By Andrew Rodney

Prosumer Digital Cameras

It's a Buyers' Market for Excellent, Affordable Models

Last month PEI showcased a few of the latest high-end professional digital cameras. Now I have the daunting task of highlighting the newest prosumer digital cameras. Why daunting? Because for every newly released high-end professional digital camera, there are at least a half-dozen new prosumer models that sell for less than $2,000. Keeping up may be a challenge for reviewers, but for buyers this burgeoning selection of affordable, high-quality cameras is a boon.

The progression of prosumer digital cameras has been staggering. Just a couple of years ago, it was rare to see a digital camera in this price range that could produce megapixel image files. Now it's rare to find a prosumer model that produces anything less. Once state-of-the-art features and file size are now commonplace in the prosumer market.

A few of the prosumer models I investigated used onboard processing to interpolate captured files to maximum resolution. So whenever possible, I've provided the actual pixel dimensions the camera produces to create the image without interpolation. Now let's look at some other criteria for judging digital cameras.

These new prosumer cameras can produce amazing file sizes—not that file size alone is the deciding factor in camera choice. But if your goal is to produce 8x10-inch or smaller prints of fine quality, you'll find many new prosumer models that are up to the task (a far cry from the new cameras of a year ago, which produced good-looking prints up to 5x7 inches, but sacrificed quality for larger prints). Of course, your criteria for quality enlargement could be vastly different from mine. Typically, I look for about 200 ppi for output to a good continuous tone printer like my Epson 1270 or Fuji Pictrography 3000. With today's cameras that can capture 3 megapixels or more, you could have enough resolution to output an 8x10-inch print at 200 dpi (1,600x2,000 pixels).

Larger files require higher compression or larger on-camera storage capacity. For the best quality, you want a camera that can provide an uncompressed TIFF file. When that's the case, a 3-megapixel camera can give you image files as large as 9MB.

Removable media like CompactFlash and SmartMedia can hold up to 192MB or 64MB per card, respectively. Storage capacity will continue to grow, but be aware of the costs that come with buying progressively larger cards. Over time, you could spend more for the media than the camera itself. Fortunately, with today's cameras you can shoot at several resolutions smaller than the camera's maximum and use different degrees of JPEG compression.

Larger image files need time to capture and store each image before the next capture can be made. The solution has been to add large amounts of onboard memory to the camera for use as a buffer. The buffer can be used for other tasks like recording limited amounts of video or shooting smaller captures in rapid mode.

The one area I haven't seen much progress in is the zoom lens, which seems to be stalled at the 3X mark. I've provided you with the 35mm lens equivalences of the camera lenses in this roundup to give you an idea of the focal lengths available. Some of the cameras have attachments for the front of the lens, such as wide-angle or telephoto focal lengths. In my tests of the Olympus C-2500 (*PEI* March 1999), the wide-angle and telephoto lens accessories worked well and produced excellent quality. With this setup, manufacturers can keep the initial price of the camera down, although it does mean toting around more accessories.

Fujifilm FinePix 4700 Zoom

Fujifilm FinePix 4700 Zoom

I've always been a big fan of the small, sexy 700 series cameras from Fuji Photo Film U.S.A. The MX-700, which could fit inconspicuously in the pocket of James Bond's tux, sported all kinds of elegant touches. The MX-2700 improved upon the original design with a larger file size, yet still lacked a true zoom lens. The fourth in the series, FinePix 4700, has a lovely 3X optical zoom lens with an f/2.8 Super EBC Fujinon aspherical lens, for a focal length equivalent to 38-114mm.

Moreover, the FinePix 4700 has a 0.58-inch Super CCD sensor to produce a 4.3-megapixel file (2,400x1,800 pixels), with shutter speeds of 1/2,000 second to 3 seconds. The captured images are stored on SmartMedia cards, and the camera has a USB-to-host interface. The ISO is adjustable at 200/400/800 and, thanks to the Super CCD technology, higher speeds should produce excellent files. The camera can also record up to 80 seconds of AVI video with sound that is stored on the supplied 16MB SmartMedia card.

The pop-up flash has red-eye reduction, flash on demand, and slow flash sync, and is effective to 11.5 feet. The LCD on the back of the camera is for examining captured images with zooming capabilities, and displays many of the camera controls. The 700 series cameras are among the clearest, sharpest LCDs I've worked with.

