

## **Photo-Documentation Techniques for the Studio Artist:**

### **Materials required:**

Digital SLR (single-lens reflex) Camera- If camera does not have an adjustable white balance feature, a light reader is necessary. (Most new Digital SLRs have a manual setting feature for their white balance.)

Tripod

Light Kit (KCAI Media Center) OR Clamp Lamps

2-4 Photo-Flood bulbs (KCAI Art Supply Store)

2 Extension Cords

Large White Sheet/Large Sheet of Illustration Board OR White Foamcore

General hanging materials (hammer, level, nails, screws, push-pins, tape measurer)

A single white sheet of paper

Personal Computer- (Photoshop is very helpful but IPHOTO or PIXA for PCs will work ok.)

Step 1- Place Light Kit Stands with bulb at 45 degree angles from where you intend to shoot images of your work. Plug in and insert bulbs. Turn the lamps on and let the bulbs warm up for 10-15 minutes.

\*Photo-Flood lights take a while to “warm up” so most diagnostic practices are more accurate after the lights have had 10-15 minutes to warm up. Additionally, be VERY careful if you have to move your light stands. The bulbs are fragile.

Step 2- Affix your fully charged camera (with all previous images deleted) to the tripod. Center the height of the tripod to the approximate center of the first work you want to document. (It is best to go from largest to smallest.)

Step 3- If your wall is not white, affix your large white, or gray sheet to the wall. Give ample room for your work to hang in the center of the large field the sheet will create. (Your sheet, once affixed to the wall, will create either a horizontal or vertical field. You want to center your sheet in the middle of the field of light emitted by the light kit.)

Step 4- If your wall is not white and your sheet is not white, affix the single white sheet of paper to the center of your camera’s field of view. (If your wall or sheet is white, zoom the camera in and bring the details

of the wall's surface into focus.) Make sure your camera is taking the largest file sizes available to it. (Menu>Image Size>Largest)

- Step 5- Turn off all other lights in the room. Close any blinds/doors so that the only light feeding in to the room is from your Light kit.
- Step 6- Walk up to the white field (sheet/wall/paper) and place your index finger perpendicular to the wall. Two shadows on either side of your hand should appear. If they are roughly the same value, proceed. If they are not, move the light that is casting the shadow further or closer based on the tonal difference. (The darker the shadow the closer the light, the lighter the shadow the further the light. If the shadow to your left is darker than the other shadow, move your right light further back. Check the "finger shadow" again until both sides are as close as you can get them.)
- Step 7- Turn your camera on and open the MENU selection bar. Scroll until you can select its WHITE BALANCE. Scroll down until you can select PRESET MANUAL. A menu will appear that read's "Overwrite existing data?" Select YES. Take a picture of your IN FOCUS white field from either your white wall, white sheet of fabric or white piece of paper. (It is VERY important that the paper, sheet or wall have no debris or marks on it that are not white. Some subtle variations are expected but use your best judgment.)

At this step, you are re-adjusting your camera's white balance to the white field (sheet/paper/wall.) Generally speaking, our brains do a lot of immediate work to adjust light from either the sun or artificial light sources. Step 5 recalibrates your camera to do exactly what our eyes do instantaneously. This can be done in the computer at later stages but the more accurate information you can capture in a raw format the better.

- Step 8- Look at the image display on the back of your camera. If the photograph of the white field is white (not tinted darker/yellowish/blue-ish) then proceed. If the sheet is not satisfactory, adjust your lights.
- Step 9- Place your work of art on the wall and center the image in the viewfinder of your camera (either by adjusting the tripod or the work of art on the wall.) Try to fill the camera's viewfinder but leave a small boarder.

\*Sometimes larger works appear to bow at the top and the bottom. This is most commonly an issue with the distance your camera is from the work itself. Larger works tend to reveal the curve of your camera's lens. A simple way to correct this is to move your tripod/camera set-up (not lights) further from the work and then zoom the camera's lens until

the image fits the camera's image display. This will cause a loss of information but will correct the lens' "fish-eyeing".

