PRESENTATION ON PHOTOGRAPHING COINS

Led by Wayne

Why do you want to photograph Coins?

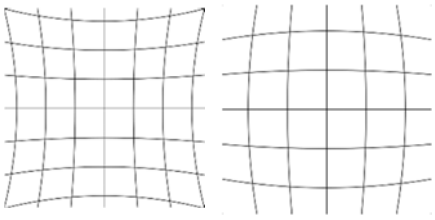
- Insurance Records
- To view coins without retrieving coins
- To review coin grades

If using photos for proof of ownership it can be good to include some identifier that you took the photograph. In some of my photos I use a paper sewing ruler with my signature.

Banknotes

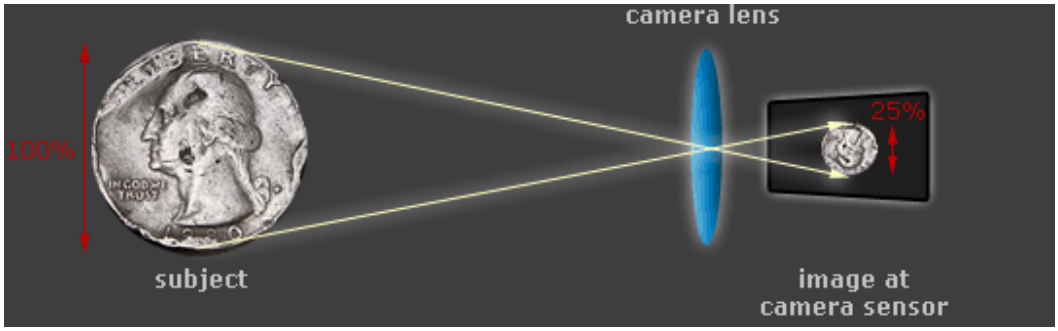
Banknotes can be difficult to photograph. If you are off square the notes will be miss-shaped. A flatbed scanner is by far the best way to digitise banknotes noting they are designed to not reproduce accurately. Scanners can be used to reproduce coins by placing a cloth over the coin however the results are usually not as good as using a camera.

Cameras - Bigger is not Always better – Distortion



Distortion can occur as you try to photograph close objects. A good site which explains this is http://www.cambridgeincolour.com/tutorials/macro-lenses.htm

One of the things to note is the bigger the sensor the bigger the limitation. The higher the image resolution the bigger the sensor. This shouldn't be a issue for you unless you are trying to do serious close-ups.



Lenses

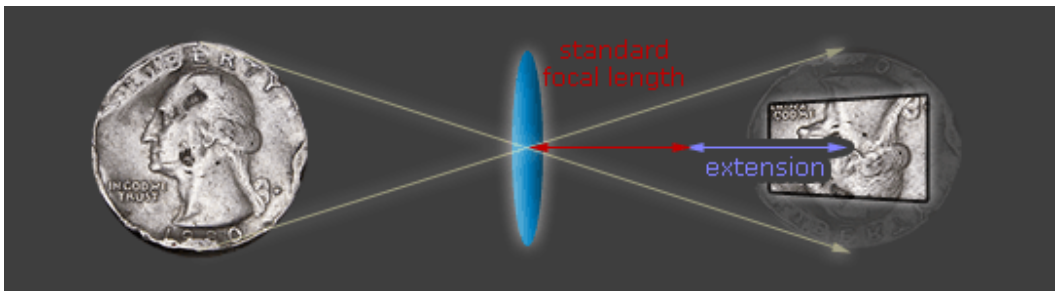
If buying a SLR lens you can look at purchasing a Macro lens. I use a 60mm f/2.8 Macro USM which can focus down to 20mm ($500)

SLR Attachments – Extension Tubes

An extension tubes come in 2 forms

- a hollow cylinder with connectors ($7-$20)
- a hollow cylinder with connectors which passes the autofocus control to your lens. ($40-$200)

An extension tube fits in between your camera and lens, causing the lens to move further from the sensor. This additional distance allows your lens to focus more closely, which in turn provides more magnification capability. Unlike most lens accessories, extension tubes don't add any extra optics, and are therefore relatively inexpensive, simple devices.



Choose a Magnification: 1:2 (0.5X) 1:1 (1.0X)

Note: Diagram assumes that the lens is symmetric (pupil magnification = 1).

An extension tube increases lens magnification by an amount equal to the extension distance divided by the lens focal length. For example, adding a 25 mm extension tube to a 50 mm lens will give a magnification gain of 0.5X. Therefore, if the lens's original magnification was 0.15X, then the new magnification will be 0.15X+0.5X=0.65X. The closest focusing distance will also decrease to ~210 mm.

0.15X Max Magnification with typical 50 mm lens	0.65X Max Magnification after 25 mm extension tube

Attachments – Macro Lens - ebay

It is possible to buy cheap macro attachments on ebay. My view is you get what you pay for. Often they can cause black rings around the picture cropping them.

Holding the camera Steady

- Flexipod – small low tripod – down side won't support SLR pointing down.
- Inverted Tripod
- Beanbag

Lighting up the coin

- **Flash –** With a flash it is hard to see what you will get until you have taken a shot
- **A Led Ring -** See picture below – unlike a flash the led light stays on. ($20-$60**)**
- **Light Box -** a box which will defuse light onto the object ($40-300)

A photo of a Coin in a 2x2 – at 100% below
Pic is 6.2 meg in size

Final Considerations

- Where are you going to setup and store equipment – I use a darkroom and the lightbox
- Taking Coins out of protection - Use Cotton Gloves if you must remove coins
- Preparing coins – cleaning – remove hairs, dust, …
- Indexing Photos – Consider directory structure and file naming or using a coin catalogue.
- Photographing sheets of notes is a whole separate discussion.

Cropped part of a Threepence Image @ 68% of original image