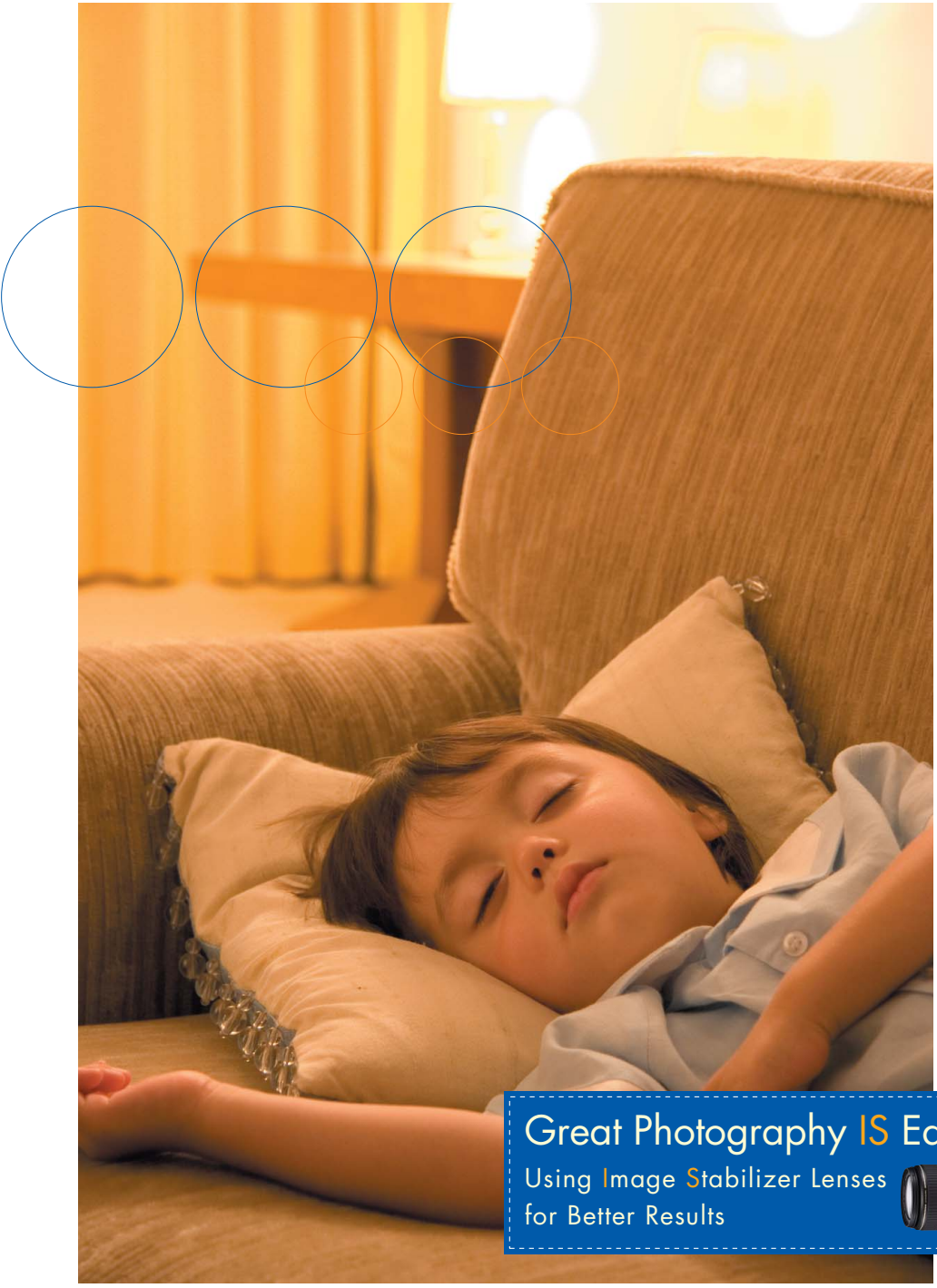
Canon



Great Photography IS Easy!

