



[ Irix ]

PREPARE FOR MORE



Extended User Manual  
Irix 15 mm f/2.4



[ Irix ]

Thank you for choosing an Irix lens. You hold in your hand the fruit of the dedication and experience of the combined forces of engineers and photographers.

Using the finest available materials, state-of-the-art technologies and cooperation, our team has created an excellent tool for both professional and amateur photographers.

The Irix 15 mm f/2.4 is an ultra-wide-angle, rectilinear, manual focus lens, designed for full-frame DSLR cameras. It is also compatible with many crop-sensor models.

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## FRONT LENS CAP



The front lens cap protects the front lens element from possible contamination and impact damage. The cap should always be attached when the lens is not in use.

To attach or remove the front cap, hold the lens body firmly in one hand and grasp the cap with your thumb and finger by the recesses in the front of the cap. Squeeze gently toward the center of the cap to release the latches.

Additional lens caps may be purchased through the Irix Online Store [www.irixlens.com](http://www.irixlens.com).

## FRONT FILTER THREAD



Your Irix lens can accept 95 mm screw-in filters via the front threads. Due to the wide angle of view, the use of “slim” filters is advisable to prevent vignetting. Filters with a low profile of 5.3 mm or less are recommended. Stacking multiple filters may also cause vignetting.

Irix Edge filters are highly recommended, as they are engineered to be fully compatible with the lens design.

To attach a threaded filter, align the threads carefully and rotate it clockwise while facing the front of the lens. The filter should turn smoothly and with very little effort. If it appears to be crooked or binds, reverse the rotation to remove and realign the filter.

Excess pressure or misaligned threads may permanently damage the lens and filter.

Before tightening the filter, ensure that it does not come into contact with the front element of the lens. Contact between the surfaces may cause permanent damage to both.

## LENS HOOD



The removable and reversible lens hood helps prevent unwanted sidelight from the sun or other sources from entering the lens. It also helps protect the lens from accidental impact damage. We recommend having your lens hood attached at all times.

There is no need to remove the lens cap when removing or attaching the lens hood.

To remove the lens hood from its storage (reversed) position, rotate it counterclockwise (when facing the lens) until it releases (approximately 1/8 turn).

To attach the hood for use, align the white line on the hood with the corresponding line on the end of the lens. Slip the hood gently over the mount and rotate it clockwise until it clicks firmly into place. The alignment mark should now align directly with the line on the angled portion of the lens barrel.

To reverse-mount the lens hood prior to storing the lens in its transport case, use the same procedure with the lens hood facing the opposite direction.

## FILTER WINDOW



The filter window in the lens hood provides access to the edge of filters that rotate, such as circular polarizers, graduated filters and variable ND filters. This feature allows you to adjust those filters without removing the lens hood.

To open the filter window, push the raised portion of the blind toward the front of the lens hood, sliding the blind until it clicks into place. To prevent unwanted side light from striking the lens, close the blind when the window is not in use.

## FOCUS SCALE CALIBRATION



You Irix lens has been engineered to exacting standards. The focus scale is factory calibrated and should be accurate. In some cases, however, you may find that the infinity mark on your lens does not correspond to the optimum focus setting for distant objects. While the focus ring will rotate past the infinity setting to allow you to compensate for this, it may be more convenient to re-calibrate the infinity setting on your lens. You can make this adjustment yourself or contact the Irix support team for help.

To calibrate the focus ring:

1. Remove the calibration window cover by unscrewing the T6 Torx screw and sliding the cover outward.
2. Set the focusing ring at the infinity position and rotate the focus lock ring to the locked position. The internal calibration ring and flat head locking screw should be visible.
3. Using a flat head screwdriver, loosen the screw on the calibration ring. Be careful not to allow the screws to fall into the lens housing. A screwdriver with a magnetic tip is recommended.
4. Using your camera's Live View and LCD zoom, rotate the calibration ring to focus carefully on a distant subject (farther away than 50m/164ft).
5. Lock the calibration ring by re-tightening the screw and replace the calibration window cover.