The FinePix 4700 measures a compact 3.1x3.8x1.3 inches and weighs 9 ounces. I haven't had an opportunity to shoot with the FinePix 4700 to see what the new Super CCD technology is capable of, but I can't wait to try it out. It's powered by two AA batteries. Suggested retail price, $999.

More info? PEInfo No. (130)

Olympus D-460 Zoom

The new Olympus D-460 Zoom camera sports many improvements over the D-450 Zoom. The D-460 is what is known today as an entry-level camera—in other words, it has specs that were considered fairly high-end a year ago. This clam shell-designed camera offers no less then six capture resolutions, up to 1.3 megapixels (1,280x960 pixels) with JPEG compression or uncompressed in TIFF format and stored on the supplied 8MB SmartMedia card.

The D-460 has a 3X autofocus optical zoom lens equivalent to 35-105mm with optional 2X 'digital telephoto at any focal length. The camera is metered with either Olympus Digital ESP matrix or spot metering. ISO ratings are 100/200/400, and exposure compensation is available in ± 2 steps in 1/2-step increments.

The onboard flash has five modes, including red-eye reduction, force-fill flash, automatic low-light and back-light mode, flash-off, and slow-sync. The LCD, which displays the file name, has an image-inspection mode at 3X magnification. Other features include two-frames-per-second burst mode, video-out capability, auto white balance, and direct printing to the P-330 Instant Photo Printer. The camera measures 5x2.6x1.8 inches and weighs 9.5 ounces.

The D-460 comes bundled with two of the new long-lasting CR-3V lithium batteries, 8MB Olympus SmartMedia card, strap, serial cables, video-connection cables, and CamediaMaster 2.0 software, all for a street price of $499.

More info? PEInfo No. (131)

Olympus D-460 Zoom

Olympus C-3030 Zoom

Olympus C-3030 Zoom

I'm a fan of the Olympus C-2500 camera and I'm impressed by Olympus' manufacturing of digital cameras. The new C-3030 3.34-megapixel (2,048x1,536 pixels) camera has an all-glass 3X f/2.8 optical zoom lens equivalent to 32-96mm; the optional 2.5X digital telephoto zoom brings the equivalent to

260mm. The macro mode focuses to 8 inches, and depth-of-field previews can be used as you alter the various apertures. The C-3030 comes with auto- and manual-focus options.

The camera has no less than 15 modes of capture resolution, including five uncompressed TIFF modes. In addition, it can produce QuickTime movies with sound (191 seconds at 160x120 pixels or 46 seconds at 320x240 pixels), with an onboard microphone. The C-3030 can output files to a standard television over the supplied NTSC cable. Images can be downloaded via USB or serial cable from a standard SmartMedia card (16MB SmartMedia card supplied). The supplied Olympus cards have panorama firmware for panorama camera mode that smoothly locks the first captured image with additional captures for even stitching in the bundled QuickStitch application. The card or camera can be directly output to an optional Olympus P-330 printer, completely bypassing the computer.

With an ISO of 100/200/400, the C-3030 offers shutter speeds of 1/800 second to 16 seconds. Exposure compensation is available in 1/3-step increments. When invoked, the auto-exposure bracketing mode will produce 1/3-stop bracketing automatically. The standard-issue 1.8-inch LCD screen is for image inspection at up to 3X and focus evaluation.

The camera measures 4.2x2.9x2.6 inches and weighs 10.7 ounces. It's due to ship by the time you read this, and will come bundled with a remote control, two lithium batteries, lens cap, strap, USB and serial cables, video-connection cables, and Adobe Photoshop LE software, and CamediaMaster 2.0 software, all for a street price of $999.

More info? PEInfo No. (132)

Nikon Coolpix 990

The Nikon Coolpix 900 won rave reviews and for good reason. Not satisfied with industry accolades, Nikon upped the ante with the new Coolpix 990, built along the lines of its predecessor. The new Coolpix CCD can capture 3.34 megapixels (2,048x1,536 pixels), with the option of doing so in uncompressed TIFF file format. You can also save several other file sizes onto CompactFlash cards in standard JPEG format and download them to a host computer through a USB or serial interface.

Nikon Coolpix 990

The 3X zoom lens has Nikon Super Integrated Coating, and a very fast f/2.5, 38mm-115mm lens equivalent, with macro capabilities to 0.8 inches. The digital telephoto option increases the focal length by 2.5X.

