Nikon COOLPIX, 8400

#### **Key Features and Benefits**

- 8.0 Effective Megapixels for photo-quality prints beyond 20" x 30"
- 3.5x Ultra-Wide Angle Optical Zoom-Nikkor ED 24-85mm Lens (35mm equivalent) for capturing incredible, sharp, clear images
- 15 Scene Modes automatically adjust controls for great pictures instantly
- J Nikon In-Camera Red-Eye Fix™ automatically corrects for red-eye in most typical situations
- Nikon D-Lighting Exposure Correction automatically compensates for insufficient flash or excessive backlight
- Compact All-Metal Body provides a strong yet lightweight easy-to-carry camera
- Electronic Viewfinder and Vari-Angle LCD provide for enhanced frame coverage and bright viewing
- Movie Mode allows the capture of live action with sound with Electronic VR
- Superior Exposure, Image, Metering and Speedlight Controls to maximize the possibilities. Compatible with Nikon speedlights SB-600 and SB-800
- PictBridge Compatibility allows direct printing to any PictBridge or USB direct enabled printer
- Fast (Hybrid) AF achieves sharp results when shooting spontaneous moments
- **Electronic VR** in Movie Mode reduces the effects of camera shake
- Auto Color Enhancement provides automatic enhancement to color that makes it more pleasing to the eye
- ▲ New EN-EL7 Rechargeable Battery & Charger Included for extended battery life of up to 260 images on a charge

#### **Everything you need to get started:**

- Strap
- USB Cable
- Audio Video Cable
- EN-EL7 Li-ion Rechargeable Battery
- MH-56 Battery Charger
- PictureProject CD-ROM
   ML-L3 Remote Controller





Rugged Magnesium Alloy Body

3.5x Zoom-Nikkor – ED glass Lens (Extra-low Dispersion) minimizes chromatic abberations for crisp, clear shots



Hot Shoe attach additional speedlights i-TTL speedlight compatibility with SB-600 and SB-800 Mode Dial one-touch operation on the dial

Use **Monitor Button** to switch from Electronic Viewfinder to LCD viewing

#### **Quick Review**

1.8" LCD Monitor with Quick Review lets you instantly confirm a shot you just took or review any of the other images stored on the CompactFlash™ Card.

> Quick Review Playback

Vari-Angle LCD monitor lets you shoot at any angle

#### Nikon In-Camera Red-Eye Fix<sup>™</sup>:

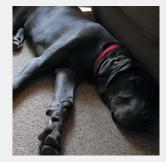
This in-camera feature automatically removes most typical occurrences of red-eye. You may never see red-eye again.





#### **Nikon D-Lighting:**

In playback mode, D-Lighting will compensate for underexposed areas or insufficient flash without affecting properly exposed areas.





#### **NEW!** Time Lapse feature in Movie Mode

Camera takes a series of still images at specified intervals (30 seconds to 60 minutes) and joins these frames together to create a Quicktime™ movie with a frame rate of 30 frames per second.



#### The Coolpix 8400 System (optional accessories)



#### **Through the Shooting Menu**

Framing Guides display framing guides on the **ĽCD** monitor in order to achieve an ideal composition



**Real-time** Histogram Real time display of image data to confirm exposure and make adjustments



**Saturation** Mode Control color saturation



Noise Reduction Mode Minimize digital artifacts in long exposures

White **Balance** Bracketing Ensure proper color balance



#### **Autofocus/Metering Options:**

#### Choose the **autofocus option** you want to use.

Fast (Hybrid) AF AF ranging sensor estimates distance before camera focuses achieving sharp results when subject is moving erratically

Standard AF Camera focuses using contrast detection



Manual 9-Area Multi-AF





#### Matrix Metering optimal exposure is measured by comparing 256 areas of the frame

Pick the **metering option** that is right for your shot.







Center Weighted Metering optimal exposure is measured by using 1/4 from the center of frame

Spot AF Area exposure is linked to active focus area

#### Versatile 15 Scene Modes

Fifteen programmed Scene Modes make it easy to capture optimal results in the most diverse shooting situations. With the COOLPIX 8400, anyone, even a novice photographer, can take great images simply by choosing the appropriate mode for the next picture.



Back Light

Copy Fireworks Show



Portrait Emphasizes a subject with natural skin tones against a soft, pleasing background.



Close Up With precise manual focus area selection and appropriate coloration, this mode makes detailed subjects stand out from the background.