## FOCUS RING LOCK



The focus ring lock allows you to fix the focusing ring in a selected position. This innovative feature helps prevent accidental movement, resulting in focus shift.

You may want to use the focus lock during long exposures, time-lapse imaging, or whenever repetitive shots are called for. You can also use it to avoid changing the focus setting while mounting or removing the lens or to retain the focus setting when storing it in a bag, case or backpack.

Landscape photographers, street photographers and journalists can utilize the focus lock to keep the lens at the infinity setting or hyperfocal distance for a given aperture.

To use the focus lock, focus the lens, then rotate the locking ring in the direction of the “lock” arrow until you meet resistance. Don’t over-tighten. To unlock, rotate the ring in the opposite direction until “unlock” aligns with the top of the lens.

**CAUTION:** Forcefully rotating the focus ring with the lock engaged may cause permanent damage to your lens.

## FOCUS RING



The focusing ring moves the internal focusing elements of the lens to achieve the desired focal point. You can focus visually while looking at your subject in the viewfinder or LCD screen or by using the distance, depth of field or hyperfocal scales on the lens barrel.

Your Irix lens allows you to set the focus at infinity without the need to look at the scale. While rotating the focus ring, infinity is indicated by a click and a definitive stop in the rotation.

## DEPTH OF FIELD SCALE

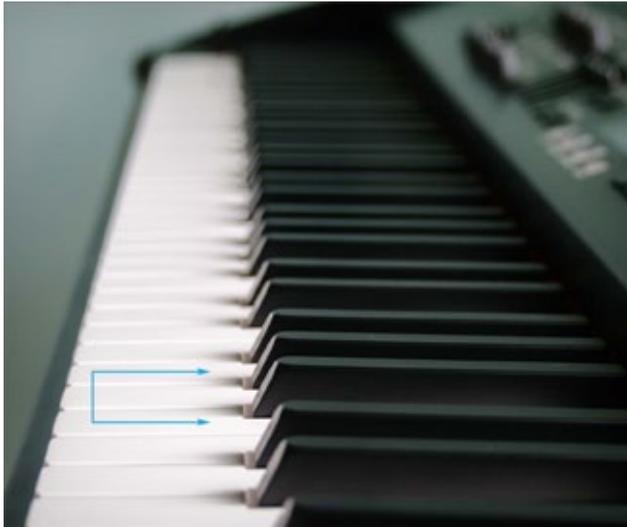


The depth of field scale provides a visual reference for the range of maximum sharpness in your photos at a given aperture and focus setting. It allows you to determine the plane of focus, within which objects in your image will be at their sharpest.

Using the scale correctly takes practice. The following examples will demonstrate how to use it for creative control of depth of field (DoF).

DoF control is achieved with the lens aperture, so you will need to set your camera to Aperture Priority or Manual mode.

## DEPTH OF FIELD SCALE



### EXAMPLE NO 1

In this example, the lens is focused on the eighth key from the front of the image. The lens aperture is at its maximum setting of 2.4.

You can see in the image that only the neighboring keys are in sharp focus at this aperture setting. The term for this effect is “shallow depth of field”.

As this demonstrates, it would be virtually impossible to provide legible marks on the DoF scale for this aperture setting. DoF scales are only useful for a smaller aperture setting (higher f/number).

In the case of your Irix 15 mm lens, the lowest number represents f/8.

## DEPTH OF FIELD SCALE



### EXAMPLE NO 2

In this image, the focus setting remains the same as the first example, while the aperture setting is changed to  $f/8$ .

Consulting the DoF scale, we can now use the two numerals “8” on the scale to determine the distances where sharpness will drop. Simply look for the distances in feet or meters that align with the “8”s on the scale to determine the closest (left “8”) and farthest (right “8”) points that will be in focus.

You can verify the change in depth of field in the image. Notice that the number of keys in focus has increased.

