

Filling the niche between the 20D and the Mark II, the new Canon DSLR combines speed and performance in a compact camera.

BY RON EGGERS

Its own *class*

CANON EOS 5D



Canon's new EOS 5D full-frame digital single lens reflex camera is in a class by itself. Positioned in the market between the 20D and the least expensive Mark II—what Canon calls the “premium DSLR market”—it's suitable for a broad range of professional applications.

Priced just over \$3,000, the 5D is less expensive than the lowest-priced Mark II, and holds its own against those models in speed and performance. The 5D is designed around a 13.3-megapixel 35.6x23.9mm CMOS sensor (12.8 megapixels effectively), with maximum resolution of 4,368x2,912 pixels. With 8.2-micron pixels, the 5D's second-generation Canon CMOS chip is a significant redesign of the original, engineered for lower power consumption and less noise distortion, particularly in shadow detail.

Other features punch up the 5D's performance, including the proprietary Canon high-speed DIGIC II Image Processor, fast DDR SDRAM memory and four-channel data transfer capability. According to the specs, it's possible to

The Canon EOS 5D is an ideal camera for professional assignments, ranging from action to portraiture to weddings. Its Picture Styles options ensure the right settings for the various types of photography.



All images ©Ron Eggers

shoot up to 60 full-resolution JPEG or 17 RAW image files per burst, at speed up to 3 frames per second (fps). That translates into shooting at full speed for 20 seconds. My test results fell a little below the specs, but not much. Using a high-speed SanDisk Extreme III 1GB CompactFlash card, I was able to capture 42 to 45 frames in those 20 seconds. For longer bursts, I averaged 104 frames per minute. That's very good.

Shooting RAW, I hit an average of 21 frames in 10 seconds, though it took another 17 seconds for the buffered data to roll onto the card. When I continued to shoot after the initial burst as the data transferred, the camera gave me unpredictable, sporadic firing at about 1 to 2 seconds per frame on average. Unlike some other Canon models, the 5D's resolution and file format are set through the menu, not with a separate button on the body. (I prefer using a body button to digging through menus.)

The 5D comes with a redesigned high-speed, dual-curtain focal plane shutter with a durability rating of 100,000 frames. That doesn't match the Mark IIs' shutter rating, but it's comparable to many other professional bodies. The entire mirror assembly has also been redesigned.

The focusing system shows improvement, thanks to a new auto-focus algorithm and more sophisticated AF circuitry. The 9-point AF system is supplemented by six invisible AF points for greater accuracy, particularly in AI SERVO AF mode. Focusing and focus speed were good, but focus tracking took some practice. In the continuous focusing mode, the focus tended to jump around (more than with the Mark IIs I've used). With the camera set to fire only when the focus was locked on, several times I missed the shot I wanted, even when the action wasn't all that fast, such

as a model walking toward me, and with little camera movement on my part.

Canon says that with a fast 300mm lens, its predictive AF should be able to track a subject 66 feet away, moving at 186 mph. (Must be a knack to correctly locking on the subject.) Focusing hesitation became somewhat less of a problem as I grew accustomed to using the camera, but it still cropped up.

Like many high-end Canon DSLRs, the 5D has Custom Function features (C.Fn.) that are accessed through the main menu. C.Fn. enables such things as adjusting flash firing, setting exposure

in increments, and locking the mirror. These functions can also be used to set auto reduction of electronic noise (customary at higher ISOs) and longer exposures, as well as to extend the standard ISO 100-1600 equivalence to 50-3200.

Sophisticated white balance control, with nine different white balance settings and white balance bracketing, assures accurate color. The Custom option makes it possible to set the white balance to match a predefined target image. The enhanced 35-zone exposure metering system gives photographers significant control.

In the past, I've faulted Canon for

building inadequate LCDs into pro models. But the 5D's LCD is a significant improvement, larger and more viewable, with adjustable brightness levels and the backlighting LED modules expanded from three to six. The menus themselves are easy to access and adjust. You can navigate through all menus in sequence, or jump to a particular menu for a specific task. The menu option last selected will be the first option when you re-access the menus—very handy.

The 5D is compact for its capabilities, so compact that it's billed as the world's smallest and lightest full-frame DSLR. The body weighs only 28.6 ounces and is nowhere near as bulky as the Mark II series, yet it's a comfortable camera to hold. Even in my big hands, the grip of the 5D fits fine.

Though lightweight, the magnesium alloy and stainless-steel body is sturdy. With proper care, its lens mount can handle any Canon lens, even the longer, heavier telephotos. With its full-size sensor, there's no lens conversion factor. The 5D takes most EF lenses, including wide-angle, without altering the coverage of the lens. That opens the full range of wide-angle photography.

The 5D's consumer-type battery is smaller than the Mark II's, but the power management was excellent. I could repeatedly fire off over 500 frames without exhausting the battery. For even more power, an optional battery grip is available. ■

See the Picture Styles sidebar, page 44. Picture Styles is an in-camera image optimizing feature included in the Canon EOS 5D and the Canon EOS-1D Mark II N.

See more images taken with the Canon EOS 5D in the January Bonus Content at www.ppmag.com.



specs: Canon EOS 5D

IMAGE PROCESSOR: DIGIC II Image Processor

SENSOR: CMOS, 8.2-micron pixels

RESOLUTION: 12.8 effective megapixels (4,368x2,912 pixels)

METERING: Maximum aperture TTL 35-zone SPC; evaluative, partial, spot (multi-spot), center-weighted averaging

SHOOTING SPEED: 3 fps; bursts to 60 frames in JPEG mode (45-frame bursts in tests for this review), 17 in RAW

ISO: 100 to 1600 equivalence in 1/3-stop increments, expandable to 50 to 3200

EXPOSURE SETTINGS: Program AE (shiftable), shutter-priority AE, aperture-priority AE, auto,

E-TTL II autoflash program AE, manual

SHUTTER: Vertical-travel, mechanical, focal-plane shutter, 1/8,000 to 30 seconds (1/3-stop increments), X-sync at 1/200 second

WHITE BALANCE: Auto, preset (daylight, shade, cloudy/twilight/sunset, tungsten light, white fluorescent light, flash), manual (custom, color temperature)

LENSES: Canon EF (except EF-S lenses)

FLASH: E-TTL II autoflash, EX-series Speedlite compatible

STORAGE: Compact Flash Type I and II

PRICE: \$3,299