Landscape

Emphasizing depth-of-field, this mode captures distant scenes sharply and clearly, for postcard-like landscape pictures.



Allows you to take several side-by-side images, all at the same exposure and white balance setting, then combine them later using the "Panorama Maker™" photo editing software (supplied) to create spectacular wide-vista photos.

### **PictureProject Software**

#### Nikon is proud to introduce the next generation of imaging software, Nikon PictureProject.



Nikon PictureProject<sup>™</sup> is a fast and powerful tool for organizing and working with your pictures easily and intuitively.

PictureProject will let you transfer your pictures from your camera seamlessly. You can then edit, remove red-eye, enhance, crop, print, e-mail, post pictures to the web or create a photo album. You can even publish them to your PDA, create slideshows with music or stitch together a number of pictures to create a stunning panorama.

With Nikon PictureProject you can spend more time taking pictures instead of managing them and then easily store, organize and share your memories. PictureProject will work with Windows<sup>®</sup> 98SE, 2000, ME & XP as well as Mac OS<sup>®</sup> X (10.1.5 or later).



Continuous shooting at 2.3 fps Now you can take up to five full-size, 8-megapixel (3,264 x 2,448) images at 2.3 frames per second.

# **AE Best Shot Selector:**

#### AE-BSS for the proper exposure

AE-BSS (Auto Exposure -Best Shot Selector) automatically selects the best relative exposure from a series of consecutive images. Select from three modes: Highlight mode, Shadow mode, and Histogram mode.



Highlight mode

Shadow mode

If getting the whole picture matters, wide angle matters.



# © 2004 Bruce Da

# 8-megapixel resolution



The COOLPIX 8400 and its newly developed CCD offer 8.0 effective megapixels for an astounding high resolution

of 3,264 x 2,448 pixels. Quality like this makes images of exceptionally high definition possible — even when cropped.

# 3.5x Zoom-Nikkor ED lens



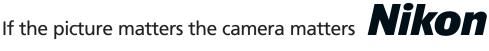
The 3.5x ultra-wide, zoom gives you the power of a 24-85mm (35mm equiv.) lens, while Macro capability lets you get as close as 1.2 in. (3cm). This

combination is supported by Nikon's worldrenowned optical technology, with two Pro-Quality ED glass elements delivering crisp, clear images while minimizing chromatic abberation — all of which helps realize the full potential of 8.0 effective megapixels

### Lifelike image reproduction

The COOLPIX 8400's exclusive image processing technology takes true-to-life images a step closer to reality.

A 256-segment Matrix Metering system enables optimal exposures in even the most challenging lighting environments, while Matrix Auto White Balance neutralizes color deviations created by ambient light sources. Both advanced features allow the COOLPIX 8400 to preserve a faithful reproduction of color, detail and gradation.