## DEPTH OF FIELD SCALE



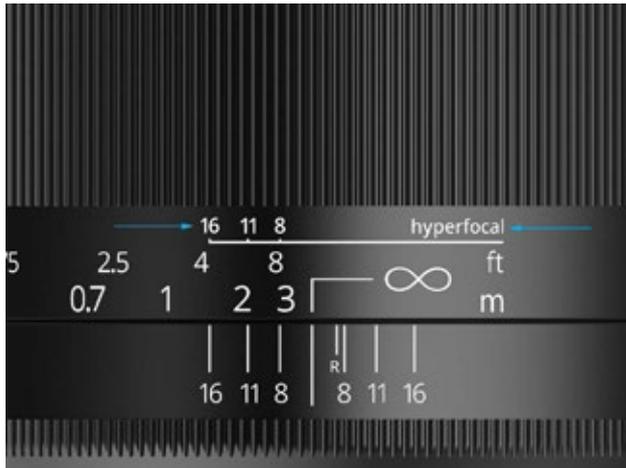
### PRZYKŁAD 3

Next, the aperture setting is decreased to  $f/16$ , without changing the focus setting. This smaller aperture will increase the DoF.

You can see the increased plane of focus in the image. Consulting the DoF scale at “16” will show a corresponding change in the indicated distances. The DoF scale can be used in this manner to estimate the plane of focus in your images at aperture settings of  $f/8$  and smaller.

The DoF scale on your lens indicates the results with a full-frame camera. Using your lens with a camera with a smaller sensor will noticeably affect the depth of field and the accuracy of the scale. Practice will help you determine and compensate for the difference.

## HYPERFOCAL SCALE



In landscape, travel and similar types of photography, it's often beneficial to maximize the depth of field in your images. This is best accomplished by setting your focus at the closest point of sharp focus for the chosen aperture setting. That point is known as the hyperfocal distance. Even when using the DoF scale, this distance can be difficult to determine in the actual scene.

## HYPERFOCAL SCALE

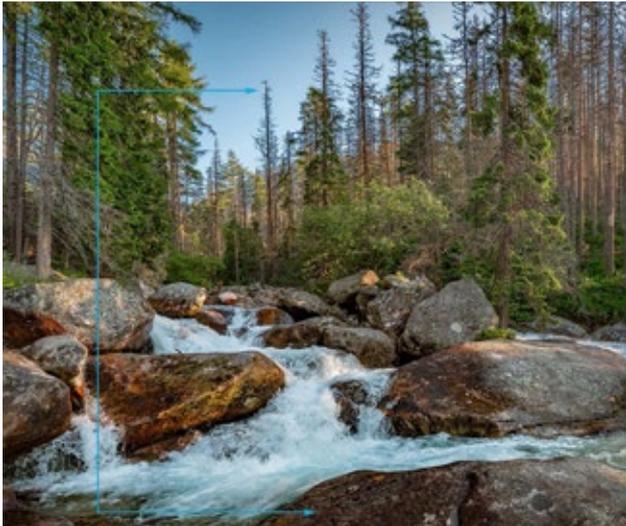
Your Irix lens includes an innovative feature that allows you to quickly focus your lens at the hyperfocal distance for apertures of f/8 to f/16. The hyperfocal scale is located above the distance scale on the lens barrel.

After selecting your aperture setting with your camera in aperture Priority or Manual mode, simply align the corresponding f/number on the hyperfocal scale with the center of focus indicator (the center mark on the DoF scale). Your focus is now set to the hyperfocal distance and there's no need to focus visually!

The landscape image to the left was taken using the hyperfocal scale at f/16. Notice the overall sharpness in the image.

### Notes:

1. When using the hyperfocal scale for several consecutive photos, consider using the focus ring lock.
2. The hyperfocal scale is calibrated for use with a full frame camera. Using a camera with a smaller sensor will cause a shift in DoF and a corresponding shift in the hyperfocal distance. With practice, you can learn to determine and compensate for the difference.



## REAR GELATIN FILTER SLOT



Your Irix lens is equipped with a 30 mm x 30 mm slot behind the rear element to accommodate gelatin filters. A template for pre-cutting filters is included on the last page of this document.