Focusing is quite sophisticated in manual and continuous AF modes with the LCD monitor, and in single AF mode without. The Coolpix 990 has a 4,896-step autofocus control—the key to fast and precise autofocus. Shutter speeds range from 1/1,000 second to 8 seconds, and images can be captured as fast as 1.2 images per second, even at the highest file size (the massive 48MB buffer holds up to 8 images). The Coolpix 990 multishot mode captures 16 frames (at 1/16 size), and the ultra high-speed continuous mode produces approximately 30 frames per second at QVGA-size. The camera also has a movie mode that produces 40 seconds of QVGA-size images at 15 frames per second. ISO ratings of 100/200/400 are available, with exposure compensation of ±2 EV in 0.3 EV steps. You can choose from seven white-balance modes, three metering modes (matrix, spot, or center-weighted), and five flash modes.

The Coolpix 990 has an onboard flash sync connector for Nikon Speedlights or other external flashes. As with previous models, the lens swivels around the body, making it highly flexible for many shooting situations. The 1.8-inch LCD can be used as a viewfinder (with images at 97 percent). It is also used to display camera functions such as the shutter speed and aperture in use. You can zoom-in to display images to 3X, or view your captures as nine-up thumbnails. There's also a histogram feature on the LCD.

A unique and intriguing feature of the 990 is something called the BBS system, a kind of standard bracketing system on steroids. In a nutshell, with the BBS engaged, you compose the shot, press the shutter release, then stand by while the camera takes up to eight images using different parameters, and then picks the best.

Other features include video-out via NTSC or PAL. Measuring 5.9x3.1x1.5 inches, the Coolpix 990 body is made of a magnesium alloy, which makes it lightweight yet strong at just 13.1 ounces. The Coolpix 900 was famous for its excellent image quality, and I look forward to test driving the new 990, which Nikon says is an even better digital camera. It's hard to believe this package can be had for a street price of only $900.

More info? Circle PEInfo No. (133)

Epson PhotoPC 850Z

This new Epson PhotoPC 85OZ digital camera, which looks much like a conventional 35mm camera, produces files of 1,984x1,488 pixels using Epson HyPict technology. To the best of my knowledge, HyPict is a form of interpolation implemented over the true native maximum resolution of 1,600x1,200 pixels. Captured images are stored in JPEG and DCF file formats.

The f/2.0/2.8 3X optical zoom lens has a 35-105mm equivalency, and an optional lens can be made into a zoom with the supplied 49mm lens adapter. In macro mode, the lens can focus to 8 inches. Shutter speeds range from 1/800 second to 4 seconds, with ISO ratings of 100/200/400. The exposure controls are program-automatic, with ± 2.0 exposure values in 0.2 steps. The camera modes can be set for sports, portrait, landscape, or spot-metering.


Epson PhotoPC 850Z

The built-in flash has five modes, including red-eye reduction and slow sync. An external hot shoe supports optional external flash units. White-balancing can be accomplished automatically, and there is also a fixed 5,200-degree setting. The camera has video-out capabilities for viewing images on a standard television (NTSC and PAL). Up to 10 seconds of sound per image can be recorded.

The LCD on the back of the camera is used to view captures and set the camera controls. A feature unique to Epson cameras is the direct-print control that sends images to a supported Epson printer, altogether bypassing the computer. The Solar Assist panel, another cool feature, extends battery life by using the sun to light the LCD display. Connectivity is via USB or serial cable.

The Epson PhotoPC 850Z ships with an 8MB CompactFlash card, serial and USB cables, direct-to-print cable for Epson printers, video-out cables, neck strap, and four rechargeable NiMH batteries with charger. The camera measures 4.92x3.15x2.76 inches and weighs 11.2 ounces. Suggested list price, $799.

More info? Circle PEInfo No. (134)


Epson PhotoPC 650

Epson PhotoPC 650

This entry-level model has a maximum resolution of 1,152x864 pixels, with the image files stored on SmartMedia in standard JPEG compression (8MB card included). The fixed-focal-length f/2 lens is equivalent to 39mm, and the macro mode can focus as close as 6 inches. Shutter speeds range from 1/500 second to 1/4 second, with an ISO of 140.

The 1.8-inch LCD is for setting the camera controls and inspecting captured images. The PhotoPC 650 supports video-out in NTSC and PAL, and images can be downloaded with USB protocol. Exposure and white balance are fully automatic on the PhotoPC 650.