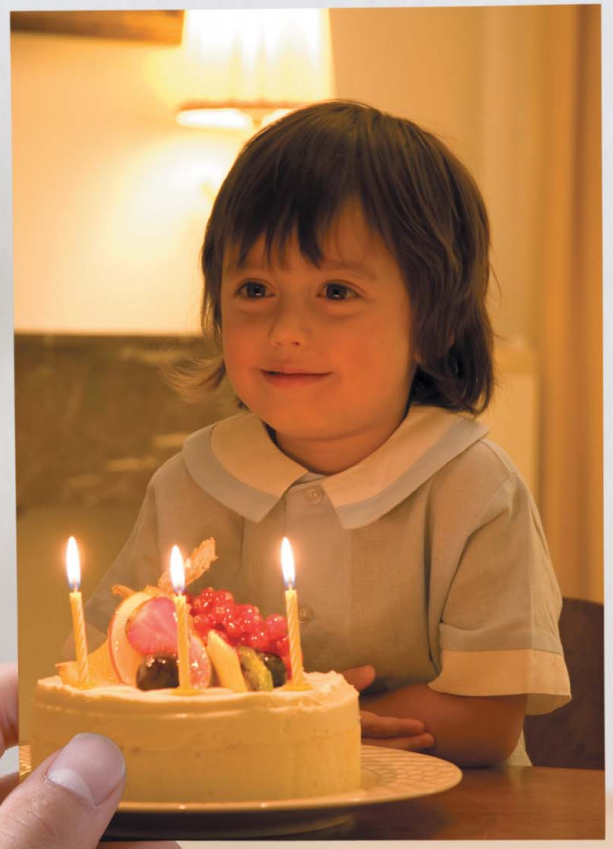
Using Image Stabilizer Lenses for Better Results

Taking too many blurry pictures?
Canon IS* Lenses are the solution!

Nice shot! Or is it? When you enlarge your image,
the print looks fuzzy. Frustrating! But a common experience.
In most cases, this accidental blurring is caused by camera shake
— especially when shooting with a telephoto lens
or at slow shutter speeds in dark places.
Even if you try to stay still,
the camera isn't perfectly steady in your hands
when the shutter button is pressed.
But now there's a great solution: Canon IS* Lenses.
For beautifully clear, blur-free photos. With ease.

* IS: Image Stabilizer

Day or night, indoors or outdoors. Canon IS Lenses give you steady control of great pictures!



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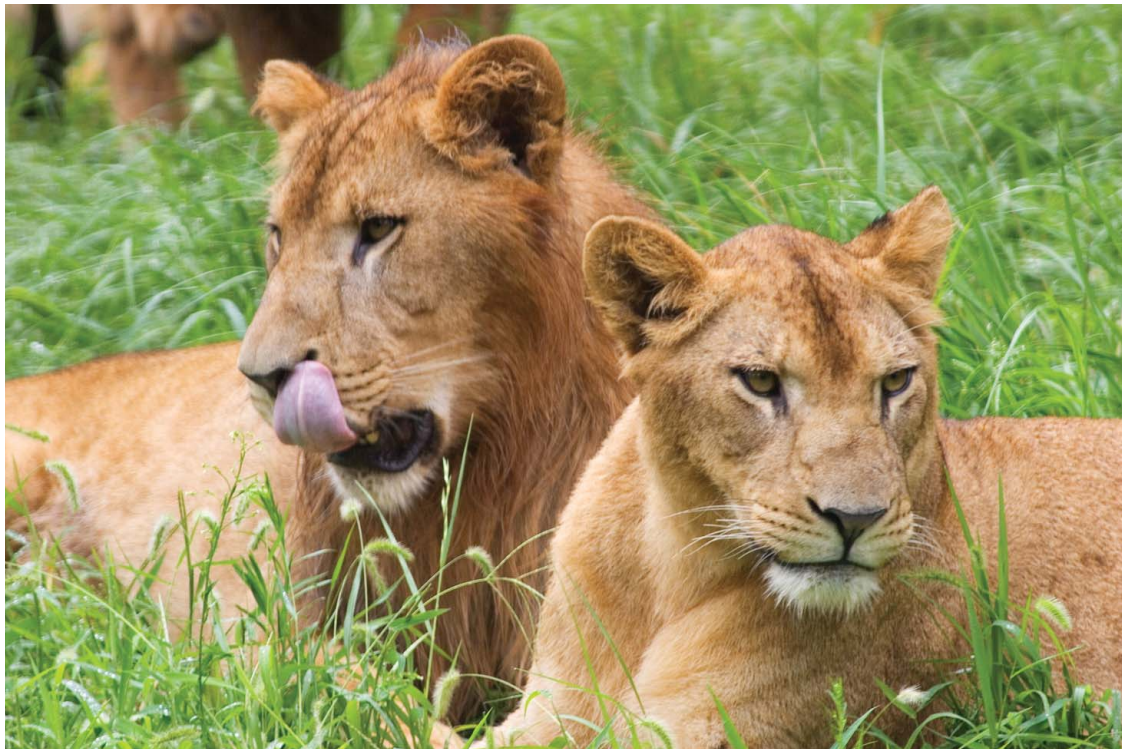
11:00 am / Zoo pictures



