



Digital Photography

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“A picture is worth a thousand words.”
- quote from someone with a great idea

Introduction to the “Aim and Shoot” Digital Camera:

What’s available in the digital world? Sony, Kodak, Epson, Canon, Olympus, etc..

Basic camera features that you should know; *Resolution, zoom and flash settings.*

Additional features for creativity and storage; *Close-up, backlighting, slideshow, etc..*

Camera extras; Memory cards (8MB to 2GB), extra batteries, tripod, filters, camera bag, etc..

Quality: Know your Resolutions

Typical resolutions: MegaPixel (MP): More pixels = better image detail and quality.

640x480-(.3 MegaPixel) good for computer presentations and Web use only.

1024x768-(.8 MP) better for overall use with computer presentation, Web and small photo prints.

1600x1200- ~2 (1.9) MP quality. Provides quality prints up to 5" x 7" in size.

2000x1500- 3 MP quality. Offers prints to 8" x 10" in size.

3000x2000- 6 MP quality. Found with high-end camera including quality optics, many advanced features, and offers prints to 11" x 14" and larger in size.

Simple Shooting Ideas:

- ▶ Mover closer to your subject! Use the zoom lens to get closer.
- ▶ Think composition. Try not to center your main subject. Apply the Rule of Thirds.
- ▶ Think vertical. Take “portrait” (vs. landscape) type photos for vertical-based subjects (people, trees, flowers, etc.).
- ▶ Working with lighting. The best quality photos are taken outdoors. If you have to take a photo indoors, remember that your flash is only good up to 10 feet distance.
- ▶ Photographing people. Once again, move closer to people when taking their photo. People doing activities make good photos. For portraits, “head and shoulder” shots are the best (crop the feet out).
- ▶ For creative photos, try photographing above or below your subject. Get on your hands and knees, typically not at “eye-level,” for those award winning shots.
- ▶ Anticipate the moment. Digital cameras have a short delay (typically 1 to 2 seconds) when pressing the “shutter button” before an image is recorded. Test your camera and practice before taking action photos.
- ▶ Since you have a digital camera, take more photos! Try taking more than one photo of the same subject. Move in closer, try a different camera angle, and get different poses from people.
- ▶ READ YOUR MANUAL. These cameras are also small computers packaged with tons of features like backlighting, night scenes, fast shutter for sports, indoor lighting, cloudy day mode and much more.



File Formats:

What is the difference between JPG, TIF, RAW?

How does compression work? Quality (normal/fine) vs. file size

Removable Media Storage:

Compact Flash Type 1 and 2 (most common), Memory Stick (Sony),
Secure Digital (SD)/MultiMedia Card (MMC) (Toshiba, Panasonic)



Software Ideas:

Programs- Adobe Photoshop / Elements, JASC PaintShop Pro, IrfanView, Serif PhotoPlus

What fixes to apply? Cropping, resizing, adjusting the brightness and color, using special effects, removing dust and scratches and cleaning up a background.

Options for Outputs:

Electronic presentations- inserting an image into PowerPoint. (*Lower quality resolution, 1-2MP*)

Desktop Publishing- inserting an image into a newsletter, flyer or publication.

(*Medium to higher resolution needed, 3+MP*)

Printing- creating a nice looking color or black & white photograph for your home or office.

(*Medium to higher resolutions, 3+MP*)

Digital Photography Resources on the Internet:

http://www.oznet.ksu.edu/edtech/How_To/HT-DigitalPhotography.htm IET's EdTech site

<http://www.dpreview.com/> Digital Camera Reviews with imaging tips, glossary and links

http://reviews-zdnet.com.com/Digital_cameras/2001-6501_16-0.html ZD Net Digital Cameras

<http://www.kodak.com/US/en/digital/dlc/> Kodak's Digital Learning Center

<http://www.shortcourses.com/> Digital photography On-line short courses

<http://www.focus-online.com/> Web-based digital photo magazine

<http://www.irfanview.com/> IrfanView, free image and thumbnail graphic software (~1Mb)

<http://www.freeserifsoftware.com/> Serif PhotoPlus 5.5, free digital photo retouching tool (~7Mb)

Canon PowerShot A95 Digital Camera:

CCD Sensor 5.0 million (mega) pixel camera

Cost \$289 to \$350

Image Quality Resolution modes:
640 x 480 pixels to
2,592 x 1,944 pixels
(11x14 print quality)

Zoom Optical 3X, Digital 4X
(38mm to 114mm range)

LCD Display 1.8" (swivels 360°)

Focus Range Macro mode: 2" to 32"
Normal mode: 32" to infinity

Built-in Flash Range: 8" to 12'
Modes: Auto flash, Forced flash, Flash off, and Slow synchronized

Memory Compact Flash Type1 (standard 32MB with camera, available to 2GB)

File Formats JPG (still images), MPEG1 (video capture)