The camera runs on four AA batteries and has an optional A/C adapter and NiMH Power Pack. The camera measures 5.3x3.2x2.2 inches and weighs 11.5 ounces without batteries. Price is $299.

More info? Circle PEInfo No. (135)

Epson PhotoPC 3000Z

The Epson PhotoPC 3000Z, due for release this month, is Epson's most deluxe prosumer camera to date. With 3.34-megapixel capture (2,140x1,560 pixels) and Epson HyPict technology, this camera can produce files measuring 2,544x1,904 pixels. The largest files can be saved in uncompressed TIFF format, and the camera also supports JPEG compression with an optional 640x480 file size.

The f/2.0/2.6 lens is a 3X optical zoom equivalent to 34-102mm and focuses to 8 inches in macro mode. The optional lens can be used as a zoom with the supplied 49mm lens adapter. The exposure controls available include program-automatic, with ±2.0 exposure values in 0.2 or 0.5 steps. You can also shoot in sports, portrait, and landscape modes, as well as matrix or spot-metering modes. ISO ratings are 100/200/400 at shutter speeds of 1/750 second to 4 seconds. The Epson PhotoPC 3000Z can capture 25 seconds of motion JPEG at 15 frames per second at 320x240 pixels and record voice annotations of 3 to 10 seconds.

The 1.8-inch LCD is used to set the controls and view images at 98 percent when used as a viewfinder, 100 percent for playback. Images are stored on the supplied 16MB CompactFlash card and can be downloaded to the host computer through USB or serial cables. The built-in flash has five modes, and there's a hot shoe on the body for external flash units.

Epson PhotoPC 3000Z

Video-out supports NTSC and PAL and the video cable ships with the camera. Also bundled are USB and serial cables, neck strap, soft case, lens cap with strap, and four AA rechargeable NiMH batteries with charger. Sierra Imaging Image Export software, a TWAIN driver, and a stand-alone utility driver for accessing images. The PhotoPC 3000Z measures 4.37x3.46x2.59 inches and weighs 12.2 ounces without batteries. Estimated street price, $999.

More info? PEInfo No. (136)

Agfa ePhoto CL30 Clik!

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The specifications on the Agfa ePhoto CL30 Clik! lists this model's resolution as 1,440x1,080 pixels, using Agfa PhotoGenie interpolation technology. In my take on those specs, the true maximum optical resolution of the camera is 1,152x864 pixels, with three lesser resolutions available. Captured images are saved in standard JPEG format.

There are a couple of interesting features of the ePhoto CL30. For one thing, images are stored with an Iomega Clik! drive on 40MB Clik! disks, hence the name of this little camera. Further, with this pairing of the camera with Clik! technology comes a digital print order form (DPOF) that allows users to view images on the Clik! disk and specify the number of copies to be automatically sent and printed on a DPOF-compatible printer or minilab.

Images are viewed on a 1.8-inch LCD that can also be used as a viewfinder for shooting. A switch on the LCD allows the user to turn the unit on and off to save battery power. Options include both auto and manual focus, exposure and white balance, and USB interface. The 2X digital zoom lens has a 37mm thread that can be used for optional lenses and filters.

The onboard flash has five modes: auto, fill-in, variable, red-eye reduction, and external flash trigger. Measuring 5x3.25x1.5 inches, the ePhoto CL30 Clik! weighs 9.33 ounces without batteries. The camera supports video-out with the supplied cables and ships with a 40MB Clik! disk. Suggested retail price, $549 (before the $50 rebate).

More info? PEInfo No. (137)

Editor's Note: *Ricoh has announced two new digital cameras to be released this summer. Here's what we know about them as of press time:*

Ricoh RDC-7 & RDC-6000

Ricoh should get more attention for its digital cameras. Early on, the company introduced a few really lovely units, such as the RDC-2, so I'm happy to see the new RDC-7 come along. It doesn't look like a typical digital camera, but it has sex appeal and strong features like the high-resolution, 3.34-megapixel CCD that captures JPEG or uncompressed TIFF image files.

The RDC-7 has an onboard image processing system based on Ricoh's Image Enhancement Technology, which interpolates image files to 7 megapixels. The 3X optical zoom has an amazing feature from the old RDC-2 model: macro-focus to 2cm.

The RDC-7 can be used as a digital voice recorder with playback for digital audio in WAV file format to incorporate images with sound. It can also capture full-motion video with sound in the

motion JPEG file format. With a secondary shutter release and pivoting LCD monitor, the RDC-7 can be held vertically or horizontally for either portrait or landscape capture.

