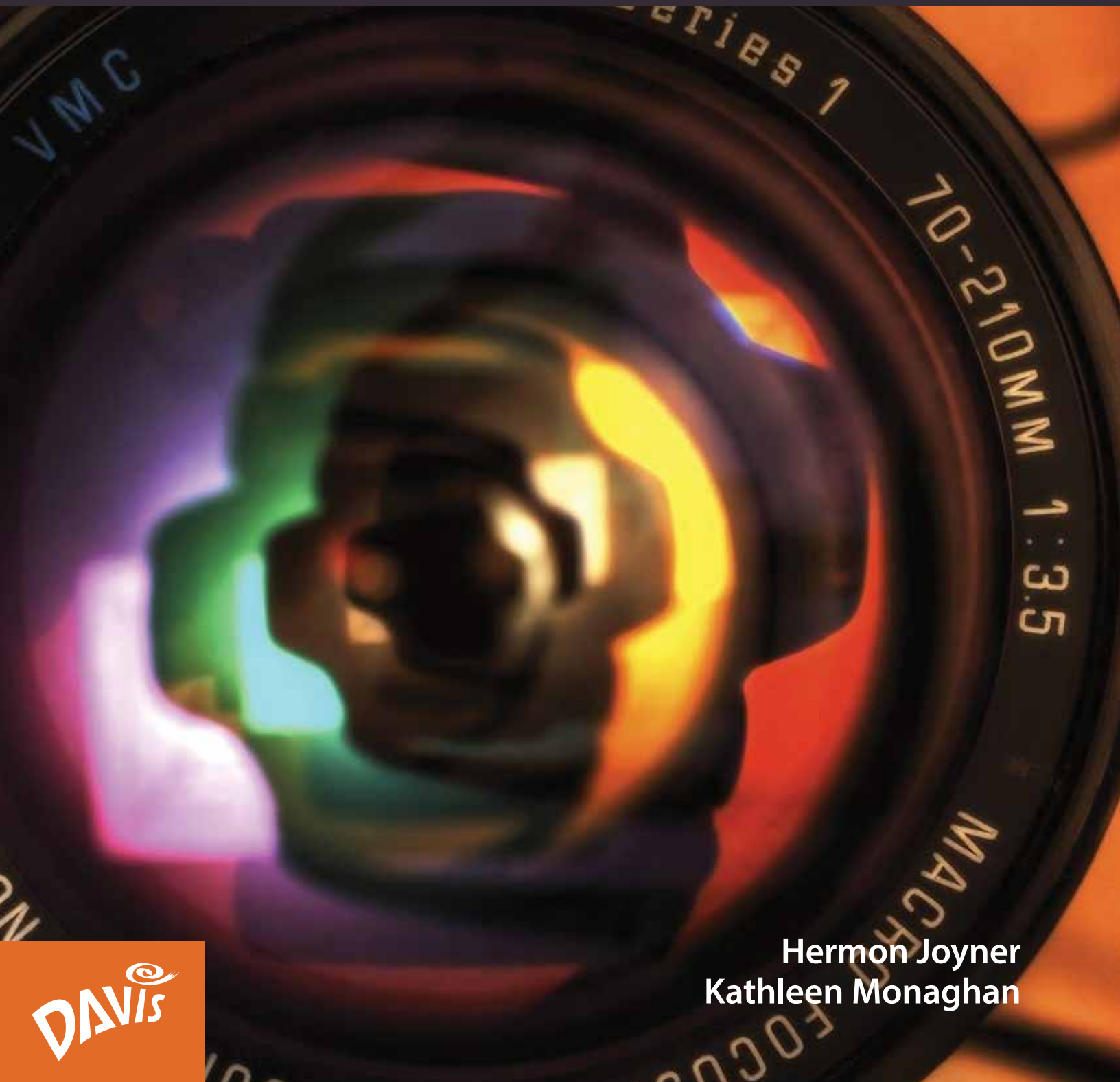
PHOTOGRAPHING
your Artwork



Hermon Joyner
Kathleen Monaghan

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PHOTOGRAPHING
your Artwork

What's the point of spending hours creating great artwork if the photos you take of it don't do it justice?

Every artist needs to keep visual records of their work and that includes the educators teaching them. Whether you're using the pictures for college portfolios, classroom portfolios, assessment, or keeping reference for the following years, you should always have up-to-date images ready to share.

We put together some guidelines to help you photograph artwork like a pro. Look Inside! You'll find instructions, pointers, and tips and tricks to help you create excellent photos!