EF 70-300mm f/4-5.6 IS USM, 1/125sec., Shutter-priority AE

Most children love going to the zoo. Here's how to shoot "wild" pictures!

Great shot! Can you get it? Photographing animals from afar takes good timing and usually, super-telephoto lens. But don't worry! With a steady-shooting Canon IS Lens, there's no fear of blurry results. Even if you're not using a tripod.

Without IS Lens

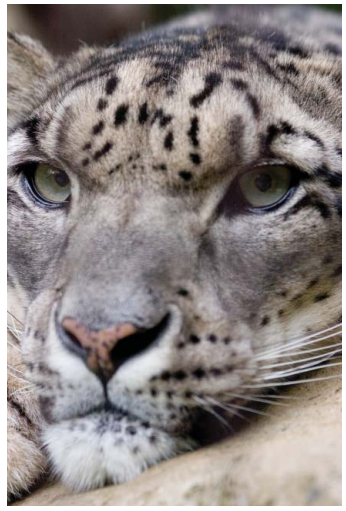
Picture problems

Blurring is virtually unavoidable when shooting distant subjects with a telephoto lens (unlike a wide-angle lens). Maybe you can reduce blur with a faster shutter speed, but that won't work on cloudy days or when shooting subjects in shadow. So a Canon IS Lens is a must!

Great photo tips

Trying to take snapshots of the animals, but bars get in the way? What to do?

f/16



f/5.0

It's easy to get rid of distracting elements like cage bars — with a little know-how!

1. Simply set your lens to telephoto.
2. Choose the Av mode and hold the aperture as wide open as possible.
3. Approach the cage as close as safely possible and shoot.

Now, see how well the shot turns out. The cage bars are gone, and the animals look like they're in the wild.

12:00 pm / Kids in motion

EF 70-300mm f/4-5.6 IS USM, 1/60sec., Shutter-priority AE

Your child is swinging, running, playing actively. Now you can capture pure energy in pictures!

Kid won't slow down? Panning* technique is tricky, but worth trying.
Just set a Canon IS Lens to Mode 2 to correct vertical camera shake while taking pictures.
The result? Panning shots made easy — so you can catch that kid for keeps!

Without IS Lens

Picture problems

Chasing your child with the camera? It's hard to even keep the kid in your viewfinder! And when you take the shot, you push the shutter button too hard — shaking the camera and creating vertical blurring. But no more! Canon IS Lenses with Mode 2 help you get the picture right.

Great photo tips

Fast moving subject, slow background. How can you get good panning shots?

If you know the optimal setting, panning techniques can get better results. Here's one example (with EF 70-300mm f/4-5.6 IS USM):

1. Turn the IS function on and select IS Mode 2.
2. To improve your success, shoot at around 100-200mm (rather than an extreme 300mm telephoto setting).
3. Select the camera Tv exposure mode and 1/60 sec. shutter speed. Select AI Servo AF as the autofocus mode.
4. While keeping the moving subject in the viewfinder, press the shutter button halfway down and hold.
5. Then, at the right moment, press the shutter button all the way down to take the shot while continuing to follow the subject. Keep using this technique while taking several photos.

Go ahead! Impress yourself with panning shots like a pro!

What's the best shutter speed?

Actually, there's no simple answer. The optimal shutter speed varies depending on the amount of subject motion and other conditions. If the shutter speed is too fast, images appear static and lacking in energy; if the shutter speed is too slow, images may be completely blurred. Find the best shutter speed by trial and error. Check results in the LCD monitor right after shooting and decide the best shutter speed for yourself.

