

DIY Photography of Artwork

by Phillip Schubert

So, you need good images of an artwork for submission or promotion – the key word here being “good,” as low-quality photographs look awful, misrepresent their subject and are routinely dismissed, discarded, rejected and rubbished without a second glance. Short of calling in an expensive professional, what methods can you use to get the best results? Spoiler alert: it’s going to be somewhat fiddly!

What you’ll need

- This article
- Plenty of time and an abundance of patience
- A darkened room with ample space in which to work
- Tape measure
- Two spirit levels, one long and one pocket-size
- Tripod
- Camera (digital or film) with zoom lens
- Cable release or self-timer
- Two or more 250-watt (or brighter) daylight-balanced tungsten lights with wide reflective hoods and spring-clamp handles
- Extension cord and multiple outlet power bar
- Colour bars card
- White card (digital images) or 18% grey card (film images)
- Pen or newish pencil
- Come to think of it, a willing assistant would be nice

Background

Use a plain, clean, smooth, uniform background, free from extraneous objects such as power cords, light switches and electrical outlets. Choose a background that is in tonal contrast to the artwork being photographed. For paintings, framed works and most sculptures, this usually means a white or off-white wall or backdrop. The basic rule is “lighter colours recede, darker colours advance,” so a light background will reinforce that the artwork is in the foreground. However, if the artwork you’re photographing is a very light colour (like a plaster sculpture), you probably don’t want to use a white background. Also, it’s usually best to avoid using a bed sheet or other fabric for the background, as the creases, folds and undulations can produce uneven and distracting results. Consider purchasing a single-colour or gradient seamless background paper from a studio supply store.

Artwork setup

Position the artwork so that its vertical centre is not higher than the maximum nor lower than the minimum height of your tripod (for large works, you may have to place the tripod on a platform or table). If you’re shooting a series of wall-mounted works one at a time, start with the smallest one first, so that the subsequent, larger works will cover the holes in the wall as you go. I’d suggest keeping the centres of the works consistent as you go (yes, by careful measuring), so that you don’t have to keep repositioning the camera. Use the long spirit level to get the art hanging perfectly straight. It’s best to install the work flush to the wall, so that the top doesn’t kick out to give the work a forward lean; this is done by

making sure the attachment points are quite near the top edge of the artwork, without exposing the hardware.

Sculptures should be placed at least an arm's length from the wall behind them, to enhance the sense of depth in the photograph. If you're using background paper (recommended), pull its leading edge forward and place the sculpture on top of it, letting the paper curve up gently as it transitions to the wall. This will eliminate the line created between the floor, table or plinth and the wall.

Lighting setup

You'll need to control all of the light that falls on the artwork. It's best to darken the room by covering the windows and/or to work after sunset. Turn off the room lights when adjusting the lighting and when taking the photograph.

The lights indicated above are inexpensive. The fixtures (wide reflective hoods with spring-clamp handles) are available at most hardware stores. The daylight-balanced globes (bulbs) can be purchased at a studio supply store. Do not use household globes, as they are not colour-balanced; they produce light that is skewed toward the red end of the spectrum. Your brain corrects for this when it interprets what you see, but the camera doesn't – it can only see and record what's there. Also, buy extra globes, as they tend to burn out when you're in the middle of using them!

You can usually clamp the lights to the backs of chairs. Depending on the size of the artwork, position them one to three metres (yards) in front and to the left and right of the artwork, directed toward its centre at about a 45-degree angle. Large-scale artworks will require more lights (4 to 8). You'll want to light beyond the edges of the artwork, and you'll need to experiment with the placement to achieve even illumination. A good test is, if the space around the artwork appears to be evenly lit then the artwork probably is, too. Look carefully at the lit artwork for any hot spots or reflections of the lights in the surface of the work. Move the lights further left and right or up and down to eliminate these. To fine-tune the lighting, stand in front of the artwork facing the lights and hold a pen or pencil even with the artwork's centre and parallel to the floor, with its tip against your white or grey card; if the shadows it casts onto the card look even in tone and angle then your lights are correctly placed. Turn off the lights now until you're ready to shoot, so they'll last longer.

If you're photographing a video artwork, you don't need to light the screen, but you still definitely need to darken the room.

Camera setup

It's best to use a camera that allows you control over focal length, focus, exposure and flash. Turn off the flash, because you've already optimised your lighting. Using the flash will create a big hotspot right in the middle of the image.

If you're using a digital camera, set it to use the highest resolution.

Mount the camera onto the tripod. Align it so that the lens points straight ahead exactly midway between two of the tripod legs. Next, with the tripod standing on the floor, use the pocket level on a flat part of the camera to centre its right-to-left and front-to-back tilt; the idea here is to keep the plane of the camera's image collecting surface parallel to the surface of the artwork being photographed (more on this later). Now, adjust the tripod's vertical shaft so that the camera's lens is the same distance from the floor as is the centre of the artwork (more measuring, what fun!).

Looking through the camera's viewfinder, adjust the zoom so that the artwork fills the frame as much as possible (without cropping it), with the following caution: never have the zoom set on wide. For a powered lens, you need to have the zoom set in the middle of its travel or higher. For a manually adjustable zoom lens, the focal length needs to be at least

50mm. It's best to be farther back from the artwork and zoomed in, rather than closer to the artwork and zoomed out. A zoomed-out (wide angle) setting will distort the image, giving it a curved and warped appearance.

