

The Canon XT, the second-generation Digital Rebel, features significant improvements over the original.

BY RON EGGERS

Rebel, *pumped*

CANON EOS DIGITAL REBEL XT



The Canon EOS Rebel XT is designed around an 8-megapixel, single-plate, high-sensitivity APS-sized CMOS sensor with maximum effective resolution of 3,456x2,304 pixels, 25 percent greater than the original 6.3-megapixel Rebel, which will remain in the Canon DSLR product line with a reduced price.

The XT has many of the advanced features and sophisticated electronics of higher priced models. Its sensor is slightly smaller than the EOS 20D's, but its circuitry has many of the 20D's innovative features, including the DIGIC II image engine. Combined with the XT's controllable, on-chip noise reduction circuit, this image-processing engine yields exceptionally high image quality.

Unlike some earlier CMOS sensors, when used at the camera's default settings, the XT's sensor captures relatively bright, well saturated photographs. After shooting with the Canon EOS Rebel XT extensively, I was duly impressed. It's free of many of the problems of entry-level DSLRs, such as shutter lag and the slight hesitation that irked some users of the original Rebel. Its startup rate is

Even though it's considered an entry-level digital SLR, the Canon EOS Digital Rebel XT's responsive speed allows precision capture for pros.



0.2 second, 10 times faster than the original's. In my tests, the interval between turning the camera on and firing off two frames was less than 1 second—top-notch performance for *any* digital SLR.

Its electronically controlled, vertical-travel, mechanical focal plane shutter makes shooting with the XT feel much like shooting with a 35mm SLR. Camera specs claim a capture rate of 3 frames per second (fps) in high-resolution JPEG mode, and 14-frame burst capacity. For RAW captures, the burst rate drops to 5. The combined RAW+JPEG mode brings it down to 4.

Using a 1GB SanDisk Ultra II CompactFlash card, and firing in the continuous shooting mode, I could repeatedly take 54 (maximum resolution) to 67 (minimal compression) JPEG frames in 30 seconds, with very little hesitation.

In the maximum resolution RAW mode, I could shoot 7 frames in less than 3 seconds, slightly better than stated in the specs. At that point, without taking any additional frames, it took another 7 seconds to clear the buffer. With the buffer filled, I could continue to shoot at roughly 1 fps.

Focusing was speedy and responsive. In most cases, the wide-area, seven-point autofocus system seemed almost intuitive in finding just the right point of focus in the frame. (In a couple of low-light conditions, the focus wasn't quite as sharp as I desired.) Unlike some high-resolution digitals, the XT never exhibited annoying focusing hesitations, and never had to run through the entire focusing range as it locked in on a focal point.

For focusing on moving subjects as you track them, the XT's predictive auto-focusing mode (one of several focusing modes) works well, as long as the movement of the subject and your camera is not extreme. I had no

problem tracking subjects on skateboards and rollerblades.

Metering options include 35-zone AF point evaluative metering, partial metering at the center of the image, and center-weighted averaging. Shutter speed ranges from 1/4,000 second to 30 seconds, with ISO equivalence ranging from 100 to 1600. With the XT's advanced image processing, I could shoot at its default ISO 400 setting (the original Rebel's default is ISO 100) making it possible to pick up two stops without degrading image quality or introducing significant electronic noise.

The XT features a white-balance correction control option that acts like a digital color filter. It can be used as a light-balancing or color-compensating filter. You can adjust both the blue/amber and the magenta/green bias plus-or-minus nine levels. You can also use white balance bracketing to

Lightweight with high-quality capture ability, the XT is an all-around good camera to carry along.



specs: Canon EOS Digital Rebel XT

SENSOR: CMOS, 8 effective megapixels (3,456x2,304 pixels) with DIGIC II Image Processor

METERING: Maximum aperture TTL metering with 35-zone SPC, evaluative metering, partial metering at center, center-weighted average metering

SHUTTER: Vertical-travel, mechanical, focal-plane shutter with electronic control for all speeds, 1/4,000 to 30 seconds, bulb, X-synch at 1/200 second

FRAME RATE: 3 fps up to 14 consecutive frames

SENSITIVITY: ISO 100 to 1600

WHITE BALANCE: Auto, six standard modes, custom

FILE FORMAT: JPEG, RAW, simultaneous JPEG and RAW

AUTOFOCUS: TTL-CT-SIR with AF-dedicated CMOS sensor, one-shot AF, Predictive AI Servo AF, AI Focus AF, manual

FLASH: E-TTL II auto flash metering system, built-in pop-up flash (GN 13 at ISO 100 in meters); compatible with Speedlites, including EX-series

LENSES: Compatible with all Canon EF lenses

STORAGE: CompactFlash Type I and II, Microdrive

INTERFACE: USB 2.0 High Speed

MSRP: \$999 with lens, \$899 without



The bundled 18-55mm lens can focus down to 4.5 inches for detailed close-ups.

capture three consecutive images with different bias settings.

With its eight flash modes and flash exposure compensation, the XT supports E-TTL flash in eight flash modes. It compliments the sophisticated control circuitry in the EX-series Speedlites, with flash sync all the way up to 1/200 second. That's an advantage for shooting action under low-light conditions.

Like other Canon digital SLRs, the XT has a set of customizable functions. The nine custom functions have 24 separate settings, including options for controlling long exposures, adjusting flash sync speed in the AV mode, and changing the E-TTL II metering pattern.

The XT is compatible with more than 50 Canon EF and EF-S lenses, which were specifically developed for

the digital SLRs (with its APS-C size sensor, there's a 1.6X lens conversion factor). It comes bundled with the EF-S 18-55mm f/3.5-5.6 II lens, which covers the 35mm equivalence of 28-88mm—a compact lens with a nice range. It's not a true pro lens, but the quality is good enough for most applications. In closeups, it stayed in focus within 4.5 inches of the subject.

Frequently, I would use the XT with a 28-135mm IS lens (44.8-216mm equivalent coverage), and other than its limited wide-angle coverage, it was a great camera-lens combination. The XT body has a metal lens mount that accepts long telephoto lenses, but because it's lighter and less sturdy than other DSLR bodies, I'd make sure those lenses were firmly braced before shooting.

Like many of Canon's consumer models, the XT supports printing directly to any PictBridge-compatible printer, bypassing the computer altogether.

There only a couple of things about the XT I can find fault with. With even small consumer cameras now sporting large, viewable displays, the XT's mere 1.8-inch LCD is a disappointment. Its meager size is somewhat understandable, given the XT's small body, but the LCD's poor viewability isn't. It's hard to review images under some lighting conditions, and though they're readable when highlighted, the menu items are too small. Looking for an option while scrolling through the various menu tabs is even more difficult. The brightness on the LCD can be adjusted, but it doesn't help all that much.

The technical data is displayed on a viewable-enough monochrome LCD above the color display. Most of the control buttons are situated along the sides of the LCD—not a bad arrangement, unless, like me, you have big hands and tend to accidentally press the buttons that change the camera settings. Most often it was the timer button I'd accidentally land on.

The Canon EOS Rebel XT, available with a brushed silver patina or a matte black finish, comes bundled with a set of utilities and EOS Digital Solutions Disc 10 software, featuring ZoomBrowser EX, ImageBrowser, ArcSoft PhotoStudio. It also ships with the Digital Photo Professional 1.6 RAW file converter. Priced \$999 for both the body and lens, \$899 sans lens, the XT is a lightweight, un-pricey camera that even serious photographers can use, particularly as a standby body if they already shoot with Canon digital equipment. ■