Using gelatin filters allows you to add rear filters in conjunction with front-mounted threaded filters, while avoiding the vignetting that can be caused by stacking multiple front filters. For instance, a color correction filter can be added while using a circular polarizing filter or ND filter.

Exercise caution when inserting filters to avoid touching the rear lens element and electrical contacts on the mount.

Filter dimensions that do not match the template in this manual should not be used.

## HOW TO ATTACH THE LENS TO THE CAMERA



Exact mounting methods vary from camera to camera. Consult the user's manual for your camera for instructions on mounting your Irix lens. The dot on the case bevel closest to the camera indicates the alignment mark for mounting.

Exercise caution when attaching and detaching your lens. Do not force the lens. Be sure to press the lock release on the camera body when detaching the lens. Consult your camera manual for the exact location of the release. Failure to follow these steps may cause permanent damage to your lens and/or camera.

## REAR LENS CAP



The rear lens cap protects the mount and rear elements when the lens is detached from the camera. It should be attached immediately when the lens is removed.

Your Irix lens comes with a spare rear cap, which you can find inside the lens box. Additional lens caps can be purchased from **[www.irixlens.com](http://www.irixlens.com)** if needed.

To avoid damage, never place the rear of the lens on any surface with the rear lens cap removed.

## APERTURE CONTROL



Your Irix lens is equipped to function with your camera's electronic aperture controls. It also communicates the aperture information to the camera's software for display and EXIF data.

This feature allows you to fully utilize the creative aspects of lens aperture in conjunction with your camera's metering system and autoexposure settings.

There are a few important points to know about your lens and its aperture settings:

1. Using an aperture setting higher than  $f/16$  may cause some lack of sharpness do to an optical phenomenon known as diffraction. This is not a defect, but a natural occurrence in all optics.
2. When selecting the maximum aperture of  $f/2.4$ , some camera models will display  $f/2.5$ . This is a software issue with some systems. The actual aperture size will be  $f/2.4$ .

## HARD LENS CASE



To protect your lens against damage from the environment, always store it in the included hard case.

While the case helps protect your lens, it is NOT waterproof and will not prevent damage due to severe impacts.

## MAINTENANCE



All Irix lens elements are coated with anti-reflective compounds, which also increase their resistance to contamination.

Periodic cleaning should consist of dust removal with a bulb-type air blower or soft brush\*, followed by the use of cleaning products specifically made for coated lenses to remove smudges, oily films and fingerprints.

\* High-pressure air may cause damage to lens surfaces and seals.

## SAFETY PRECUTIONS

Your Irix lens is equipped with seals to prevent the infiltration of dust, moisture and water splashes. This sealing does not make your lens completely waterproof. Do not allow your lens to become submerged, come into contact with liquids under pressure, or be stored in humid locations. Store your lens with silica gel packs to help prevent moisture.

A skylight or UV filter attached to the front of your lens may help prevent dust or water infiltration as well as scratches or impact damage to the front element.

Do not leave the lens exposed to strong sunlight or high temperatures.

Do not look directly at the sun through the lens, as permanent eyesight damage may occur. Do not allow the lens to point directly at the sun for prolonged periods, to avoid the risk of fire or camera sensor damage.

Keep the lens and all associated accessories out of the reach of children.

