

Image stabilization helps you hold steady at slow shutter speed, but demands a price in power; this rugged pro lens eats it up.

BY JOE FARACE

Ready steady

CANON EF 70-200MM F/4L IS USM TELEPHOTO ZOOM LENS



Like all Canon L series lenses, the compact Canon EF 70-200mm f/4L IS USM L series telephoto zoom lens for pros is sealed against dust and moisture. The latest generation of Canon Image Stabilizer (IS) technology corrects camera shake to slow shutter speed up to four steps, three steps in the first 0.5 seconds of engagement, and another after 2.5 seconds.

The EF 70-200mm f/4L IS USM lens is the same size as the EF 70-200mm f/4L USM lens (in stock for now, but no longer being made), but the new lens incorporates a circular diaphragm for more natural looking background blur, or bokeh, and provides distance information for improved AF and exposure with Canon EX flash units. The lens controls flare and ghosting with coatings and optimal placement of 20 lens elements in 15 groups. One fluorite element and two ultra low dispersion (UD) elements suppress chromatic aberration for crisp images throughout the focal range. A ring-type ultrasonic motor (USM) drives fast and quiet autofocus, yet allows manual focusing, even with the lens in AF mode.

The EF 70-200mm f/4L IS USM zoom provides two IS modes. Mode 1 is for photographing stationary subjects under dim light; I also found it useful for shooting from moving vehicles. Mode 2, best for panning a moving subject, corrects for vertical shake by switching off the horizontal IS function.

The downside of an IS lens is the power it demands for optimal performance. It's a good idea to turn off the IS when the camera is mounted on a tripod. If you use a tripod and prefer to mount the lens on it, get the optional Tripod Mount Ring A (W) for \$113.95.

Unlike non-L lenses, this one has a real IS on-off switch, and the focus limit switch reduces near-distance so the autofocus doesn't hunt. I tried both focus limit options—1.2m (3.93 ft.) and 3m (9.84 ft.)—under a wide range of lighting situations, but saw no difference in this fast-focusing lens.

While shooting with the EF 70-200mm f/4L IS USM at a Halloween dog costume contest, I ran into situations where the lens

The focal length of the EF 70-200mm f/4 L IS USM makes it ideal for candid portraits. I took this image from the deck of one boat while the crewman was on an adjacent vessel. Both yachts were bobbing gently in the water and the EF 70-200mm f/4 L's image stabilization enabled me to get a sharp image. Exposure was 1/500 second at f/6.3, ISO 200, with a one-third stop exposure compensation to make the white boat sparkle.

specs:

EF 70-200mm f/4 L IS USM Telephoto Zoom Lens

FOCAL LENGTH: 70-200mm

MAXIMUM APERTURE: f/4

LENS CONSTRUCTION: 20 elements in 15 groups

ANGLE OF VIEW: 34 to 12 degrees with full-frame cameras

FOCUS ADJUSTMENT: AF with full-time manual

CLOSEST FOCUSING: 3.94 feet

ZOOM SYSTEM: 7-group helical zoom (rotational angle: 72 degrees)

FILTER SIZE: 67mm

MAXIMUM DIMENSIONS: 3.0x6.8 inches

WEIGHT: lens only, 26.8 oz.

PRICE: \$1,249



would *not* focus and wouldn't let me shoot. It turned out to be user-error, but that's when I discovered the power requirements of autofocus. AF speed is a product of focusing calculation speed and lens drive speed, bringing the camera body into the calculations. Typically, the newer an EOS camera, the faster its AF speed. I was shooting with an EOS 5D with nine focus points.

Recent EOS-1-class cameras have 45 focus points and dual-dedicated AF CPUs that run simultaneously under the control of DIGIC II. The greater voltage supply of an EOS-1-class camera provides a brief burst of extra drive speed with certain EF lenses, a big difference over such lower voltage models as the 5D. In low light, EOS digital cameras allow more time for focus calculation and drive the lens motor more slowly than in bright light. I shot the same show last Halloween with an EOS-1D Mark II with EF 70-300mm IS lens without problems.

Next, I took the EF 70-200mm f/4L IS USM with me to Acapulco, Mexico. Mounted on the EOS 5D with BG-E4 battery pack, it made a well-balanced, easy-to-handle package. Though lightweight, this lens is rugged, but go the extra step to protect it. The Adorama 8-inch Slinger soft lens case sells for less than \$13. It's made of padded Softex and holds lenses up to 8 inches long with a diameter up to 86mm.

The focal length of the EF 70-200mm f/4 L IS USM is ideal for candid portraits. The IS function is useful for situations where your footing may be less than steady. Aboard a boat, I made a candid portrait of a crewman on

Photographing the trials for the cliff diving world championships from a boat was a challenge to the EF 70-200mm f/4 L IS USM's image stabilization but all of the images were sharp, even though violent swells tossed our little ship around. Exposure was 1/640 sec at f/13, ISO 320.

an adjacent vessel. Both yachts were bobbing gently in the water, yet the image stabilization enabled me to capture a sharp image.

Wedding photographers could make use of this capability at fast-moving receptions.

The IS function's biggest test was my trying to capture Acapulco's famous cliff divers. I was on the deck of a yacht being buffeted by heavy waves. I got to make only six shots of the divers before some of the crew got violently seasick. The EF 70-200mm f/4 L IS USM never missed a beat, and all of the images are tack sharp. I just wish there were more of them.

Another place image stabilization helped was on the Tres Palos lagoon, where I was photographing the flora and fauna. I'm not a bird photographer, but IR helped me get a crisp photo of a heron taking off just ahead

of the boat. Serious bird photographers would want longer focal length, but I would have loved to have Canon's EF 1.4X II Extender with me (\$285).

During its extensive workout in Mexico, the EF 70-200mm f/4 L IS USM always performed to, and frequently beyond my expectations. In L-series lenses, this one's a bargain not only in price, but also in its ability to function under a range of difficult photographic conditions. Sometimes the difference between getting a good shot and not getting a shot at all is a matter of the tools at hand, and in my tests, the EF 70-200mm f/4 L IS USM was the right tool at the right time. ■

View additional full-size images taken with the Canon EF 70-200mm f/4 L IS USM in the Bonus Content section at www.ppmag.com.



I'm not a bird photographer, but image stabilization helped me get this photo of a heron that took off just ahead of our boat touring the Tres Palos lagoon. Exposure was 1/640 second at f/13, ISO 320.