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ABOUT THE AUTHORS

Hermon Joyner received his B.S. in Arts and Letters and his M.S. in Professional Writing from Portland State University in Portland, Oregon. His photographs have been featured in more than 100 exhibitions across the United States, including 12 solo exhibitions, as well as being published in several major photography magazines. Hermon was awarded an artist's grant from the Regional Arts & Culture Council in Portland, OR, in 2003 for his project *Visual/Haiku*, a hand-bound artist's book of original photographs and poetry about Japanese gardens. He was a regular contributor to *PhotoMedia* magazine, writing award-winning profiles of photography luminaries such as William Albert Allard, Albert Watson, and Steve McCurry. Hermon currently works as a freelance commercial photographer and writer in Portland, Oregon.

Kathleen Monaghan has a B.A. in Education from Eastern Washington University, and an M.A. in Curriculum Development and Creative Arts in Learning from Lesley College in Cambridge, Massachusetts. She has 14 years of experience teaching K–12 art in private and public schools, and has taught textiles to college students and adults for more than 20 years. She is the author of *You Can Weave: Projects for Young Weavers* (Davis Publications, 2000) and has also been published in *Handwoven* magazine. Kathleen is the director of marketing and communications for Pendleton Woolen Mills and teaches weaving at Multnomah Art Center in Portland, Oregon.

CHOOSING YOUR EQUIPMENT: SMARTPHONES AND DSLRS

SMARTPHONE

You can use the built-in camera app that comes with your smartphone. With every update, these apps get better and offer you more options. While using your smartphone's built-in camera is easiest, it might not have all the features that camera apps offer. There are specific camera apps for both iPhone and Android that offer extended features and work well for photographing artwork. Additionally, many let you check the level of your smartphone as you use it. Reference your App Store to choose one that best matches your needs.

SMARTPHONE CAMERA SETTINGS

Resolution: If you want to make a print of your artwork or plan to submit your image to a print publication, shoot at the highest resolution your app offers. If you are aiming for social media or online publication, you can go lower than that. Choose a resolution that gives you a finished image anywhere from 2 to 6 MB in size. That will be good for many uses.

White Balance: Automatic White balance settings frequently make mistakes. Select the correct setting for your environment if your smartphone's built-in camera app (or other app) allows you to change your white balance setting. ***See chart on page 3 for White Balance settings.***

ISO: If your smartphone or app allows you to adjust the ISO speed, keep the setting low, around 100 or 200.

Focus: Leave your smartphone on Auto Focus.

No Flash: Turn off the Flash setting. It overpowers the artwork.

Exposure Compensation: Check your images as you shoot and make sure they look like the artwork. Use the exposure compensation to lighten or darken the image to match what you see.

DSLR

Digital Single Lens Reflex (DSLR) cameras are specifically designed to take photographic images. They offer more options for photographing artwork and in general will produce higher quality results. DSLR cameras allow for variable aperture and shutter speed control which means you can influence motion capture and depth of field, something a smartphone will struggle to do. Additionally, you can attach a multitude of lenses to a DSLR, giving you the ability to take ultra-wide or telephoto shots.

DSLR CAMERA SETTINGS

Exposure Mode: Set the mode dial to "A" – this stands for Aperture Automatic. In the "A" mode, the camera will pick the right shutter speed to match the f-stop you choose. Reference the following sections for more information on f-stop choices.

Resolution: Select the largest file size. This can be found in the camera's menu under Picture Size. You can always resize the image later to make it smaller if you need to.

Image Quality: Choose JPEGs to shoot. JPEGs are smaller files, so you can take more images and for most purposes they are perfectly fine. As previously mentioned, though, make sure you have chosen the largest-size JPEG you can record.

White Balance: Don't use the Auto White Balance setting. They frequently make mistakes in choosing the right color balance. ***See chart below for White Balance Settings***.

ISO: Shoot at a low setting, 100 or 200 ISO. This gives you the best detail and sharpness. In some situations, like dim museums and galleries, you may need to use higher ISO settings from 400 to 3200 ISO. Note: higher ISOs increase visual noise in the image and lower resolution.

Focus: Reference the following sections to determine focus based on what you are shooting.

No Flash: On-camera flash overpowers the image, so don't use it.

Exposure Compensation: Check your images as you shoot and make sure they look like the artwork. Use the exposure compensation to lighten or darken the image to match what you see.

WHITE BALANCE SETTINGS

White Balance		Lighting Condition
	Tungsten	indoors with regular screw-in light bulbs
	Fluorescent	long tube light bulbs, like you find in schools
	Cloudy Daylight	the lighting on cloudy days
	Open Shade	when you are in the shade with the clear blue sky above you
	Daylight	direct sunlight

PHOTOGRAPHING 2D ARTWORK

Image 1: Artwork not cropped.

