# How to Set Your Digital Camera to Photograph Art

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### Introduction

You might have purchased a new digital camera instead of a film camera because the shows are starting to jury digitally. You might have asked a friend to photograph your art with their digital camera because you don't own one yet.

If you're new to digital photography, keep reading. You're probably shooting JPEG because it's easier, and may not have heard of RAW. RAW is the original data captured by a digital camera that hasn't been processed yet. Capturing in RAW, if you know what you're doing, can give you the highest quality images that a digital camera is capable of. But for the purposes of digital jurying it's not necessary. Especially since RAW requires proprietary software.

Over the past few years I've been contacted by too many artists who have taken their own digital jury images and tried to tweak them and have run into the same common problem. They've opened the JPEG in their editing program, modified and pressed Save, overwriting the original - and have ruined their images. If you're one of those artists, or are new to digital photography, this article is for you.

And if you are in the market for a new digital camera, please get one with at least seven megapixels, which will give you over 3,000 pixels long dimension. That will give you enough information to compose and crop properly.

## Some basic misconceptions

Just because you capture your images as a JPEG, it's ready for digital jurying. Or how about this one. The sales person at the camera store told me to set the camera at a lower resolution setting because I told him I needed a JPEG file.

A few truths and tips to get you started in the right direction Out of the box, the digital camera is set wrong. It's set for auto everything and not even the highest quality JPEG. You need to change your settings before photographing your art work.

# **Before Using Your Camera**

The instructions that should come with every new camera

### Purchase a tripod

Let me repeat. Always use a tripod. For the highest quality photographs, either with a film or a digital camera always use a tripod to steady the camera.

### Set the ISO to the lowest setting

By default, the ISO is set to Auto which lets it fluctuate between the lowest and highest setting that the camera is capable of, depending on the amount of available light. Lower ISO is higher quality with less digital noise. This is equivalent to ASA film speed where ASA 25 or 100 speed film is higher quality than ASA 400 speed film because higher ASA films have more grain. Digital noise is equivalent to grain. The less the better.

### Set the camera to capture the most pixels it's capable of

This won't be an option if you shoot TIF or RAW because those setting will always give you the most pixels available. But it's really important if you shoot JPEG because you'll need all the information the camera is capable of capturing. Besides, digital cameras always use all the pixels but if a lower resolution setting is selected, the camera makes the file smaller, something that can be done afterwards in post processing if needed. Forget what that sale person told you when you mentioned needing JPEGs. Web sized JPEG images are too small for ZAPP. Additionally the JPEG setting in most digital cameras offers you a choice of compression quality. Always choose the setting that gives you the highest quality with the least amount of compression. If you don't have enough room on your memory card, purchase a larger capacity card. Memory is cheap and you shouldn't let it dictate the quality of the images you produce.

## Never use the digital zoom

All consumer digital cameras have an extended digital zoom range. If you can't get close enough with the built in optical zoom, move your tripod. The digital zoom interpolates in camera and is not as good as cropping (and enlarging) in an editing program like Photoshop or Elements. You should try and keep the optical zoom in the mid range when photographing your art because there will be less distortion caused by lens aberrations.

#### Fill the frame

Fill the frame as much as possible with your art so you end up using more of the available pixels. That will give you potentially a higher quality jury image. If your work is horizontal, position the camera horizontally. If your work is vertical, position the camera vertically. Use the most amount of image area you can in the long pixel dimensions. If you're using a 7 or more megapixel camera, leave some room around your work so it can be cropped in a visually pleasing way.

#### Turn off the flash

Shooting artwork with the built in flash is ugly, with hot spot reflections of the flash. Better to shoot without the flash and use window light to illuminate the art, or shoot outdoors under your white canopy for even illumination.

### White Balance or why can't I get accurate color

If at all possible, set your white balance to match your light source. That will insure that the whites in your work, or background, show up as white in your digital files, which will let all the other colors fall into line. This is a difficult concept to grasp. And to complicate things a little more, most cameras allow you to set a custom white balance so mixed lighting can be used accurately. Auto white balance should only be used in situations where matching colors from image to image isn't necessary.

### Color space sRGB

Most digital cameras create files in the sRGB color space. That's a good thing for digital jurying because the images will be viewed in the sRGB color space. More advanced digital cameras also may give you the option of the Adobe RGB color space. Either is OK for capture as long as you convert your digital file to the sRGB color space before creating your JPEG image for jury submission.

#### A JPEG is not a JPEG

The image quality of a JPEG that a digital camera captures is almost indistinguishable from a TIF. For the purposes of digital jurying, you can shoot JPEG and end up with excellent digital jury images. That's why you should always shoot at the highest quality with the least amount of compression. I know I'm repeating myself, but it's important. The JPEG you wind up with after editing, if done correctly, will be a compressed JPEG and have little relation to the JPEG originally captured in the camera.

# Opening your camera original JPEGs in an editing program

This is one of the most important facts on this page. When you first open your images in an editing program like Photoshop or Elements, go to File>Save As and specify either a TIF or a PSD, which is the native Photoshop file. Those are uncompressed image formats. A JPEG is a compressed image format which looses something with each modification. NEVER work on an original JPEG out of camera. It's your negative and you need to archive it. Working on a JPEG

causes the image to degrade and if you save over the original, you've lost it forever. Always work on an image in an uncompressed format so any changes you make improve the image, not degrade it. If you have any questions, this is where you e-mail or pick up the phone and ask someone who understands, before you do any irreparable damage to your digital images.

### Every digital image needs post processing

Actually every photograph either captured on film or digitally, can be improved in post processing. This is really the reason we work in programs like Photoshop. It's not to just resize our images, but also to improve how they appear to others. After all, you want your image to accurately reflect how your art looks. That requires practice and is an acquired skill.

### **Summary**

Except for the digital zoom, these tips also apply to the more sophisticated Digital Single Lens Reflex (DSLR) type camera also. Consider this page a checklist of things you need to do to protect the integrity of your digital images. It's difficult enough trying to get into shows without handicapping yourself. Let's get the basics done right first.

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