



[Irix]

DESIGNED BY PHOTOGRAPHERS



Extended User Manual
Irix 11 mm f/4.0



[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 11 mm f/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.

Spare lens caps may be purchased through the Irix online store **www.irixlens.com**.

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.

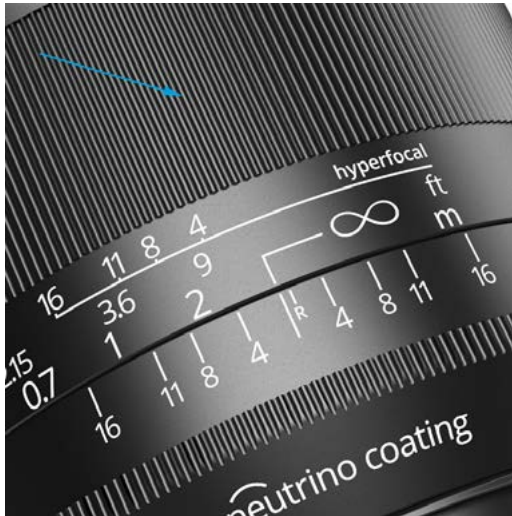
To calibrate the focus ring:

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 then rotate the focus lock ring to the locked position. The internal calibration ring and small flat head locking screw should be visible. Note: The position of the calibration ring is maintained thanks to the screws with a large flat head. These screws must stay screwed all the time.
3. Using a flat head screwdriver, loosen the smaller screw on the calibration ring. *Be careful not to allow the screw to fall into the lens housing. A screwdriver with a magnetic tip is recommended.* Turn on the live view on the camera and then use a thin tip screwdriver to turn the calibration ring clockwise or counterclockwise until the correct focus on the plan is at least 15 meters (49 feet) away.
4. Lock the calibration ring by re-tightening the screw and replace the calibration window cover.

FOCUS LOCK RING



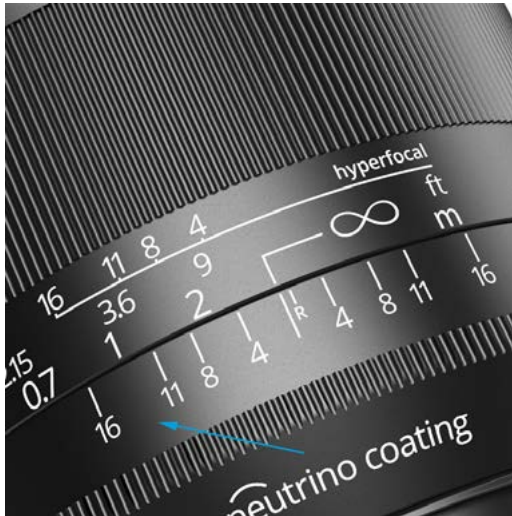
FOCUS RING



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

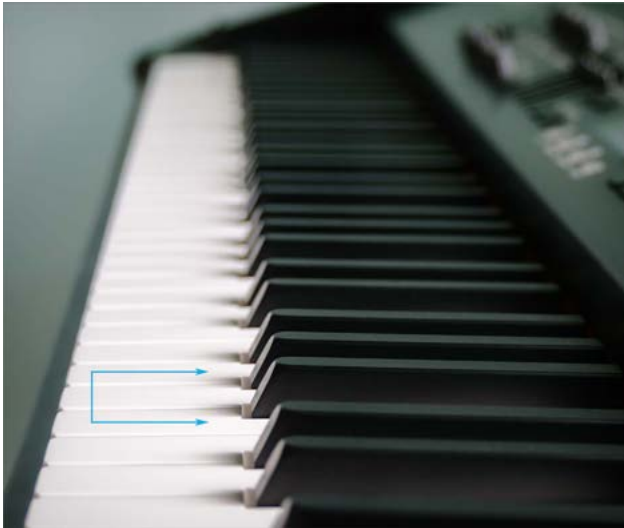


The depth of field scale provides a visual reference for the range of maximum sharpness in your photos at a given aperture and focus setting. It allows you to determine the plane of focus, within which objects in your image will be at their sharpest.

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 seventh key from the front of the image. The lens aperture is at its maximum setting of 4.0

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”.