# Nikon Coolpix. 8400

# **Digital Camera Specifications**

Type of camera:	Digital	camera E84	00								
Effective pixels:	8.0 million										
CCD:	2/3-inch-type (total pixels:8.31 million)										
Image size (pixels):	8M (3,264 x 2,448), 3:2 (3,264 x 2,176),5M (2,592 x 1,944), 3M (2,048 x 1,536), 2M (1,600 x 1,200), 1M (1,280 x 960), PC (1,024 x 768),T V (640 x 480) selectable										
Lens:		3.5x Zoom-Nikkor; 6.1-21.6mm [35mm (135) format equivalent to 24-85mm]; f/2.6-4.9; 10 elements in 7 groups; two glass molded ED lens elements included									
Digital zoom:	Up to	Up to 4x									
Autofocus:		Ranging AF using AF ranging sensor and contrast-detect TTL AF with AF-assist illuminator; Center, Auto 5-area multi AF, manual 9-area multi AF selectable									
Focus modes:	1) Continuous AF, 2) Single AF, 3) Manual Focus (from 1.2 in. [3cm ] to infinity $(\infty)$ with focus confirmation indication)										
Focus range:		19.7 in. (50cm) to infinity ( $\infty$ ); 1.2 in. (3cm) to infinity ( $\infty$ ) (W), 7.9 in.(20cm) to infinity ( $\infty$ ) (T) in macro and manual focus modes									
Viewfinder:		0.44-inch type, 235,000-dot, polysilicon TFT color LCD viewfinder; Diopter adjustment: -3 to $+1\text{m}^{1}$									
LCD monitor:	bright	<ol> <li>B-inch type, 134,000-dot High Transmissive Advanced TFT LCD monitor with brightness and hue adjustment; frame coverage: approx. 97% horizontal and vertical (shooting)</li> </ol>									
Storage:	File sy and D (uncor (movie *A stai makes **Exch with pi	Media: Type 1 and II CompactFlash™ (CF) and Microdrive™ cards File system: Compliant with Design Rule for Camera File System (DCF)*, Exif 2.2**, and Digital Print Order Format (DPOF) File formats: RAW (NEF) and TIFF-RGB (uncompressed), JPEG-baseline-compliant (1:2,1:4,1:8,1:16)(compressed), QuickTime (movies), WAV (sound files) *A standard widely used in the digital camera industry to ensure compatibility among different makes of camera. **Exchangeable Image File Format for Digital Still Cameras. Version 2.2 allows information stored with prictures to be used for optimal color reproduction when images are output on Edit-compliant printers.									
	Number of frames with 256MB CF Card (approx.)										
	_	je Size:	8M	5M	3M	2M	1M	PC	TV	3:2	
	Image Qulaity	RAW	20	—	—	—	-	—	—	_	
		HI FINE	20	50	80	130	200	310	710	10 35	
		FINE	60	100	155	250	390	600	1305	70	
	<u> </u>	NORMAL BASIC	125 240	195 370	310 600	485 870	710	975 1565	1955 2610	140 275	
Chaoting modes					000	070	1505	1505	2010	215	
Shooting modes:		SCENE, P, S,					1	<u> </u>	NP 1 - 1		
Scene modes:	Museu	Portrait, Party/Indoor, Night portrait, Beach/Snow, Landscape, Sunset, Night landscape, Museum, Fireworks show, Close up, Copy, Back light, Panorama assist, Sports, and Dusk/Dawn									
Shooting menu:	<ol> <li>White balance, 2) (Exposure) Metering, 3) Continuous (Shooting), 4) Best Shot Selector (BSS/AE-BSS), 5) Image adjustment (Auto/Normal/More contrast/Less contrast), 6) Saturation Control (-2 to +2/Black &amp;White), 7) User setting (two combinations of mode setting can be memorized as #1+#2), 8) Image mode, 9) Sensitivity, 10) Image Sharpening, 11) Lens, 12) Exposure options (AE Lock, Bulb/Timed release), 13) Focus options, 14) Zoom options, 15) Speedlight options, 16) Auto Bracketing, 17) Noise Reduction, 18) Reset, 19) My Menu, 20) CF Card Format</li> </ol>										
Capture modes:	1) Single, 2) Continuous H (2.3fps; up to 5 frames), 3) Continuous L (1.2fps; up to 11 frames), 4) Multi-shot 16 (16 consecutive frames at 1.6fps), 5) Ultra H5 (highspeed) (640 x 480 pixels; 30fps, up to 100 frames), 6) 5 shot buffer (0.7fps), 7) Interval Timer Shooting, 8) Movie* TV movie 640 (640 x 480 pixels)with audio at 30fps; up to 60 seconds, Small movie 320(320 x 240 pixels) with audio at 15fps; up to 895 seconds, Filme-lapse movie (640 x 480 pixels) at 30fps; up to 35 seconds (1,050 frames); Sepia movie 320 (320 x 240 pixels) with audio at 5fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 5fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240 pixels) with audio at 15fps; up to 895 seconds, RW movie 320 (320 x 240										
Exposure metering:		4-mode TTL metering: 1) 256-segment Matrix, 2) Spot, 3) Center-Weighted, 4) Spot AF area									
Exposure control:	1)Prog 3) Ape	1)Programmed Auto with Flexible Program [P], 2) Shutter-Priority Auto [S], 3) Aperture-Priority Auto [A], 4) Manual [M]; Exposure Compensation (±2EV in 1/3EV steps); Auto Exposure Bracketing; AE-BSS									
Exposure range:		) to +18.5 (V									
-		,									