Step 10- Take a photograph of your work. Look at the image in your camera's image display. If it is too dark, bring your lights close, re-adjust the White Balance, or adjust the camera's F-STOP. (I have heard F-8 is a good setting but obey the results you get from your camera.

\*Sometimes people will mention "bracketing" which is a practice of adjusting your F-stop one setting up and down from your camera's ideal setting. (ie: if you are shooting an image at F-8, shoot an image at F-6 and F-12) This gives you slight adjustments on how much information your camera is capturing. Additionally some cameras have a setting that automatically brackets.

Step 11- Once your camera is displaying a relatively accurate image in the camera's image display, turn the camera off, and upload the images to your computer.

Step 12- Check the focus and appearance of the image in PHOTOSHOP, IPHOTO or PIXA. Make the appropriate corrections to your light set up.

Step 13- Shoot your works. Be careful when shooting works of with significant changes in tone, hue, surface quality. If the works change significantly, pay attention to the image quality in your camera's image display. If you get unacceptable results (which is relatively common) recalibrate your camera's WHITE BALANCE, F-STOP, or ISO.

\*Some works have a stronger sense of hue or materiality and may require you to "bounce" light off of a photo-umbrella or sheet of foam-core. Also, if your work has a significant material quality, you can move one of your lights closer and at a more acute angle to cast shadows from the work's surface.

As you shoot your work, it is wise to review the images on your computer with relative consistency. If you change the formal character of the works you are shooting, (ie: tonal to hue based, flat to active surfaces, large to small) take a moment to review the images you are taking.

Types of Photographic Documentation and their purposes:

Installation Shots-

Shooting works installed in an exhibition setting is wonderful. It gives viewers a sense of the scale and physical presence of your work. A "quick and dirty" method of doing this is to adjust the white balance on your camera using the space directly adjacent to your installed piece. (Given that the light on the wall is consistent.)

## Professional Documentation Shots-

This is the bulk of what has been outlined. Images of your work in the most ideal of circumstances with even, consistent lighting show your work in its most ideal state. Once in PHOTOSHOP, you can crop your image and adjust its size and resolution. Make sure that you leave a boarder around your image showing the wall behind it, as highlights the physical presence of your work. This is often a mandatory feature for various professional uses of your work (grad schools, galleries, etc.) You can slightly sharpen your image to compensate for your camera's deficiencies.

### Image Resolutions and their function:

- 400 If your image includes text this is ideal for printing.
- 300 Ideal resolution to use to repurpose your images for its various uses. Also bragging rights.
- 180 Ideal resolution for print/publication. Commonly used for post-cards, newspapers, magazines etc.
- 90-72 Given that internet speeds are improving dramatically, the old standard of using lower dpi for web based images does not stand up. Go big or go home.