Like some earlier models, the RDC-7 can capture images of text or graphics in a special black-and-white TIFF file format, making this pocket-size model a highly portable text scanner.

The 2.14-megapixel RDC-6000 was designed as a dual-mode camera for capturing still images and for use as a Web camera for Internet broadcast over USB connection. The RDC-6000 captures full-motion video in the high-quality motion JPEG AVI file format, and uses onboard interpolation to create high-res JPEG stills equivalent to 3 megapixels, all stored on SmartMedia cards.

A 4X digital zoom, full-featured flash, and myriad customized settings ensure optimal image capture flexibility. The RDC-6000 will be introduced this summer, followed closely by the release of the RDC-7.

More info? PEInfo No. (138)

Ricoh RDC-7

Ricoh RDC-6000

Kodak DC290 Zoom

The DC290 Zoom, Kodak's top-of-the- line prosumer digital camera, has a maximum optical resolution of 2 megapixels (1,792x1,200 pixels), and an optional "ultra" resolution of 3.3 megapixels (2,240x1,500 pixels) that is accomplished, I presume, by some kind of interpolation. The 8MB files are saved in uncompressed TIFF or compressed JPEG image files.

The 3X f/3 optical zoom lens is equivalent to 38-115mm with an additional 2X digital zoom factor, and macro focus to 12 inches. The 37mm thread on the lens accommodates optional lenses with an optional adapter. The camera's ISO is 100, and the shutter speeds range from 1/360 second to 16 seconds.

The DC290 provides auto and manual exposure control with override compensation of ±2 EV in 0.5 EV increments, plus white-balance control. Up to four images can be captured at high or medium resolution in burst mode, or 16 pictures at standard resolution. You can also specify burst rate of 0.1 to 3 frames per second. The onboard flash has an auto and red-eye reduction mode with a range of 13.1 feet. There is also a flash sync on the camera for external flash units. An additional feature is the time-lapse mode, which allows the user to set the intervals between captures.

The 2-inch LCD can be used as a viewfinder (in addition to the optical viewfinder) and for setting the camera controls. The auto-orientation sensor is a cool feature that automatically rotates the

Kodak D290 Zoom

image to the correct orientation on the LCD when shooting portraits or landscapes. NTSC and PAL video-out are supported, and images can be downloaded through a USB interface. The Kodak DC290 supports removable CompactFlash cards.

Other interesting features include time and date stamping and an in-camera album to keep images organized. The proprietary DIGITA text-based scripting capability extends this camera's functionality. You can, for example, control such features as adding text and sound, cataloging images, and controlling color balance and other capture parameters using scripts. New capabilities can be added as new scripts are released. The camera measures 4.6x2.2x4.2 inches and weighs 15.1 ounces without batteries.

The DC290 ships with four AA NiMH rechargeable batteries with charger, USB and audio/video cables, Adobe PhotoDeluxe and PageMill software, and a Photoshop-compatible module for downloading images. The camera is available for $899.

More info? PEInfo No. (139)

Prosumer Digital Cameras At A Glance

Camera	Highest Optical Resolution	Lens Length (in 35mm Equivalent If available)	Removable Media Available	Onboard Flash	Size of Supplied Media	LCD Display Included	Connectivity	Price
Fujifilm FinePix 4700 Zoom	2,400x1,800 (Super CCD)	38-114mm	SmartMedia	Yes	16MB	Yes	USB	$999
Olympus C-3030 Zoom	2,048x1,536	32-96mm	SmartMedia	Yes	16MB	Yes	USB/Serial	$999
Olympus D460 Zoom	1,280x960	35-105mm	SmartMedia	Yes	8MB	Yes	Serial	$499
Nikon Coolpix 990	2,048x1,536	38-115mm	CompactFlash	Yes	16MB	Yes	USB/Serial	$900
Epson PhotoPC 850Z	1,600x1,200	35-105mm	CompactFlash	Yes	8MB	Yes	USB/Serial	$799
Epson PhotoPC 650	1,152x864	39mm fixed	SmartMedia	Yes	8MB	Yes	USB	$299
Epson PhotoPC 3000Z	2,048x1,536	34-102mm	CompactFlash	Yes	16MB	Yes	USB	$999
Agfa EPhoto CL30 Clik!	1,152x864	N/A	Clik! disks	Yes	40MB	Yes	USB	$549
Kodak DC290 Zoom	1,792x1,200	38-115mm	CompactFlash	Yes	8MB	Yes	USB	$899
Canon PowerShot S20	2,048x1,536	32-64mm	CompactFlash	Yes	16MB	Yes	USB/Serial	$900
Sony DSC-D770	1,344x1,024	28-140mm	Sony Memory Stick	Yes	8MB	Yes	Parallel Port Adapter	$1,799

