

Pentax breaks into the pro ranks with a new DSLR priced less than \$1,000.

BY RON EGGERS

Moving on up

PENTAX K10D



polycarbonate body surrounding a high-rigidity stainless steel chassis. It's constructed with 72 moisture and dust protection seals and will operate in relatively harsh weather conditions. With proper lens protection, it could be used in heavy mist, snow, dust and other demanding environments.

The K10D also has more effective power management. Previous models required sets of four AA batteries. It was possible to use rechargeable NiMH AAs, but they didn't last all that long, and they discharged rapidly in storage. The K10D operates with rechargeable lithium-ion batteries—a major improvement.

Pentax offers a detachable power pack as well, the Battery Grip D-BG2, for longer shooting. The battery in the body and in the power pack are interchangeable. Not only will the camera work if the body-battery is depleted, it will even work without it. The power pack, also weatherproofed, adds to the professional look and feel of the K10D. The battery grip has a separate shutter release and selection dial, as well as room for an extra memory card and the remote control unit that comes with the camera. With the infrared remote, you can fire the camera from in front of or behind the camera, up to 5 meters away.

The Pentax K10D has all the technical and creative controls of a professional camera, and more. White balance is a good example.

The Pentax K10D features rugged construction with a stainless steel chassis and 72 moisture and dust protection seals.

I've shot extensively with all but one of the Pentax digital SLRs, and while each new generation was a step up, they were all basically in the same category. They were functional cameras that performed well, made primarily for consumers but with some applications for pros. The Pentax K10D breaks out of that category, yet retains a consumer-range price.

The K10D has a CCD with effective

resolution of 10.2 megapixels, a big leap above the 6-megapixel CCD in the previous model, and its body is larger than previous models. The last model I reviewed, the K100, was comfortable enough to hold, but still compact. The K10D has more of a professional camera feel, large enough to hold comfortably without being heavy or bulky.

It's also better built, with a fiber-reinforced



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specs: Pentax K10D

SENSOR: 23.5x15.7mm CCD, 10.2 megapixels

RESOLUTION: 3,872x2,592

SHUTTER SPEED: 1/4,000 second to 30 seconds, bulb

EXPOSURE SETTINGS: Program, Hyper Program, Sensitivity Priority, Shutter Priority, Aperture Priority, Shutter and Aperture Priority, Manual (Hyper Manual), Bulb, X-sync

WHITE BALANCE: Automatic, Daylight, Shade, Cloudy, Tungsten light, Fluorescent, Flash, Manual, three Kelvin settings and mired values with fine adjustments

FOCUS MODES: TTL Phase Matching with 11 focus points, adjustable between automatic and manual focus point selection, spot focus

METERING: TTL Open-Aperture 16-segment metering coupled with lens and AF information, adjustable between multi-segment, center-weighted and spot metering

SHOOTING SPEED (RATED): 3 fps

ISO: Auto, 100-1600

LENSES: KAF bayonet mount, compatible with KAF2-, KAF-, KA- lens mounts. Other Pentax lenses with adapters.



The Pentax K10D viewfinder crops frames tighter than the capture. Objects on the edge of the frame, like the light pole at left, will be outside the viewfinder coverage, making composition difficult.

FLASH: Built-in P-TTL, guide number 15.6 at ISO 200, coverage 28mm (35mm equivalent) hotshoe, sync 1/180 second

STORAGE: SD Cards (including SDHC)

PRICE: \$999 with lens



The underside of a pier captured at ISO 100 (top right), ISO 800 (center right), and ISO 1600. When viewing a detail of the shot at 200 percent or larger, there's a considerable difference in noise between ISO 800 and ISO 1600.

enhances dynamic range and significantly improves color fidelity, particularly with gradients and skin tones.

Like previous models, the K10D has the Pentax-proprietary Shake Reduction (SR) image-stabilization system, one of the most effective systems in use. Sensors detect camera shake and move the CCD to compensate. The specs say it's possible to pick up 2.5 to 4 stops in low light, but 2 or 3 stops is probably more realistic. Since the shake-reduction technology is body-based, it works with any lens, and can be turned off when you want creative blur.

The dust reduction system includes a special fluorine coating on the low-pass filter that keeps most dust from adhering to the CCD. If particles remain, the jostle of the

The Pentax K10D handles analog to digital conversion in 22-bit color, which improves color fidelity, particularly with gradients and skin tones. Model: Melissa Storms

It has auto, daylight, tungsten and other common color temperature settings, and each setting can be adjusted precisely to match specific lighting conditions. For more control, instead of one option for setting the specific color temperature, there are three. Each can be preset and fine-tuned, then stored in memory.

The K10D can capture images in RAW, JPEG, or RAW + JPEG formats. In testing, the performance was close to the 3-frames-per-second rating. It consistently fired off 24 to 26 shots in 10 seconds. With a SanDisk Extreme III card, the camera didn't hesitate and continued to fire until the card was full. Using an inexpensive generic SD card, the

camera hesitated after a dozen or so shots, and after a few more frames, shooting became erratic. Apparently, the card couldn't receive the buffered data fast enough for the camera to keep up the shooting speed.

Images are captured in 8 bits per channel for JPEG, 12 bits per channel for RAW. Captured images are processed in the latest generation advanced PRIME (Pentax Real IMage Engine) for optimum image quality and high speed. Its DDR2 buffer memory module supports considerably faster throughput.

Analog to digital image conversion is handled in 22-bit color, rather than 12 or 14 bits with some of the competition. That





The Pentax Shake Reduction image-stabilization system helps you pick up a couple of extra stops for low light shooting. Exposure: f/6.7 for 1/180 second, ISO 100.

shake reduction system should remove them. The dust is then trapped and doesn't become a problem again.

The TTL Phase Matching focusing system has 11 focusing points. In the automatic mode, the camera default will focus on the nearest object in the frame, but any focusing point can be selected. Two optional focusing screens are available. The AF Divided Matte screen combines the focus area brackets with a grid pattern to facilitate balanced compositions, while the AF Scale Matte ensures accurate scaling. Focusing seems faster with the K10D than with the previous model.

Automatic ISO, which will adjust to the maximum ISO but not beyond, can be set to cover a range as narrow as ISO 100-200 and as broad as ISO 100-1600. I shot a series of frames under a pier at 100, 800 and 1600 ISO. The electronic noise at 800 is minimal, but there's a noticeable difference between 800 and 1600, particularly when viewing a detail of the shot on screen at 200 percent or larger.

In Sensitivity-Priority AE mode (Sv), the

monochrome LCD displays the ISO sensitivity. By rotating the dial on the back of the camera, the ISO is merely another exposure factor that's as easy to adjust as it is to change shutter speed or aperture settings in shutter and aperture priority. That's useful when you're trying to pick up a stop or two of sensitivity.

At 95 percent, the viewfinder coverage is not the best; it crops frames much tighter than the actual capture. To get any anchor lines and framing objects close to the edge of the picture, they have to be outside of the coverage of the viewfinder, making composition more difficult.

Pentax included a popup flash on the K10D body, but not a PC/sync cord connector. Though many pros use slave or wireless triggering systems, a sync cord connector is usually expected with professional cameras.

The Pentax K10D has limitations, but not sufficient to eliminate it as an option for most professional applications. Bundled with an 18-55mm lens, it has a suggested retail price \$999. ■