1/60 sec.

1/320 sec.

 * Moving the camera as the subject moves.

2:00 pm / Animal snapshots

EF 70-300mm f/4-5.6 IS USM, 1/125sec., Shutter-priority AE

Turn a tiny creature into a great picture. Canon IS telephoto zoom makes it easy!

You're in the park and a cute chipmunk is posing within range! You lower your camera and focus on its eyes. All set? No, you're not steady enough. You need a Canon IS Lens to stop camera shake — and even create a softly hazy background.

Without IS Lens

Picture problems

Before you blame your camera for poor results, take a good look at your picture-taking posture. Are you trying to shoot at low level while squatting on your heels? Well, sometimes you can't brace yourself or choose a steady platform. That's why you need Canon IS Lenses to banish camera shake.

Great photo tips

Catch that little chipmunk with telephoto in a beautifully blurred natural setting.

Here's how to take a charming picture and get an intentionally blurred background (using EF 70-300mm f/4-5.6 IS USM):

1. Set the lens as far as possible to the telephoto side (200-300mm), for the longest focusing distance.
2. Select the Av exposure mode and keep the aperture open.
3. Choose natural elements as a background — flowers, gleams of sunlight on leaves, etc.
4. Get as close to the subject as possible — quietly.
5. Find ideal framing and angle while checking shots through the LCD monitor.

Shot with open aperture f/5.6

Shot with closed aperture f/16

7:00 pm / Night shots

EF-S 17-85mm f/4-5.6 IS USM 1/4sec. f/5.6

Evening enchantment. Canon's standard IS Zoom Lens is ready for brilliant shots!

As the sun sets and the dusk grows darker with every passing second, the city lights up with exciting possibilities for glamorous night shots. And you're ready to take dazzling handheld pictures with Canon's standard IS Zoom Lens. Perfect!

Without IS Lens

Picture problems

What's the difference between these two night shots? Same low light conditions, same low shutter speed. The critical difference is camera shake, which ruins your ability to make the most of picture opportunities after dark. Don't carry a tripod around? Just keep a Canon IS Lens handy!

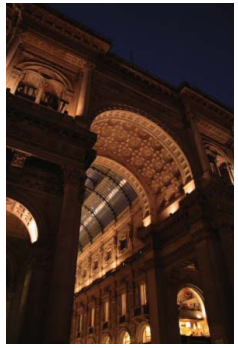
Great photo tips

How can you capture twilight scenes when the light changes each second?

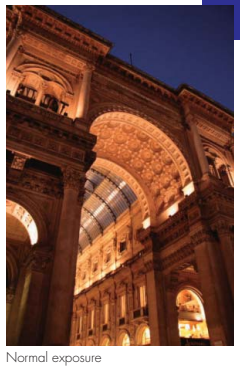
Simple! Just use the convenient AEB (Auto Exposure Bracketing) function to generate three different brightness variations for a single shot!

1. Set the camera's drive mode to continuous shooting mode.
2. Set the camera's AEB adjustment to 2/3 in 1/3-step increments.
3. Turn the IS function of the lens "on."
4. When you press the shutter button and hold it, three photos with different brightness (exposure levels) are created.
5. Select the one you like best.

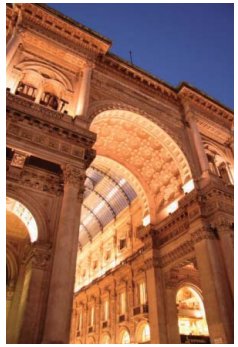
AEB eliminates the time-consuming task of searching for optimal exposure. So you won't miss once-in-a-lifetime pictures.



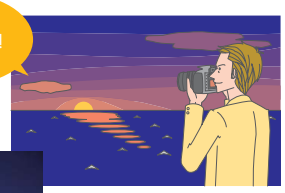
Underexposure



Normal exposure



Overexposure



8:00 pm / Indoor shots

EF-S 17-85mm f/4-5.6 IS USM, 1/10sec., f/5.6

It's happy birthday time! Take pictures in low light without spoiling the mood.

Low light? No flash? Don't be concerned — be inspired! Canon IS Lenses let you take full advantage of candlelight and other low light conditions to create breathtakingly beautiful indoor pictures in available illumination. On any occasion.