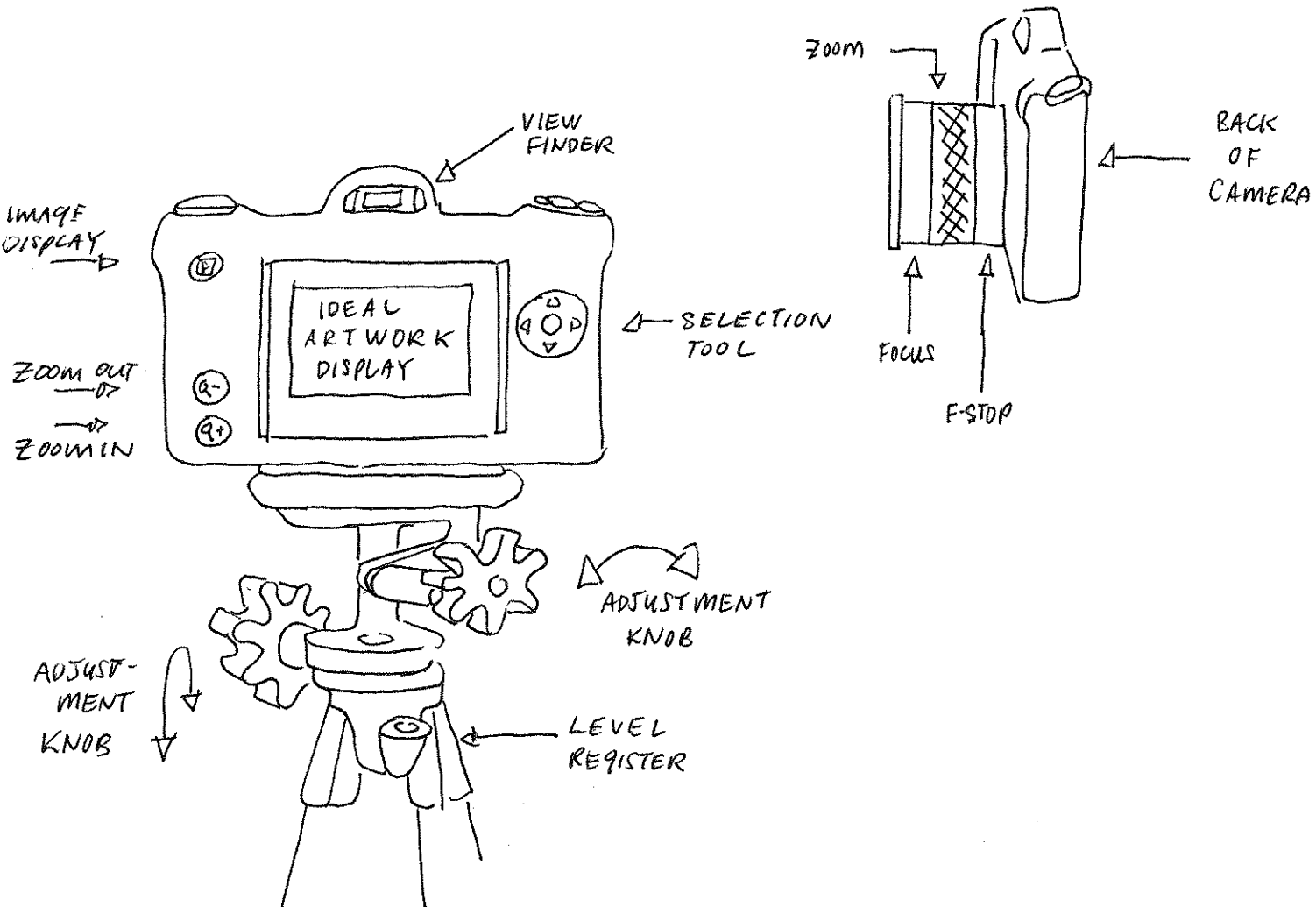
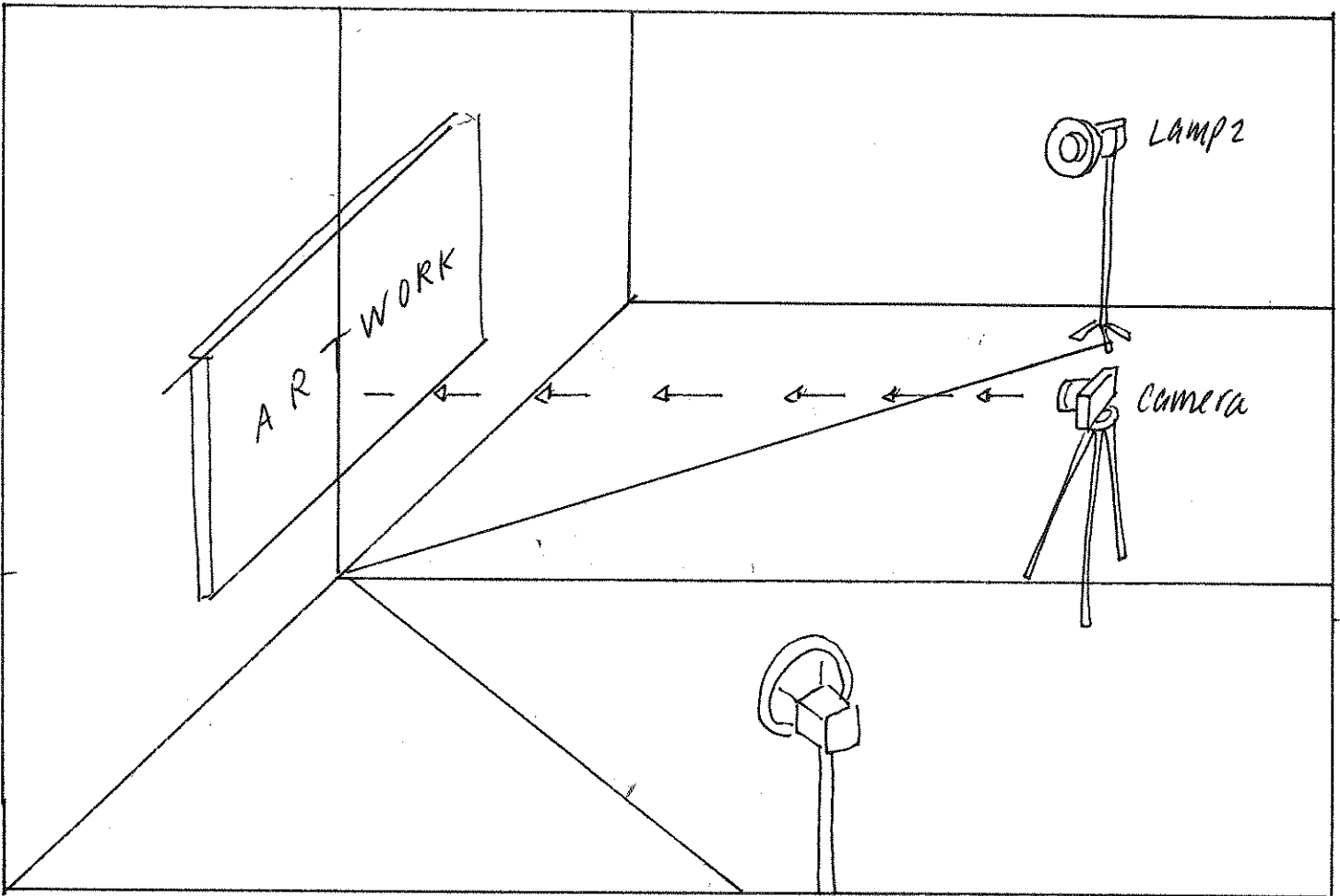
### Image Size vs. Resolution:

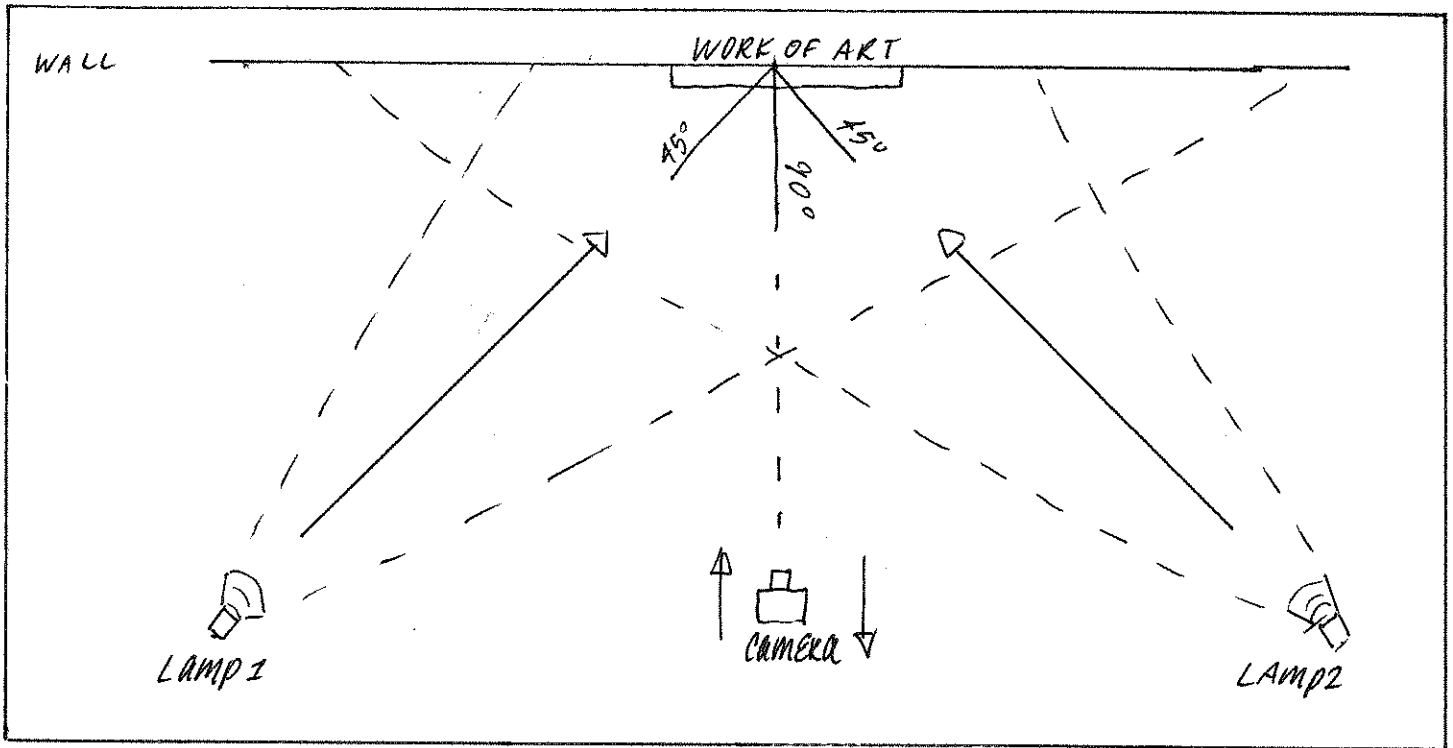
A large image at a high resolution will convert better to a smaller image at a smaller resolution because the initial image has MORE information to translate.