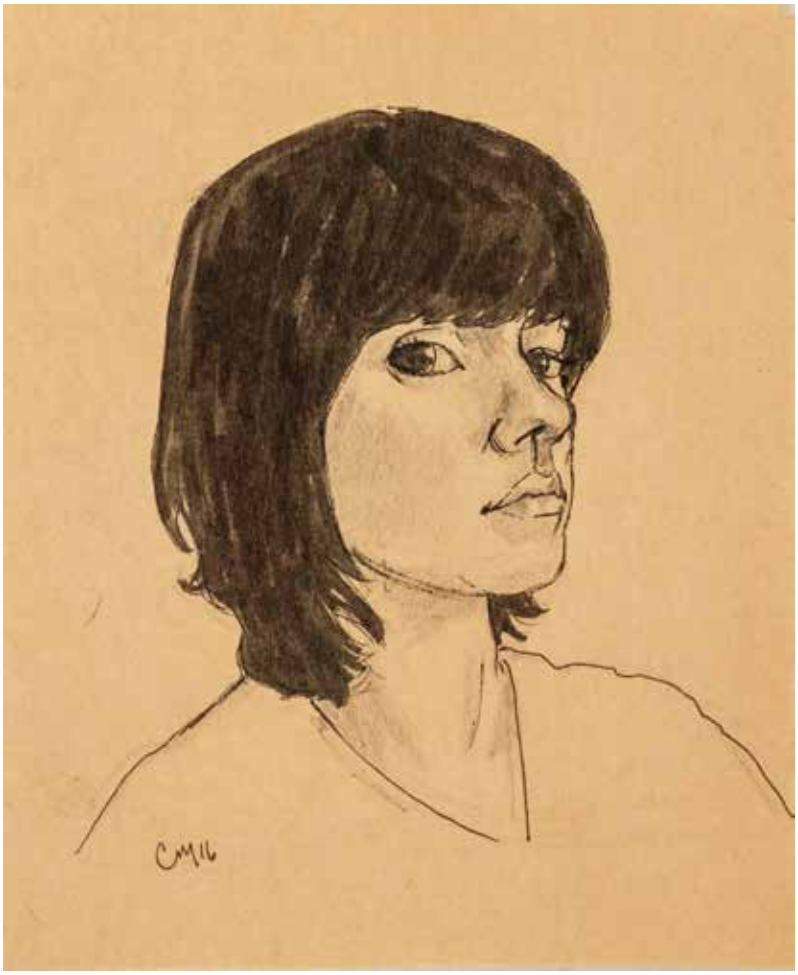


Image 2: Artwork cropped.

GENERAL TIPS

2D artworks are mostly flat and are intended to be viewed from one direction, directly in front of the artwork.

1. Photograph the artwork before it is framed, matted, or under glass. Crop the image to get rid of the surrounding paper to concentrate on the art. If you plan to use the image in print, do not the crop the image too closely. Publications my require a bleed to ensure images can be printed to the edge of the paper. See Images 1 and 2.

2. Make sure the camera or smartphone is level and parallel to the artwork. This prevents distorting the image.

3. Photograph in one kind of light and use the correct White Balance setting for that light on your smartphone or DSLR.

4. Make sure the lighting is even across the artwork. You don't want bright spots on some parts of the artwork and shadows on other parts.

SET-UP

The lighting set-up is the same for both smartphones and DSLRs.

Lighting: If working indoors, position the lights between you and the artwork, but off to the sides at about 45-degrees from the wall and the artwork. Clip-on work lights with regular light bulbs are an inexpensive way to go. You can clamp them to the backs of a couple of chairs. The lights should be placed at about the same height as the artwork. ***See Images 3 and 4 on page 5.***

If you choose to shoot outdoors, do this on either a cloudy day or shoot in open shade. Open shade is when your set-up and camera are in complete shade or shadow, such as against the side of a building, but the sky above you is clear and blue.

Shooting Surface: Use a full sheet of white foam core and tape it to the wall with painters' tape. Painters' tape won't hurt the walls. Use pushpins or double-sided tape to hang the artwork on the foam core. ***See Images 5 and 6.***