mode P), 8-1/3.000 s (exposure modes S and A), BULB/TIME (max.10 min.) and 8-1/3.000 s (exposure mode M ) 1/30-1/8.000 s (Ultra HS ). Maximum at some apertures is 1/1,500 s. Aperture: 7-blade iris diaphragm; 10 steps in 1/3EV increments (to minimum of f/7.9) Sensitivity: Approximately equivalent to ISO 50, 100, 200, 400, and Auto (auto gain to ISO 200 equivalent) White balance: 1) Auto White Balance with TTL control, 2) 6-mode Manual wi th fine tuni ng (Daylight/Incandescent/Fl uorescent/Cl oudy/Speedlight /Shade), 3) Preset, 4) White Balance Bracketing Self-timer: 10 s or 3 s; can be used with supplied remote controller ML-L3 Shooting range: approx. 1.8-19.8 ft. (0.5-6.0m)(W), approx. 1.8-9.1 ft. **Built-in Speedlight:** (0.5-3.0m)(T) Flash modes: 1) Auto Flash, 2) Flash Cancel, 3) Red-eye Reduction (In-Camera Red-Eye Fix™), 4) Anytime Flash, 5) Night Portrait (Slow Sync Flash), 6) Rear Curtain Sync; Sync method:Standard i-TTL flash Standard ISO hot-shoe contact with safety lock Accessory shoe: **External Speedlight:** Hot shoe connects to external Nikon Speedlight SB-800/600 Playback menu options: 1) Full-frame, 2) Thumbnail (4/9 segments), 3) Slide show, 4) Movie with audio, 5) Playback zoom (up to 10x); File information; Shooting information; Histogram indication and highlight point display; Hide and protect attributes can be set to each image; Focus confirmation indication; RAW image playback; Small picture; D-Lighting USB 2.0 (HI-SPEED) Interface I/O terminal: DC in; Audio/Video (NTSC or PAL selectable)out; Digital I/O (USB) Supported languages: German/English/Spanish/French/Italian/Dutch/Swedish/Japanese/Simplified Chinese/ Traditional Chinese/Korean selectable in menu display One Rechargeable Li-ion Battery EN-EL7 (included), Battery Pack MB-CP10 (optional) **Power requirements:** with six 1.5V LR6 (AA-size alkaline) batteries\*AC Adapter EH-54 (optional) \*1.5V FR Lithium, 1.2V NiMH, or 1.2V NiCd batteries can also be used. Battery life (approx.): 260 images (EN-EL7; based on CIPA standard\*) \*Industry standard for measuring life of camera batteries. Measured at 25 °C (77 °F); zoom adjusted with each shot, built-in Speedlight fired with every other shot, image mode set to NORMAL /8M. Dimensions (W x H x D): Approx.4.4 x 3.2 x 3.0 in.(113 x 82 x 75mm) Weight: Approx.14.1 oz.(400g)(without battery and storage media) Supplied Accessories\*: Lens Cap, Strap, USB cable, Audio Video cable, EN-EL7 Rechargeable Li-ion Battery, MH-56 Battery charger, ML-L3 Remote Controller, PictureProject CD-ROM \*Supplied accessories may differ by country or area. Additional EN-EL7 Rechargeable Li-ion Battery, EH-54 AC Adapter, MB-CP10 Battery Pack, Soft Case, Various size CompactFlash™ Cards, FC-E9 Fisheve Converter, **Optional Accessories:** UR-E16 Step-Down Ring Lens Adapter, TC-E3ED/TC-E3PF Telephoto Converter, UR-E15 Step-Down Ring Lens Adapter, WC-E75 Wide-angle Converter, UR-E14 Step-Down Ring Lens Adapter HN-CP12, Lens Hood, SB-800/600 Speedlight, COOLPIX Filter FF-CP10NC/FF-CP10CPL/FF-CP10ND4, MSV-01 Digital Photo Storage Viewer COOLWALKER PictureProject OS: Mac<sup>®</sup> OS X (10.1.5 or later), System requirements RAM: 64 MB or more recommended for Macintosh Hard disk: 60 MB required for installation Display: 800 x 600 with 16-bit colors (full color recommended) Others: CD-ROM drive required for installation OS: Windows® 98SE, Windows® ME, Windows® 2000 Professional, Windows® XP PictureProject Home Edition, Windows® XP Professional pre-installed model System requirements RAM: 64 MB or more recommended for Windows Hard disk: 60 MB required for installation Display: 800 x 600 with 16-bit colors (full color recommended) Others: CD-ROM drive required for installation 25521 UPC code: 018208255214 Product Number: ArcSoft Digital Imaging • Internet • Entertainmen SOFTWARE FOR PEOPLE PictBridge PictureProject

Mechanical and charge-coupled electronic shutter;2-1/3,000 s (auto and exposure

Shutter:

Additional accessories can be found at **www.nikondigitalusa.com** on the Coolpix 8400 page

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# DIGITAL CAMERA COOLPIX 8400