Without IS Lens

Picture problems

Dim light, didn't use flash, camera shake, fuzzy photos... there are so many excuses for lost photo opportunities! But now, you don't have to apologize any more because Canon IS Lenses show outstanding performance in many different kinds of indoor shooting situations. Without a flash!

Great photo tips

Cake, candles, and a child's face. How can you capture it all beautifully — without a flash?

With flash

With IS Lens

Flash sometimes destroys the mood of a room. Consider using available light instead (with Canon EF-S 17-85mm f/4-5.6 IS USM):

1. Since candlelight alone is not enough, put on some room lights. Or keep the room somewhat dark, and let in light from another source (such as the room next door).
2. Set your zoom lens to a wide to normal angle (17-28mm), which has a shorter focal length.
3. Choose the Av exposure mode and keep the aperture fully open.
4. When aiming at the subject, put your elbow(s) on the table (or somewhere else) to hold the camera steady as you focus on the child's eyes. To prevent blurring, try to press the shutter button when your child is relatively still.

9:00 pm / Sleeping faces

EF-S 17-85mm f/4-5.6 IS USM, 0.3sec., Shutter-priority AE

A child falls asleep. Now, take pictures quietly without waking the sleeper!

A child's expression when asleep is especially endearing. Canon IS Lenses are the ideal choice to quietly capture these precious moments. Without distracting flash or blurred images. Without waking a child up and missing that sleeping face!

Without IS Lens

Picture problems

Well, you didn't wake the child up by using a flash, but you didn't get the picture either. A sadly missed opportunity, due to slow shutter speed and blurring with camera shake. So keep a Canon IS Lens ready for blur-free pictures at naptime, bedtime, or anytime an opportunity arises.

Great photo tips

Angles? Framing? How can you capture the best features of a well-loved face?

Shooting angles really matter in photo composition, changing the whole nuance of expression. For example, here's how to use the EF-S 17-85mm f/4-5.6 IS USM:

1. Choose the Av mode for exposure and keep the aperture fully open.
2. Turn the IS function of the lens "on."
3. Lower your camera to your child's eye level
4. When aiming at the subject, put your elbow(s) on the table (or somewhere else) to hold the camera steady.
5. Aim at the child's eyelashes to determine focusing and press the shutter button.

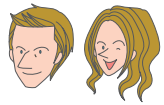
Why not take pictures of the child's soft hand and fingers, as well as the face? It's easier to capture these details when your child is asleep!

Ordinary snapshot taken from adult's eye level

Memorable picture taken at child's eye level

Now you can shoot anywhere, anytime. And count on beautiful blur-free pictures!

IS benefits



When does camera shake tend to happen, and what causes it to occur?

Perhaps you've encountered blurred images when enlarging pictures: photos that look fine in smaller postcard sizes appear quite fuzzy at greater size. In fact, camera shake happens more frequently than you'd think. There are several reasons for accidental blurring. One cause is the use of a telephoto lens, which lets you shoot small subjects at higher magnification, and also turns small vibrations during shooting into heavy blurring of images. Another cause is shooting in dark places. When taking pictures at lower shutter speeds, in an unsteady posture, or on an unstable platform such as a train or a boat, blurring is quite common.

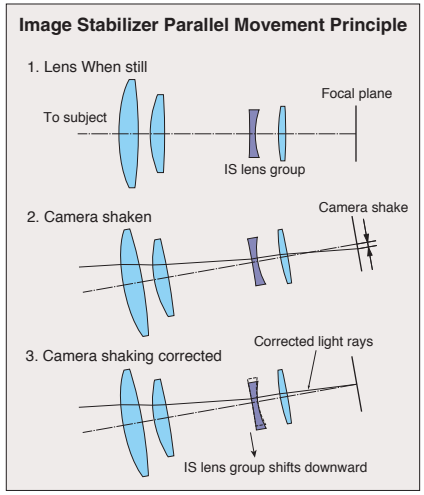
How can you best protect your pictures from camera shake and blurring?