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



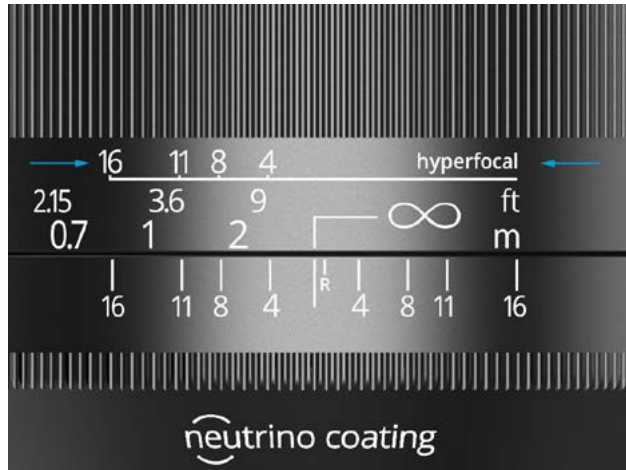
EXAMPLE NO 3

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 and different pixel pitch 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 $f/4$ 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.

HYPERFOCAL SCALE



The hyperfocal scale consists of four positions: 4, 8, 11 and 16. When working with the hyperfocal scale, the focus ring sets itself in aforementioned position and you should set this aperture number in your camera. Depending on a chosen position, your photo will be in focus according to the below scheme:

- position 4 – plans between 2 m (6.56 ft) and infinity
- position 8 – plans between 0.95 m (3.12 ft) and infinity
- position 11 – plans between 0.65 m (2.13 ft) and infinity
- position 16 – plans between 0.45 m (1.48 ft) and infinity

This aperture value was set for the example photo, and the focus area covers all the plans.

If you work with the hyperfocal scale for a longer time, consider using the focus ring lock.

REAR GELATIN FILTER SLOT



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

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** 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 due to an optical phenomenon known as diffraction. This is not a defect, but a natural occurrence in all optics.

HARD LENS CASE



To protect your lens against damage from the environment, always store it in the included hard case (Blackstone version) or soft lens pouch (Firefly version).

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 PRECAUTIONS

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.

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.

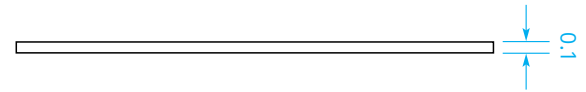
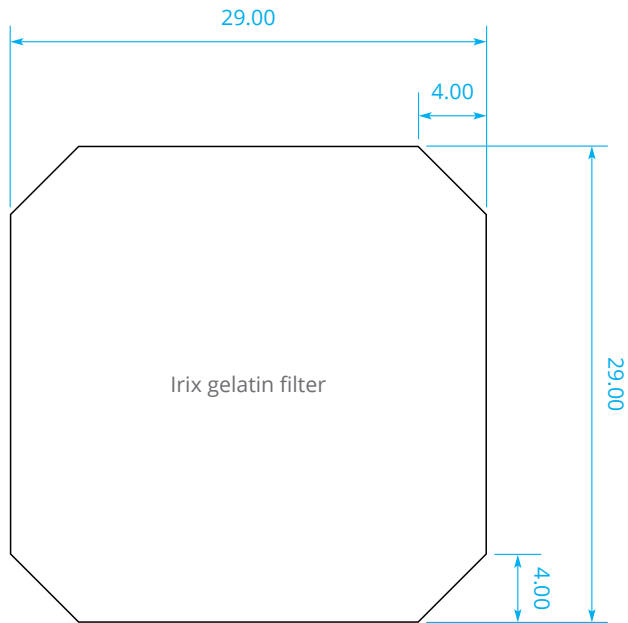
Disassembly and/or modification of your Irix lens beyond the procedures documented herein may permanently damage your lens and/or void the warranty.

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	11 mm
Maximum aperture value	f/4.0
Minimum aperture value	f/22
Number of aperture blades	9
Image size	36 x 24 mm
Angle of view	126°
Minimal focusing distance	27,5 cm (0.91 ft)
Number of lenses	16 (10 groups)
Rear gelatin filter slot	30x30 mm
Dimensions	118 x 100 mm (4.49" x 4.05")
Weight	730-790 g (1.61 – 1.74 lbs)

TEMPLATE FOR CUTTING GELATINE FILTERS





VER. 1.1

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