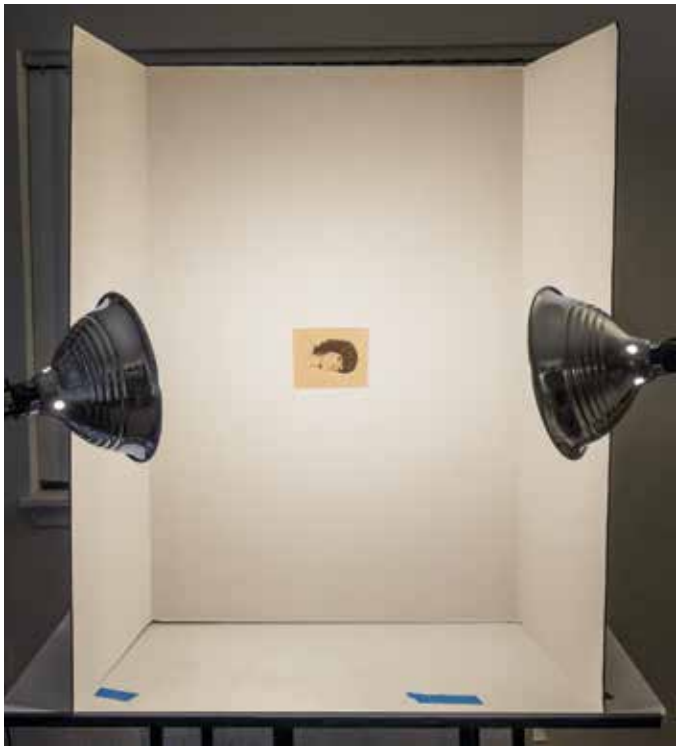


Image 3: Light booth set-up.

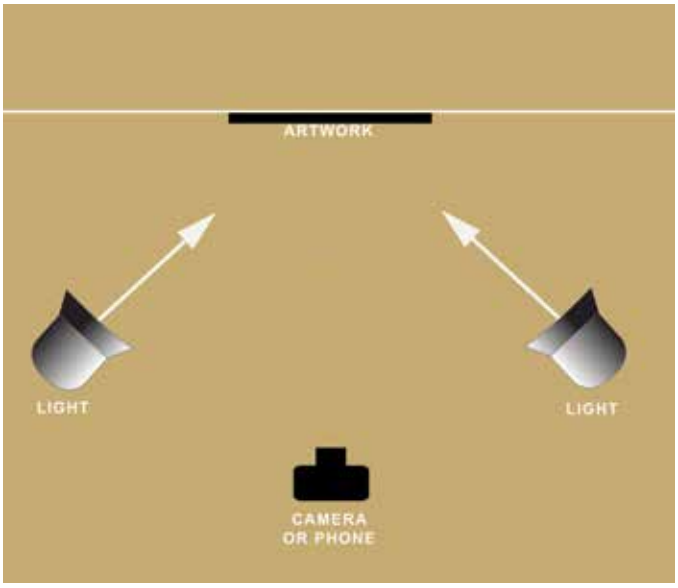


Image 4: Indoor lighting set-up.

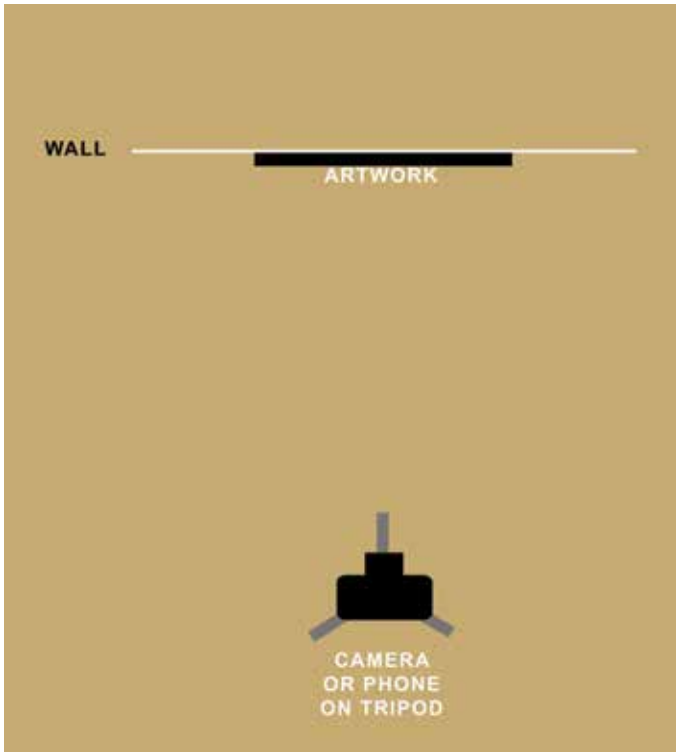


Image 5: Outdoor lighting set-up.

Image 6: Outdoor set-up.

PHOTOGRAPHING ARTWORK

Get close enough to the art to fill most of the screen of your smartphone or DSLR. Make sure that your shadow isn't falling on the artwork. Don't use the zoom feature on your smartphone's camera app to get closer to the artwork. Most smartphones don't have zoom lenses, so when you "zoom" in, you're just cropping the image. This lowers the resolution, which you don't want to do. You can use the Zoom feature on a DSLR lens without lowering the resolution.