The most certain way to prevent camera shake is the use of a tripod. Additionally, use of flash can effectively minimize blurring when shooting in low lighting conditions. However, it's inconvenient to carry around a heavy, bulky tripod, and in some places, tripod use isn't even allowed. What's more, the use of a flash may sometimes spoil the mood of a shooting scene by disrupting the natural lighting nuances of the atmosphere. In any of these situations, Canon IS Lenses are the definitive solution to blurring problems. Just a single IS Lens can help you capture images in a natural light, without other equipment or special set-up, wherever and whenever you want.

How do Canon IS Lenses repress blurring caused by camera shake?

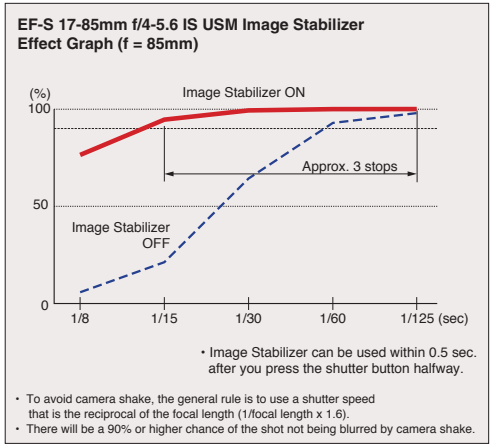
Canon IS Lenses detect camera shake with a pair of built-in gyro sensors, shifting lens components in the direction of the vibration to counteract it and prevent blurring. When the shutter button is pressed halfway while the IS function is on, compensation for camera shake is activated in just 0.5 seconds. Since the potential optical performance of the lens is optimized, you can capture beautiful images.

Image Stabilizer Unit



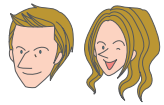
How effective is the shake compensation capability of Canon IS Lenses?

Generally, the shutter speed that allows photographers to shoot photos without blurring is "1/focal length". Of course, the faster the shutter speed, the greater the benefit in blur reduction. In comparison with lenses that lack an Image Stabilizer, Canon IS Lenses can achieve the same blur-free clarity at shutter speeds that are 2 to 3 stops (increments) slower. Let's take a look at an EF-S 17-85mm f/4-5.6 IS USM lens, for example. Since the maximum focal length of this lens is effectively 136mm with cameras* like the EOS 400D DIGITAL and others that feature APS-C image sensors, the slowest shutter speed that could normally be used while maintaining a blur-free image is 1/125 sec. However, when the IS function is activated, the shutter speed can be reduced 3 stops to 1/15 sec. without blurring. Thus, you can shoot subjects at slower shutter speeds without fear of blurred images — dramatically expanding your range of shooting situations and photo variations.



* EOS 30D, EOS 20D, EOS 20Da, EOS 400D DIGITAL, EOS 350D DIGITAL, EOS 300D DIGITAL..(as of September 2006)

Product overview



Lightweight, compact standard zoom lens for digital SLRs that take EF-S lenses

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

This shake-compensated, high-magnification standard-type IS zoom lens is ideal in combination with Canon's digital SLR cameras* including EOS 30D and EOS 400D DIGITAL. Thanks to optical design for an APS-C sized sensor, the versatile lens provides 5x zoom range and focal length equivalent to 27-136mm in the 35mm-film format, combined with a light and compact body. This single lens covers an extensive range of photographic opportunities from wide-angle landscapes to family photos to formal portraiture with its wide-to-tele capabilities. Extremely easy to use, the lens offers full-time manual focusing and an Image Stabilizer with the effective equivalent of shutter speeds 3 increments faster. Thus, you can enjoy taking photos in a dim room or capturing evening scenes without flash that can disturb the mood or disrupt natural lighting conditions.

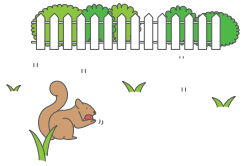
• Lens construction: 17 elements in 12 groups • Focusing distance: 0.35m - ∞ • Maximum magnification rate: 0.20x • Filter size: 67mm

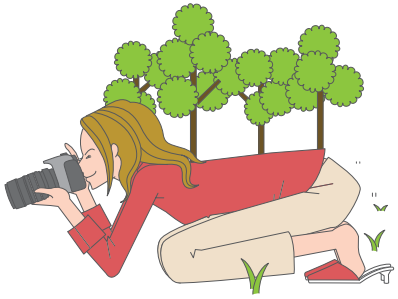
Telephoto zoom lens for easy-to-enjoy super-telescopic shooting