Next, place the tripod so that each of its front feet is the same distance from the artwork. This puts the camera pretty much parallel with the artwork's horizontal axis. "What's so important about being parallel?" you may ask. Simply put, it's how we optically obtain the correct perspective in the photograph. In the case of a rectangular artwork on a wall, here's what you're aiming for: 1) the artwork is installed flush (plumb) against the wall and is level; 2) the centre of the camera lens is aligned with the centre of the artwork; 3) the camera is level and plumb (not tilted left, right, forward or backward); and 4) the lens is not zoomed out to wide angle. If any one of these four conditions isn't met, the rectangle of the artwork will look like a trapezoid or a curvilinear quadrilateral in the photograph (and you thought your high school geometry would never come in handy). If the artwork is on a backward or forward lean, adjust the tripod's front-to-back tilt to match the angle of the artwork, and realign the centre of the lens. The same principles hold true for a sculpture, with the only difference being which of its three-dimensional planes you want to face the camera.

Looking through the viewfinder, make any fine adjustments necessary to the camera's orientation to bring about the correct perspective, and then look again. If you're using a manually adjustable lens, now is a good time to bring the artwork into the sharpest possible focus. I've found it helpful to zoom all the way in to focus and then zoom back out again to capture the entire artwork in the viewfinder. Remember to keep all the edges of the artwork visible, with just enough space around them.

Works under glazing

If you're photographing an artwork that is framed under glazing, you might notice at this point that you can see the tripod and camera, and maybe yourself, reflected in the glazing. To eliminate these reflections, drape a piece of black fabric around the tripod; to hide the camera, cut a round hole slightly bigger than the lens into a piece of black paper, and tape the paper over the camera. Wear black yourself, and simply stand out of the way at the moment of exposure. Throw dark-coloured clothing over anything else behind the camera that causes a reflection. As long as the space behind the camera is sufficiently darkened, this should eliminate any extraneous reflections.

Alternatively, you can prop or suspend a dark-coloured barrier in front of the camera, with a hole cut out for the lens. It will need to be large enough to mask the reflected objects from the glazing. A large piece of dark fabric or an expanse of background paper works well for this.

Don't forget to clean the glazing prior to shooting it!

Set the exposure

If you're photographing onto film, your camera is calibrated to correctly gauge exposure when its built-in light meter is reading a field of 18% grey. You can purchase a grey card from a photography supply store. With the artwork lit, hold the grey card in front of it and zoom the camera lens up to fill the frame with the card as much as possible. Take a light meter reading, and set your camera's exposure to the indicated setting. Keep in mind that you'll probably want decent depth of field (the ratio of sharpness in front of and beyond the point of focus), which is achieved by using smaller f-stops (aperture). Usually f8 or higher is sufficient.

If you're photographing digitally, the camera calculates exposure from white balance. In this case, do the same as above but instead of using a grey card, use a white one and set

your camera's white balance to the card. If your camera allows you to control the aperture, f8 or higher is recommended for adequate depth of field.

In case you're photographing a video artwork, you'll need to use a shutter speed not faster than 1/15 of a second for a television, or 1/4 of a second for a computer monitor. This is because of the frame rate inherent to video. Like a motion picture, the video image is made up of still frames, which are "refreshed" onto the screen, one after the other. Our eyes perceive this as a continuous image, but a shutter speed that's too fast will capture only the transition between frames, which will appear as a dark band across the image. A television's refresh rate is around 30 fps (frames per second), while a computer monitor's is around 8 fps. So the idea is to allow enough exposure time to capture at least one complete frame. Fill the viewfinder with the screen to calculate exposure. The camera's light meter will average the tones and usually arrive at an acceptable exposure; however, I would recommend "bracketing" the exposure, i.e. taking multiple photographs at the same shutter speed, with f-stops incrementing from one f-stop overexposed to one f-stop underexposed. Again, don't forget to clean the screen before shooting it.

Getting the colour right

It's a good idea to include a colour bars card in the outer margin of the photograph, especially if you're planning to print the image. The concept is that if the printed colours match the ones on the colour bars, then the colours are correct for the whole image. Of course, sometimes you don't want the colour bars to be visible in the final image. In this case you should at least take a separate picture of the colour bars under the same lighting conditions as the artwork. Then the same printing conditions that correctly reproduce the colours of the colour bars should faithfully reproduce the colours in the artwork.

Take the picture...

...finally! If you're at this stage of these lengthy and excruciatingly detailed instructions, you're ready to immortalise your efforts via the mystic alchemy where photons, hurtling across space and time, are captured in the wink of an eye and struck against the light-sensitive surface of your emulsion or sensor, leaving their impressions indelibly frozen within. But wait! Don't hit that shutter button just yet! The motion of your finger pressing down can be enough to cause blurring vibrations or even worse, movement of the camera's meticulously established position. The best way to minimise shift or jitters is to use a cable release, which is a cord plunger that screws into the shutter button. If you don't have a cable release, or if your camera doesn't accept one, never fear! A workaround presents itself in the form of the camera's self-timer. By delaying the time between pressing the button and opening the shutter, any vibrations should subside by the moment of exposure. Just be careful not to budge the camera out of position when you press down.

Epilogue

That's all there is to it. Follow these simple directions and you, too, can experience the personal satisfaction of producing your very own photographic documentation of the artworks that mean enough to you to go to all this trouble. Before, I'll bet you thought it was just point-and-shoot! See why professional photographers are so expensive? Now go treat yourself to something nice with all the money I just saved you.