Positioning: The smartphone or DSLR should be centered in the middle of the artwork and parallel to it. Check that the edges of the artwork are square and parallel in the screen.

With a smartphone, hold it steady with both hands. Make sure you are focused on the artwork. Take the image. Check the image you took on the smartphone and make sure it is sharp. It's very easy to move the smartphone while you take the photo, which makes the image blurry. Retake the image if you need to. ***See Image 7.***

With a DSLR, use a tripod to hold the camera steady. You can also find tripod mounts for smartphones. This ensures the camera is held steady and doesn't move during the exposure. Before you set up to shoot, place the camera on the tripod in front of the artwork. Adjust the height of the camera until it is in the center of the artwork. Make sure the camera is as level as possible. Many tripods have built-in levels so you can check this. Now pull the camera and tripod back, so that a shadow isn't being cast on the artwork. Of course, if the artwork isn't placed level, you'll have to position the camera to match it. ***See Image 8.***

Lens Options: A normal zoom lens is fine for photographing 2D artwork. Use an aperture or f-stop to make sure the artwork is sharp from corner to corner. ***See Lens Options chart below.***

Adjust the zoom lens so that the art fills most of the viewfinder of your camera, either horizontally or vertically. Check that the edges of the artwork are square and parallel in the viewfinder or rear screen. Press halfway down on the shutter release button to focus the camera. Press all the way down to take the image.

If the image appears too dark or too light, use exposure compensation to match the original artwork. With either a smartphone or DSLR, check your shots as you shoot to make sure they are sharp and correctly exposed before going on to the next artwork.

Image 7: Indoor lighting set-up with smartphone camera.

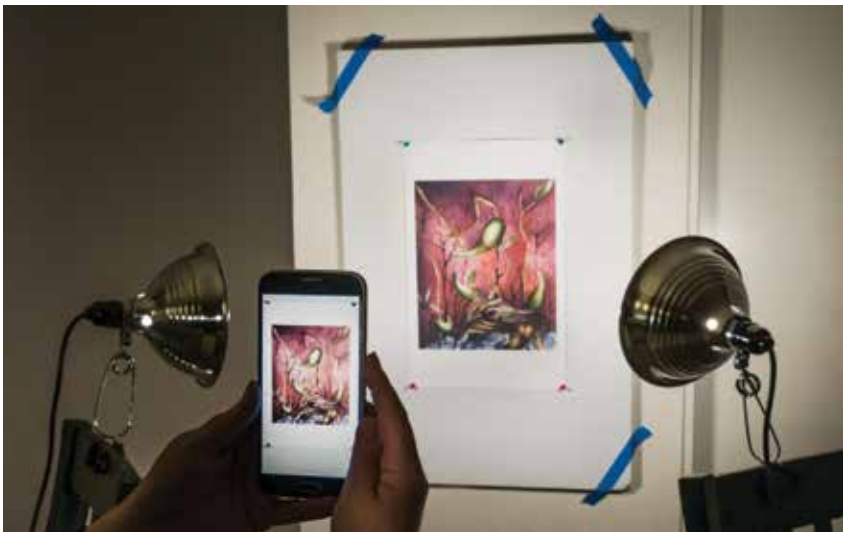
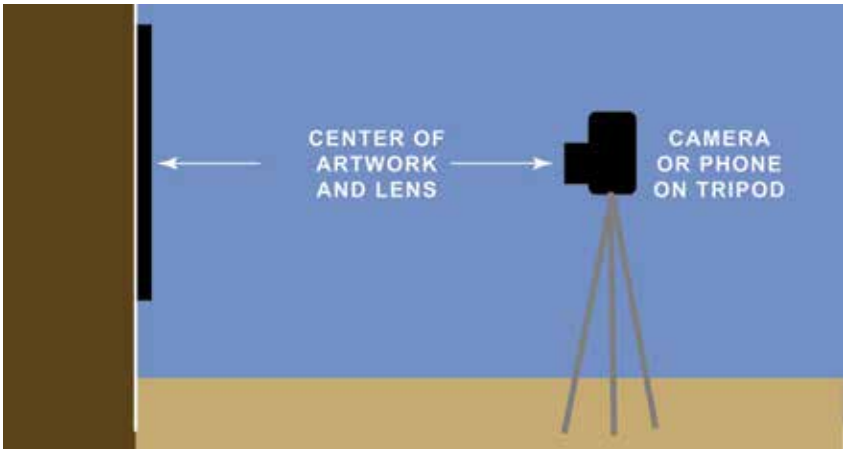


Image 8: How to align the artwork and camera.