A large image at a smaller resolution will convert with some effectiveness to smaller sizes but this is a less ideal state.

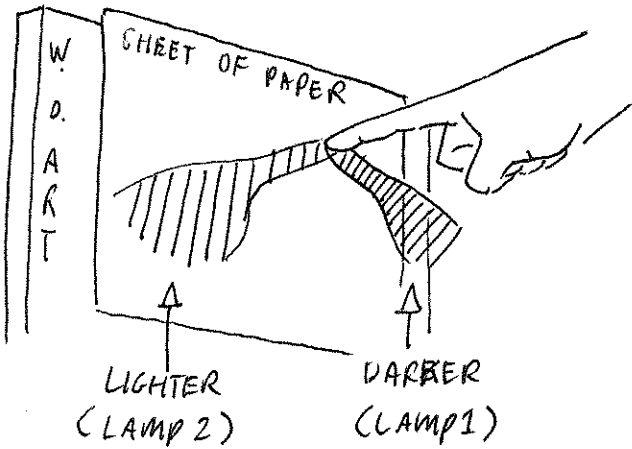
A smaller image at a high resolution will moderately convert.

A small image at a low resolution is wasting space on your computer.





FINGER TRICK



\* IN THIS INSTANCE, EITHER:

LAMP 2 IS TOO FAR!

(BECAUSE THE SHADOW IS TOO LIGHT.)

OR:

LAMP 1 IS TOO CLOSE!

(BECAUSE THE SHADOW IS TOO DARK.)