EF 70-300mm f/4-5.6 IS USM

This superb telephoto lens provides IS functionality equivalent to a shutter speed roughly three stops faster. Combined with Canon digital SLR cameras** including EOS 30D and EOS 400D DIGITAL, it provides focal lengths equivalent to 112-480mm in the 35mm-film format for mid-to-long-range telephoto capability. The lens is ideal for almost any type of photographic application, including portraits, landscapes, sports, and stage shows. Moreover, photographers can take pro-quality panning shots simply by setting the Image Stabilizer function to Mode 2. Powerful yet easy to use, the lens is equipped with UD optics for fine detail with exceptional colour fidelity.

• Lens construction: 15 elements in 10 groups • Focusing distance: 1.5m - ∞ • Maximum magnification rate: 0.26x • Filter size: 58mm





Single focal-length lenses

EF 300mm f/2.8L IS USM
• Lens construction: 17 elements in 13 groups (protective glass and drop-in filter included) • Close Focus: 2.5m - ∞ • Maximum magnification rate: 0.13x • Filter size: 52mm rear drop in type

EF 400mm f/2.8L IS USM
• Lens construction: 17 elements in 13 groups (protective glass and drop-in filter included) • Close Focus: 3m - ∞ • Maximum magnification rate: 0.15x • Filter size: 52mm rear drop in type

EF 500mm f/4L IS USM
• Lens construction: 17 elements in 13 groups (protective glass and drop-in filter included) • Close Focus: 4.5m - ∞ • Maximum magnification rate: 0.12x • Filter size: 52mm rear drop in type

EF 300mm f/4L IS USM
• Lens construction: 15 elements in 11 groups (protective glass included) • Close Focus: 1.5m - ∞ • Maximum magnification rate: 0.24x • Filter size: 77mm

EF 400mm f/4 DO IS USM
• Lens construction: 17 elements in 13 groups (protective glass and drop-in filter included) • Close Focus: 3.5m - ∞ • Maximum magnification rate: 0.12x • Filter size: 52mm rear drop in type

EF 600mm f/4L IS USM
• Lens construction: 17 elements in 13 groups (protective glass and drop-in filter included) • Close Focus: 5.5m - ∞ • Maximum magnification rate: 0.12x • Filter size: 52mm rear drop in type

Zoom lenses

EF 70-200mm f/4L IS USM
• Lens construction: 20 elements in 15 groups • Close Focus: 1.2m - ∞ • Maximum magnification rate: 0.21x • Filter size: 67mm

EF 24-105mm f/4L IS USM
• Lens construction: 18 elements in 13 groups • Close Focus: 0.45m - ∞ • Maximum magnification rate: 0.23x • Filter size: 77mm

EF 28-300mm f/3.5-5.6L IS USM
• Lens construction: 23 elements in 16 groups • Close Focus: 0.7m - ∞ • Maximum magnification rate: 0.3x • Filter size: 77mm

EF 70-300mm f/4.5-5.6 DO IS USM
• Lens construction: 18 elements in 12 groups • Close Focus: 1.4m - ∞ • Maximum magnification rate: 0.19x • Filter size: 58mm

EF-S 17-55mm f/2.8 IS USM
• Lens construction: 19 elements in 12 groups • Close Focus: 0.35m - ∞ • Maximum magnification rate: 0.17x • Filter size: 77mm

EF 28-135mm f/3.5-5.6 IS USM
• Lens construction: 16 elements in 12 groups • Close Focus: 0.5m - ∞ • Maximum magnification rate: 0.19x • Filter size: 72mm

EF 70-200mm f/2.8L IS USM
• Lens construction: 23 elements in 18 groups • Close Focus: 1.4m - ∞ • Maximum magnification rate: 0.17x • Filter size: 77mm

EF 100-400mm f/4.5-5.6L IS USM
• Lens construction: 17 elements in 14 groups • Close Focus: 1.8m - ∞ • Maximum magnification rate: 0.2x • Filter size: 77mm

* EOS 30D, EOS 20D, EOS 20Da, EOS 400D DIGITAL, EOS 350D DIGITAL, EOS 300D DIGITAL. (as of September 2006)
**Compatible with all EOS SLRs.

Canon