LENS OPTIONS

Camera Type	Zoom Lens
Full-frame 35mm	28–70mm
APS-C	118–55mm
Micro 4/3s	14–42mm

PHOTOGRAPHING 3D ARTWORK

GENERAL TIPS

3D artwork can be viewed from a variety of angles. It may take several images to capture the entire artwork.

1. Eliminate distractions and concentrate only on the artwork. Do this by controlling the background and setting for the artwork.

2. Minimize or lighten the shadows created by the light(s).

3. Photograph in one kind of light and use the correct White Balance setting for that light on your smartphone or DSLR.

4. Decide on the best angle(s) and/or view(s), and fill the screen or viewfinder with the artwork.

SET-UP

This lighting set-up and shooting surface is best suited for shooting small and medium art projects indoors and is the same for both smartphones and DSLRs.

What You'll Need:

- One 48 x 36" cardboard Tri-Fold Display Board (the type used for displaying school projects)
- Two clip-on work lights
- Two 40-watt light bulbs
- One 20 x 24" piece of neutral paper (white, gray, or black)
- One roll of masking tape or painter's tape

What To Do: Stand the Tri-Fold Display Board with the two sides folded out, so that it stands up by itself. Securely tape the sides and back to the tabletop to keep it from falling over.

Position the paper so that the bottom of the paper is lying on the tabletop and the other end is against the front of the Tri-Fold Display. It should form a curve. Tape it in place.

Using the spring clips on the work lights, attach them to the top of each side panel of the Tri-Fold Display. One or both lights could be pointed up at the ceiling. Or one could be placed lower on the side and aimed at the artwork. There are several ways to position these lights. Experiment and see what works best for you. ***See Images 9A and 9B, 10A and 10B, and 11A and 11B.***

Photographing Large Artworks

If you need to photograph larger artworks that don't fit in the above set-up, you might clear out a corner of a room and place the artwork in that corner. Or, if you have access to large rolls of paper, you could tape a piece of the paper to the wall and floor in a curve. Then place the artwork on the paper. Either way, place the two clip-on lights on the backs of a couple of chairs and aim them at the ceiling. The light should bounce from the ceiling onto the artwork.

Image 9A: Overhead lighting set-up.

Image 9B: Overhead lighting photo.

Image 10A: Forward overhead lighting set-up.

Image 11A: Side light / overhead lighting set-up.

Image 10B: Forward overhead lighting photo.

Image 11B: Side light / overhead lighting photo.

PHOTOGRAPHING ARTWORK

Place the artwork on the sheet of paper that is taped to the Tri-Fold Display. It should be a few inches back from the front edge and roughly in the middle of the paper. For the first image, this should show the main view of the artwork, if it has one.

Adjust the lights so that they provide enough light on the artwork. You might want to place a white cardboard reflector card to the front and side of the artwork to lighten any shadows. ***See Images 12A and 12B for examples on page 9.***

Get close enough to the art to fill most of the screen of your smartphone or DSLR. Make sure that your shadow isn't falling on the artwork. Don't use the Zoom feature on your smartphone's camera app to get closer to the draw-

Image 12A: Side light / overhead lighting with reflector card set-up.

Image 12B: Side light / overhead lighting with reflector card photo.

LENS OPTIONS

Camera Type	Zoom Lens	F-Stop
Full-frame 35mm	28–70mm	f/5.6 to f/11
APS-C	118–55mm	f/5.6 to f/11
Micro 4/3s	14–42mm	f/4 to f/8

ing. Just get physically closer. You can use the zoom on a DSLR lens.

The smartphone or DSLR should be just above the center of the artwork and approximately in the middle of the paper. You should be able to see just a tiny bit of the top of the artwork. This will make it clear that it is a 3D object.

With a smartphone, hold it steady with both hands. Try not to move. If the artwork is small enough, like a piece of jewelry, you could rest the edge of the smartphone on the tabletop, to get close enough, or on a tabletop tripod. Make sure you are focused on the artwork. Take the image.

With a DSLR, use a tripod to hold the camera steady. Position the camera and tripod roughly in the center of the paper and raise the camera just enough to see the top of the artwork. Make sure the camera's shadow isn't being cast on the artwork. Pull the camera and tripod back and readjust its height if it does.

Lens Options: A normal zoom lens is fine for photographing 3D artwork. Use an aperture, or f-stop to make sure the artwork is sharp from front to back. ***See Lens Options chart above.***

Photographing Small Artworks
If you are photographing a smaller object, like jewelry, you might need to use a smaller aperture, such as f/22 for Full-frame 35mm and APS-C, or f/16 for M 4/3s, to make sure that both the front and back of the object are in focus.