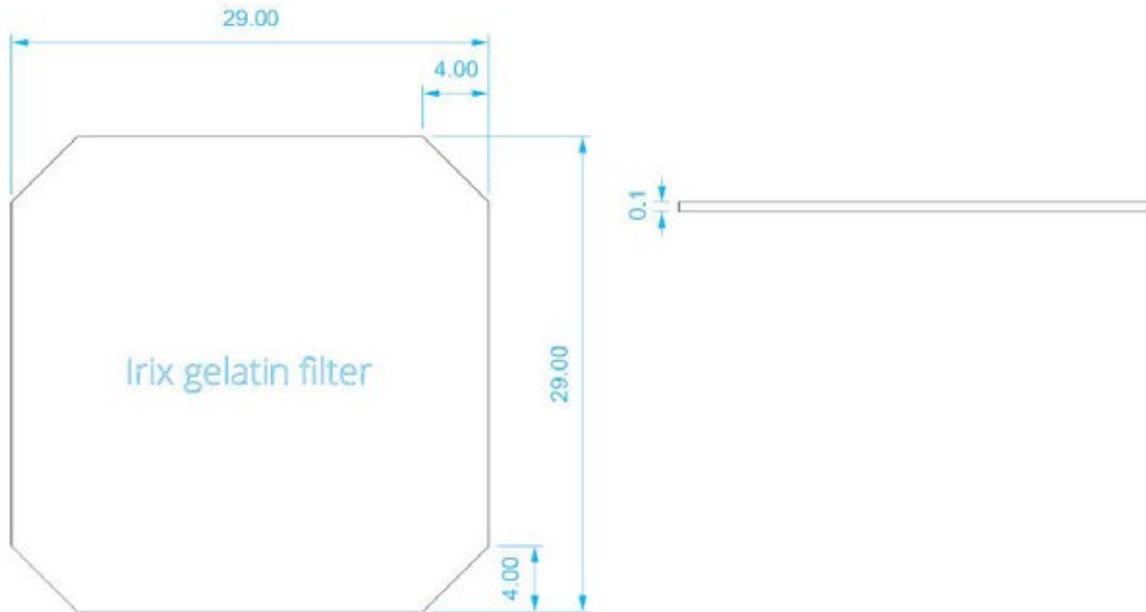
Disassembly and/or modification of your Irix lens beyond the procedures documented herein may permanently damage your lens and/or void the warranty.

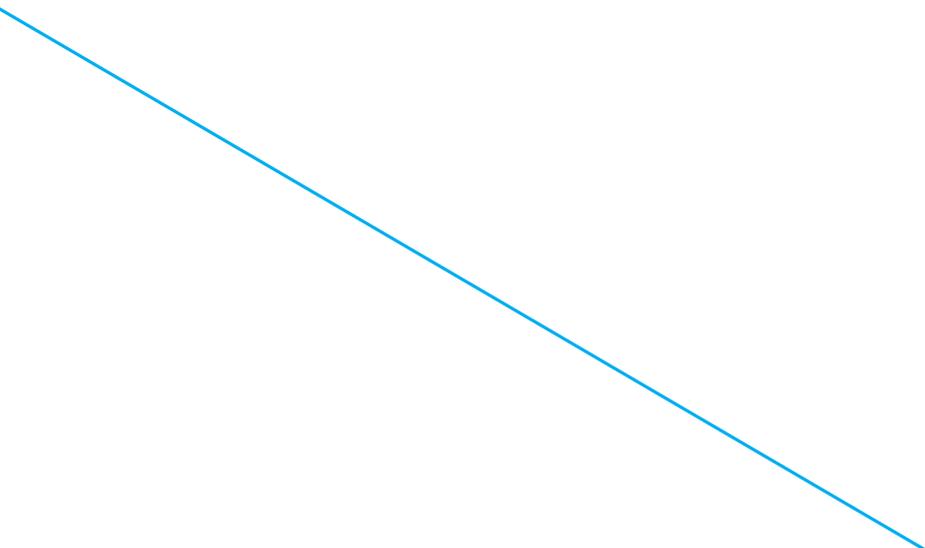
Your satisfaction with your Irix lens is our first priority. Should you find any irregularities or inconsistencies in the operation and performance of your lens, please contact the seller or an authorized Irix service center.

## TECHNICAL SPECIFICATION

Focal Length	15 mm
Maximum aperture value	f/2.4
Minimum aperture value	f/22
Number of aperture blades	9
Image size	36 x 24 mm
Angle of view	110°
Minimal focusing distance	28 cm (0.91 ft)
Number of lenses	15 (11 grup)
Front filter thread size	95 mm
Rear gelatin filter slot	30x30 mm
Dimensions	100 x 100 mm
Weight	685 g (1.51lbs)

## TEMPLATE FOR CUTTING GELATINE FILTERS





VER. 1.1

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