1.8 Fisheye PRO

## Pentax Lens Profiles

### Pentax

SMC-DA 15mm F4 AI Limited	
DA 18-50mm f4-5.6 DC WR RE	
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 Vario 7-14mm F4 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.
LUMIX G VARIO 14-42mm F3.5-5.6 ASPH. MEGA O.I.S.
LUMIX G Vario 14-140mm f3.5-5.6
LUMIX G Vario 14-140mm f3.5-5.6 ASPH Power O.I.S
LUMIX G LEICA DG VARIO-ELMAR Lens, 100-400mm F4.0-6.3 ASPH
LUMIX G 25mm f/1.7 ASPH (H-H025)
LUMIX G Fisheye 8mm f/3.5 (H-F008)
LUMIX G MACRO 30mm f/2.8 ASPH. MEGA O.I.S. (H-HS030)
LUMIX G X Vario PZ 14-42mm f/3.5-5.6 ASPH Power O.I.S. (H-PS14042)
LUMIX G X Vario PZ 45-175mm f/4.0-5.6 ASPH (H-PS45175)
Leica DG Macro-Elmarit 45mm f/2.8 ASPH MEGA O.I.S. (H-ESO45)
Lumix G X Vario 35-100mm F2.8
Leica DG Summilux 12mm f/1.4 ASPH (H-X012)
Leica DG Vario-Elmarit 8-18mm f/2.8-4 ASPH (H-E08018)
LUMIX G Leica DG Nocticron 42.5mm f/1.2 ASPH Power OIS (H-NS043)
LUMIX G Vario 100-300mm f/4-5.6 II POWER O.I.S. (H-FSA1003004A)
LUMIX G Vario 45-200mm f/4-5.6 II POWER O.I.S. (H-FSA45200)

## Leica Lens Profiles

### Leica

Leica Tri-Elmar-M 16-18-21mm f/4 ASPH
Leica Super-Elmar-M 18mm f3.8 ASPH
Leica Summilux-M 21mm f1.4 ASPH
Leica Elmarit-M 21mm f/2.8 ASPH
Leica Super-Elmar-M 21mm f/3.4 ASPH
Leica Summilux-M 24mm f/1.4 ASPH
Leica Elmarit-M 24mm f/2.8 ASPH
Leica Elmar-M 24mm f/3.8 ASPH
Leica Summilux-M 28mm f/1.4 ASPH.
Leica Summicron-M 28mm f/2 ASPH.
Leica Summaron-M 28mm f/5.6
Leica Tri-Elmar-M 28-35-50mm f/4 ASPH
Leica Summilux-M 35mm f/1.4 ASPH
Leica Summicron-M 35mm f/2 ASPH
Leica Summarit-M 35mm f/2.4 ASPH
Leica Noctilux-M 50mm f/0.95 ASPH
Leica Noctilux-M 50mm f/1 ASPH
Leica Summilux-M 50mm f/1.4 ASPH
Leica Summicron-M 50mm f.2
Leica APO-Summicron-M 50mm f/2 ASPH
Leica Summarit-M 50mm f/2.4
Leica APO-Summicron-M 75mm f/2 ASPH
Leica Summarit-M 75mm f/2.5
Leica APO-Summicron-M 90mm f/2 ASPH
Leica Summarit-M 90mm f/2.5
Leica Apo-Telyt-M 135mm f3.4 ASPH

## Fixed Lens Profiles

### Fixed Lens cameras

Canon PowerShot G1 X
Canon G5x fixed lens
Canon G7x MkII fixed lens
Canon G9x fixed lens
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