Adjust the zoom lens of the DSLR so that the artwork fills most of the viewfinder of your camera, either horizontally or vertically. Press halfway down on the shutter release button to focus the camera. Press all the way down to take the image. If you need another view or angle of the artwork, turn the artwork to get the view you want, keeping the artwork in the center of the paper, rather than move the camera. Refocus, reframe the view, and take the photograph. Continue shooting different views if needed.

With either smartphone or DSLR, if the image appears too dark or too light, use exposure compensation to correct it and reshoot it. Make sure each image is sharp and correctly exposed before going on to the next view or artwork.

PHOTOGRAPHING INSTALLATION ARTWORK

GENERAL TIPS

Photographing artwork on location in an installation has its own challenges. In some ways, it's easier because you are using less equipment; probably just your smartphone or DSLR. But you must deal with the lighting that is there and the setting for the artwork. You won't be able to change either one. You'll also have to work around other people, like exhibit visitors.

1. Eliminate distractions and concentrate on the artwork. Do this by choosing the best viewpoint(s) for the camera and minimizing the background behind the artwork.

2. You will likely need permission to photograph in galleries, museums, schools, and parks. Make sure it's okay to photograph the artwork before you do.

3. Photograph in one kind of light and use the correct White Balance setting for that light on your smartphone or DSLR.

4. Think about the position of the sun if photographing outdoors, and how the artwork will be lit by it. Plan to photograph the artwork when the sun is in the right position, if it fits your schedule.

SET-UP

With a smartphone, hold it steady with both hands. Make sure you are focused on the part of the artwork that you want. Make sure the flash is turned off. Take the image. Check the image you took on the smartphone and make sure it is sharp. Retake the image if you need to. ***See Image 13.***

With a DSLR, if possible, use a tripod to hold it steady. However, check with the gallery or location first. Many galleries and museums don't allow tripods, even for outdoor locations. In that case, you must shoot handheld, without a tripod. So, if you have image stabilization, use it.

Also, turn off your flash. Museums never allow flash photography. The light from flashes is too intense and can be harmful to certain kinds of artwork, such as paintings.

Galleries and museums often have low light levels, so set your ISO anywhere from 400 to 3200 ISO. Higher ISO settings give you faster shutter speeds for sharper images. But higher ISO settings increase the visual noise in the images, which reduces detail. It's kind of a balancing act. Keep your ISO high enough that you are getting sharp images, but try to keep it low enough to avoid excessively noisy and grainy images.

Image 13: Hold smartphone steady against a wall.

Image 14: Complete view of installation.

PHOTOGRAPHING ARTWORK

Installation artwork can be hung on a wall, the ceiling, or placed on the floor. Depending on the artwork and its size, it may appear in all three areas of the exhibition space. Many times, installation artwork is meant to be viewed from different angles. And because of the complexity of the artwork, it may be that one view isn't enough to capture the entire artwork. You might need to take several images from different angles and distances. ***See Images 14, 15, and 16.***

Image 15: Partial view of installation.

Image 16: Detail shot of installation.

PHOTOGRAPHING INSTALLATION ARTWORK CONTINUED

When you first see the artwork, take a moment to look closely at it, then walk around it, and take in the different views it offers. After examining the artwork, decide on the main view that captures most of the artwork. It could be directly in front and centered on the artwork. This is where you'll start. ***See Image 17.***

Then try walking around the artwork and photographing it from different angles. Go for the bird's eye point of view, holding your smartphone or camera as high as possible. You can use the large LCD screen on the back of your DSLR to frame your shots when you do this. ***See Image 18 on page 13.***

Go as low as you can with the ant's eye view. Just angle the viewing screen so you can see it clearly enough to frame the image. And don't lay down on the floor when you do this; you don't want to trip anyone in the gallery. ***See Image 19 on page 13.***

Then get closer or use your zoom to photograph small details of the artwork. Sometimes large artworks are made up of tiny details that aren't clearly visible from across the room. Get as close you can and focus on those details.

There are times you could be photographing artwork when the exhibit is open to the public. This means that other people will be there when you are working. There are three ways to deal with other people in this setting:

1. Wait until no one is in the picture when you take the image.
2. Politely ask people to step aside when you take the photograph.
3. Include people in the images.

You might not want people in your shots every time, but sometimes this is a good idea. People add scale to an image and give an idea of how big the artwork is. Or if there is an interactive element to the artwork, you can show people interacting with it, which adds another dimension to your images.