Canon PowerShot S20

The PowerShot S20, which produces a 3.34-megapixel (2,048x1,536 pixels) capture, has a small and rather elegant body of aluminum-magnesium alloy. Images are stored as JPEG files on the supplied 16MB CompactFlash card.

The S20 has a 2X f/2.8/4.0 optical zoom lens equivalent to a 32-64mm zoom. Images can be downloaded to the host computer via USB or serial interfaces. ISO ratings are 100/200/400, and shutter speeds range from 1/1,000 second to 2 seconds. Exposure is either center-weighted metered or spot metered, the latter available in manual mode only. Autofocus is through the lens, and there are five white-balance options, including automatic.

The camera has a three-mode onboard flash: red-eye reduction, fill flash, and auto mode. Images can be viewed on the 1.8-inch LCD, and the user can zoom into previews for closer inspection. Other features include burst mode and exposure compensation of ±2.0 EV in 1/3 steps.

Canon PowerShot S20

The S20 runs on a 2CR5 lithium battery (not rechargeable), an NB-5H rechargeable battery, or A/C current with the supplied adapter. The PowerShot S20 measures 4.2x2.8x1.3 inches and weighs about 11.3 ounces. It comes bundled with Adobe PhotoDeluxe, a Photoshop acquire plug-in, and Photostitch for Power Macintosh and Windows. The camera will be priced at about $900.

More info? Circle PEInfo No. (140)

Sony DSC-D770

Sony DSC-D770

Sony's higher-end digital cameras have always impressed me with their abundance of features, high quality, and range of zoom lens focal lengths—but they have not delivered file sizes comparable to the competition's. The DSC-D770 is a prime example. This camera produces only a 1.5 megapixel file (1,344x1,024 pixels), yet it has a 5X f/2 optical zoom equivalent to a 28-140mm zoom.

Focus can be automatic (confirmed by a beep) or manual, and users can manually focus using a lens ring. For those who require a nice range in a zoom lens, the Sony camera is impressive. ISO settings are 50/100/400, and shutter speeds range from 1/2,000 second to 4 seconds, depending on the ISO settings. Exposure is controlled by four optional modes (programmed, aperture priority, shutter priority, and manual) using center-weighted or spot metering. In manual mode, the exposure compensation is ±2 EV in 1/4 steps, and there are four white-balance options.

The 2.5-inch LCD, one of the biggest on the market, is used for playback or as a viewfinder, and there's a histogram option for evaluating the exposure. Images are stored in either uncompressed TIFF or compressed JPEG formats on the supplied 8MB Sony Memory Stick or ATA Type II PC memory cards. Happily, the newer Sony Memory Sticks can be read by external readers with the supplied PC card adapter.

The camera is equipped with a built-in flash and a hot shoe for external flash units. Like high-end Olympus cameras, the DSC-D770 is among the few with a true SLR optical through-the-lens viewfinder. Video-out is supported (NTSC and PAL), and power is supplied by a rechargeable NP-F550 video camera battery. In addition to the supplied Memory Stick and adapter, the camera comes with a wireless remote control, lens cap, battery charger, and strap. The Sony DSC-D770 measures 5.2x4x6 inches and weighs 1.8 pounds without battery. List price, $1,799. ◀

More info? PEInfo No. (141)

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Megapixel Mania

Industrywide, the term "megapixel" is used to describe camera resolution, but it doesn't tell the whole story about a camera's CCD sensor capture capabilities. A megapixel is 1 million pixels, or 1,000x1,000 ppi. A 2-megapixel camera, for example, would have CCD sensors that capture image files containing 2 million pixels. Yet in marketing, this now-standard term may have nothing to do with the actual number of pixels that are used to create an image file. CCDs in megapixel cameras often contain many pixels surrounding the area of capture for image processing purposes such as white-balancing. My misgivings aside, the term "megapixel" isn't going away, and it does provide a beginning standard for comparing image capture among different camera models.

—Andrew Rodney