

## **How to Take Photo ID Photos**

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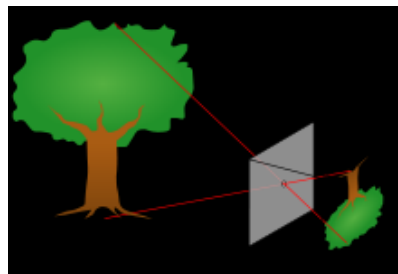
Some standard tools and practices used in taking good quality photos quickly, securely and professionally have come to light over the last fifteen years. What follows is generally aimed at plastic card production but the same rules and techniques apply to photo ID in general. As a DataCard dealer references are made to using ID Works software etc. but are easily applied to other applications and uses.

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**Background** – My single lens reflex 35 millimetre Nikon N2000 that I bought in the early 1980's was the mainstay of photography for many years. At the time it was state of the art with aperture-preferred programming and a full steel frame and it cost a good chunk of a thousand dollars. I still have it and it's served me well travelling all over the world in adverse conditions. You can still buy this camera new today.

Alas. Film is dead. What I could do with it I can now do with a camera costing much less and it's smaller, lighter and with of course many more features.

**Basics** - A pinhole camera used a box with a pinhole and some film to take a photo upside down. A manual shutter like a bit of tape completed a science project for many a youth. The focus was the distance of the pinhole opening to the film at the back.



The 'smaller the pinhole' the 'sharper the photo.' Trade-off was the 'smaller the pinhole' the longer it took for the light to burn the photo onto the film. In later, better cameras the same trade-off is the size of the aperture versus the time of the exposure.

**Some Standards** – The aperture is the size of the opening divided by the distance from centre of the lens to that distance from the film. Hence  $1/22$  is a smaller opening than  $1/2$ . This is an "F stop."

If you look at the tree above - the opening (aperture) of the pinhole would be closer to  $1/22$ . It would take some time to take the photo depending on how sunny a day it is.

If we assume the tree is twenty paces away and we put a person directly in front of the camera at three paces away both the tree and the person will be in focus.

If we make the pinhole opening larger we need less time for the light to make a burn on the film but what happens is only the object we focus on will actually be in focus. If we focus on the tree using a large aperture then the person will be out of focus.

**Artsy** – We put the person far away. We use a large aperture. We put nice flowers close to the camera and focus on the person far away. The person is in focus and the flowers are blurred. Our vision is on the person and the out of focus flowers frame the person. This is called “Depth Of Field.”

**Film** – Came in different speeds depending on how ‘fast’ it was able to burn a photo. An ASA rating of 64 took a slower shutter speed to capture a photo than an ASA rating of 400. In general Black and White film was faster than colour but had a finer grain so the photo looked sharper. The higher the speed of the film the grainier the final photo looked. Film cameras had to set the ASA rating of the film before shooting.

It was possible to “Push” the rating of the film to get a higher speed rating than that set by the manufacturer. This was done often in low light conditions with black and white film to “Get The Shot” with varying artistic success. You then told the developer to develop the film at the speed you set it at. An ASA rated film of 400 could be shot at 4000 or 2000, direct multiples of the rating.

**Lenses** – A typical 35 millimetre film single lens reflex camera came with a 50 mm lens. That meant that the magnification was one to one. A 200 millimetre lens gave a magnification of four times. “Longer” lenses like these were often used in professional portrait photography, as the longer lens seemed to “Flatten” the face and gave a more appealing appearance.

Most people when taking photos of friends use a wide-angle lens like a 28 mm. 28 mm lenses are also used in landscape photos as the angle out from the lens is wider and you can get more in. The 28 mm also works well indoors because of its ability to get all of several people in the photo in a confined space.

The problem with wide-angle lenses is they round out people and edges - but for casual snapshots and vacations and friends weddings it is the lens of choice. The good point is smaller cameras with smaller flash attached work well together at shorter ranges.

Longer lenses need a tripod to stop shaking and/or faster speed shutters and often the flash used won't reach the subject.

Zoom lenses often go from 28 to 200 so you can pick and choose on the fly and only carry one lens rather than several screw on exchanges in your pack. Zoom lenses are more expensive in general and more prone to failure under extreme conditions as they have many moving parts. Also they often under professional requirement conditions have smaller maximum apertures and some distortion.

**Flash** – Get some light on the subject. More light = a better photo. Not all light is the same. In the “old” days there were two types of colour film, indoor and outdoor. If you shot indoors with outdoor film, you got a photo that was overly red. If you shot outdoors with indoor film you get a photo that was overly blue. Or was it the other way around? Often people would only buy outdoor film and always use a flash indoors to get the right “Colour Temperature.”

Older flash ‘bulbs’ set the camera at shutter speed 1/60<sup>th</sup> of a second and you calculated the distance to the subject and set the aperture to get the right ‘exposure.’

Electronic flash was faster than the time of a bulb going off so cameras now moved up to a minimum standard of 1/125<sup>th</sup> of a second – the shutter opened, the flash went off and then the shutter closed.

**TTL Through The Lens** – Most cameras now open the lens, set off the flash, measure the light coming in through the lens and shut the shutter when enough light has come in.

**Slave Flash** – Set up on a tripod often at a different angle near the subject and goes off automatically when it detects another flash going off near it. Note – often used in underwater photography as the water loses sunlight and red colour in less than a meter – used both to give light on the subject and get the true colour back.

Flashes have different colour temperature, different speeds and intensities all effecting price.