Finally, if an artwork installation has moving parts, like a kinetic sculpture, consider using the video camera setting on your smartphone or DSLR to capture the movement. You can also use video to walk around the artwork, showing its scale and location better. It's a great way to fully document the artwork.

Image 17: Position yourself at eye level with the artwork.

Image 18: Bird's eye point of view.

PROCESSING AND STORING IMAGES

There are several image editing programs and apps to process, crop, and color-correct your images, including low cost or free alternatives. If the background around the drawing is visible, simply use the Crop tool to eliminate it and then save this new image.

You can store your images on your smartphone, computer, or use one of the many cloud storage options. Using cloud storage lets you access the image at any time from any computer or mobile device.

Keep images as PDF or JPEGs to ensure they can be used for multiple purposes on different platforms; and use a naming system to save your files, such as your last name and the title of the drawing.

Image 19: Ant's eye point of view.

GLOSSARY

Aperture A hole within a lens, through which light travels into the camera.

Exposure Refers to the amount of light and the duration of time that light is allowed to expose film or a digital-imaging sensor. Exposure is controlled by f-stop, shutter speed, and film speed.

F-Stop A numerical representation of the diameter of a lens' aperture. The "f" stands for the "focal length" of the lens in a fraction. The smaller the f-number, the bigger the aperture and the less depth of field. The bigger the f-number, the smaller the aperture and the greater the depth of field.

ISO (International Standards Organization) The standardized numbers used to measure a film's speed.

Resolution The sharpness and fine detail in an image. In digital cameras, this is measured in pixels per inch (ppi). In film cameras, it is measured in lines per inch (lpi). For both types of cameras, the higher the number, the higher the resolution or sharpness of the images produced by the camera.

White Balance A feature many digital cameras use to accurately balance color. It defines what the color white looks like in specific lighting conditions, which also affects the hue of all other colors.

Zoom Lens A lens with variable focal lengths that can continuously change from wider views to closer views. This makes the subject appear closer or farther away.

SNAPSHOT GUIDE TO PHOTOGRAPHING ARTWORK

SMARTPHONE CAMERA

There are specific camera apps for both iPhone and Android that offer extended features and work well for photographing artwork. Reference your App Store to choose one that best matches your needs.

Settings:

- If you want to make a print of your artwork or plan to submit your image to a print publication, shoot at the highest resolution your app offers.
- Leave your smartphone on Auto Focus.
- Turn off the flash setting.

DSLR CAMERA

Digital Single Lens Reflex (DSLR) Cameras are specifically designed to take photographic images. They offer more options for photographing artwork and in general will produce higher quality results.

Settings:

- Select the largest file size. This can be found in the camera's menu under Picture Size.
- Choose JPEGs to shoot.
- Don't use a flash.

SET-UP

Photograph the artwork before it is laminated, framed, or under glass.

Use a neutral yet contrasting background. This is especially important when photographing 3D artwork.

Make sure your background and foreground are clear of all distractions; concentrate only on the artwork.

For 2D Artwork:
Use a full sheet of white foam core and tape it to the wall with painters' tape. Painters' tape won't hurt the walls. Use pushpins or double-sided tape to hang the artwork on the foam core.

For 3D Artwork:
If you have access to large rolls of paper, you could tape a piece of the paper to the wall and floor in a curve. Then place the artwork on the paper.

LIGHTING

Try to set up the artwork in an evenly lit environment, then you won't have overexposed or very dark areas.

If using overhead fluorescent lights, do your best to use one light source. Make sure the windows or doors don't let in the blue daylight.

If you shoot outdoors, do this on either a cloudy day or shoot in open shade.

GENERAL TIPS

Leave space around the artwork or subject. Don't overfill the frame. Make sure not to crop any part of the artwork. Make sure the whole artwork is in the photo.

Take several pictures in case some are out of focus or blurry. Check the image you took on the smartphone and make sure it is sharp.

With a DSLR, use a tripod to hold the camera steady. You can also find tripod mounts for smartphones.

PHOTOGRAPHING 2D ARTWORK

Make sure the camera or smartphone is level; it should be centered in the middle of the artwork and parallel to it. This prevents distorting the image.

Get close enough to the art to fill most of the screen of your smartphone or DSLR. Don't use the Zoom feature on your smartphone's camera app to get closer to the artwork. You can use the Zoom feature on a DSLR lens without lowering the resolution.

PHOTOGRAPHING 3D AND INSTALLATION ARTWORK

3D and installation artwork is meant to be viewed from different angles. One view may not be enough to capture the entire artwork. You might need to take several images from different angles and distances.

Decide on the best angle(s) and/or view(s), and fill the screen or viewfinder with the artwork.