**Enter Digital** – So what's different? One thing. Film is replaced by pixels. Yes there are some computer advances – more on that later but all of the things that apply to film cameras apply to digital cameras. Light is the same. Lenses are the same. Shutters are the same. Flash is the same.

So why? What are the advantages of digital over film? Well there are several.

One, You can edit photos with software easily. This means you only print what you want and can discard or fix the rest. You can take many, many shots in hope of getting exactly what you want in terms of exposure, hue, gamma, framing and clarity with no additional cost of printing.

Two, with the same software you can colour correct for underwater, low light and glare.

Three, You can download it to your computer and e-mail it - either to friends or a photo print shop.

Four, with the LCD display on the back you can see exactly what you got instantly whereas before with film you had to wait to see what you got after developing the film. (This often made the photographer's skill more important.)

Five, for our purpose, you can connect the camera directly to a computer and run it from software to enter the photo directly to print an ID card.

**Web-Cams** – Almost every laptop and many other PC's have or can use one. (I use Logitech but there are many others) Because of the small size of the end photo used on photo ID cards these are often a very good price alternative. A web cam connected to a PC needs a "driver" to interface with software. This is usually a "Twain" driver or "Video For Windows" driver. If the web cam came with your laptop it's already installed – if you bought one it needs the driver – use the plug and play Windows Wizard and get it either from the internet or the web cam may have a disk with it.

Web Cams running from a PC do not have a flash. If you have a camera running from a PC as a web cam that has a flash - the software WILL NOT fire the flash.

Depending on the quality of photo you require there are some options. One – get rid of florescent lights – they are in pairs to overcome the firing at 60 cycles per second. One fires one way and then the other fires the other way to get 120 cycles per second – Cameras fire at 1/125<sup>th</sup> of a second so the photo could land on either the high or the low cycle of light. OR, keep the

fluorescent bulbs and overpower them with some other kind of light. Second option - get close to a window.

If you remember from above there are different colour temperatures in man-made light. Halogen, LED and incandescent all have different effects on the skin colour of your photo. A cheap alternative is to go to Home Depot and get one of the 500-watt halogen work lights for about \$25.00 It will work in a pinch but give your subject a bit of a reddish colour. If you can live with that - OK. He will also get a suntan from the light but that's OK too. If you can find an old movie camera light it will work well but they are a bit pricey.

**DataCard** – Has Photo ID Software called ID Works. It comes in four versions – Intro, Basic, Standard and Enterprise. All work very well and although I'm prejudice as a dealer in my opinion there is nothing better or even close to features and compatibility.

DataCard wrote software that will fire the flash on certain cameras while plugged into your PC via USB. As long as you have ID Works and one of these cameras you can fire the camera from the software and the flash will fire as well. The software is free if you have ID works to plug it into and you can download it from [www.DataCard.com](http://www.DataCard.com) There are some restrictions via versions and Windows – check with your dealer.

The lists of tested cameras today are all Cannon but others may work as well - they have just not been tested. Here's the list to date:

- Canon EOS-1D Mark III
- Canon EOS 40D
- Canon EOS-1Ds Mark III
- Canon EOS 450D/Rebel XSi
- Canon EOS 1000D/Rebel XS
- Canon EOS 5D Mark II
- Canon EOS 50D
- Canon EOS 500D/Rebel T1i
- Canon EOS 7D
- Canon EOS-1D Mark IV Canon EOS 550D/Rebel T2i

**So to recap** – To take an ID photo you need a Cannon camera using the maximum optical zoom (Not the digital zoom) you can tolerate, with flash, with ID Works software plugged into a PC, with free plug in software. Use a tripod to eliminate jiggle. At three meters from the camera have the subject stare at a spot a meter away from the camera – have a dot for them to look at – this keeps “Red Eye” to a minimum. SMILE! Yes I know that for passport and others it's not allowed on a photo. You don't have to comply.

What else? A good backdrop makes all the difference – no things growing out of heads – it does make the photographer look bad. At least get a bucket of paint and paint the wall white behind the subject. Got a decal of your company logo to put there?

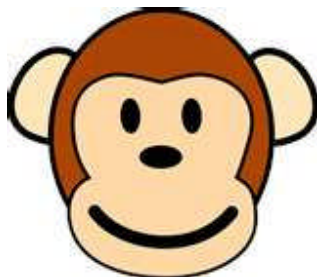
More What else? Most people are the same height sitting down. Schools may have a short person followed by the lead basketball player in the middle of a long line. Sitting down you don't have to move the camera on the tripod as much.

**Remote sites** – On the way home from work you have to stop off at the shop to take some employee photos – This is better for all regarding time concerns. You take your trusty Digital camera, take the photos and get back to the office the next morning and download the photos from your camera to file. It's OK as you know the software can import the photos from file and you can even crop them from there. Problem is you have six thousand employees and you don't know who these people are even though they're on your list. They got downloaded as a number to a file.

The solution is to take a water pen and plastic board with you and have the subject hold it on their chest and you write their ID Number or name on the board and crop it out later. You all know who these photos belong to because their name is in the photo!



Whereas You don't know is which Monkey 1, Monkey 2 and pig below.



You get the picture.

**How Big?** – Consider the two photos below.



Both are jpg, which is what most digital cameras gravitate too but the one of the man is 8Kb and the one of the woman is 4Kb. Twice the size! Yet the woman's photo is much clearer with better skin tones and generally a better photo. Why? It was taken with better light, a wider lens aperture, on a tripod,,,,,,,,

You can do the same too!