WOODWORK
A MAGAZINE FOR ALL WOODWORKERS

How to Photograph Your Work

Photography shows people who might never see your work in person what that work looks like. Although a photograph can never have the tangibility of the work itself, it still has a tremendous power to communicate-or miscommunicate-what the thing is like. If you've done a piece you're proud of and want to try to publish it or to have a print of it in your portfolio, you owe it to yourself to get decent photos. If your pictures are out-of-focus, the colors sickly, the lighting harsh, the perspective distorted, the backgrounds distracting, no magazine will print them, even if you've just built a masterpiece. It isn't always the best work that gets published-it's the best photographs, best work or not.

You do not have to be a professional photographer in expensive sunglasses to pull this off. You can take studio-quality photos of your work with a modest investment in equipment, some of which you might already own. This is the equipment that is needed:

- a 35 mm. single-lens-reflex ("SLR"), camera body with a built-in exposure meter
- a "short telephoto" lens and lens shade
- a tripod
- a cable release
- a pair of lights, light stands and umbrellas or reflectors
- a backdrop of unobtrusive, neutral material.
- the proper kind of film

The camera body can be either a manual focus or an autofocus type, but if autofocus it should have an override that permits focusing manually. The lens should be from somewhere in the "short telephoto" or "portrait" range of focal lengths, because these give pictures the most pleasing, natural perspective-the most common focal lengths in this range are 85 mm., 90 mm., 100 mm., or 105 mm. You can use a longer (which is to say, a higher magnification) focal length, 135 mm. to 200 mm., but these will force you to stand further back from the subject than may be practical in most rooms, and may increase the difficulty of keeping every part of the work in sharp focus (as focal length increases, the "depth of field," or the zone you can keep in sharp focus front to back, decreases). Some of the best of the portrait- or short-telephoto lenses also have a "micro" or "macro" feature that enables you to shoot details closer in. Whatever lens you use, be sure to use its matching lens shade, to block out stray flare or glare from your lights.

In a pinch, zoom lenses will work for shooting furniture, but the optical compromises involved in their design will mean your pictures won't be as good as those shot with a lens of fixed focal length. Also, except for situations that demand shooting large objects like beds or dining tables in the confined space of small rooms, it's best not to use wide-angle lenses, because their optics distort the proportions of most objects.

Besides a camera with the right lens, you need a tripod to minimize vibration and keep the camera still, and a cable release (or the camera's delayed self-timer) to trip the shutter. There is much less chance of blurring the image if you aren't hand-holding the camera, or pressing down on the shutter button directly with your finger, snapshot style.

If you are shooting for publication, slides, or "chromes," are much preferred to prints from color negative film. (While slides or transparencies are all that many publications will accept, some publishers, because of recent advances in digital photo-scanning technology, are now beginning to accept glossy color prints.) Whether you're shooting slide film or print film, however, the approach to lighting is basically the same: you can work with flash, or even with available light-with daylight streaming through the windows, or in

open shade-but on the whole, it is easier to control the look of the photo by using tungsten lighting, or "hot lights" and to shoot in an otherwise darkened room. Tungsten lights come in the form either of photo-floodlights or-better, but more expensive-quartz halogen bulbs, in special reflectors.

Shooting slides using tungsten lighting, however, requires that you use tungsten slide film matched to your bulbs' color value, or "color temperature." If you have tungsten lights but can only find "Daylight" slide film, you can use a correcting filter (no. 80A) but the results won't be quite as good. If, on the other hand, you shoot slides with flash or in daylight instead, then you must use "Daylight", not tungsten film. With either type film, the relatively slow and finegrained films rated at ASA 25-ASA 100 will give the best results provided exposures are no longer in duration than one second (with longer exposures, funny things can happen to the colors.) After the shoot, don't drop off slide film at the drugstore. Have it processed and mounted by a professional color lab instead-the cost is not that great. In photo jargon, the code name for the process is "E6." Most labs can process and mount E-6 within two or three hours.

Print film - if prints are what you need - is not specifically corrected for tungsten, daylight, or any other light source. The colors of any print are only a printing lab's interpretation of the color negative. Interpretation is by definition subjective, but you can help the lab get it right by telling them what kind of light the film was shot under. The lab can then make adjustments when printing to make sure colors look as they appeared to you when shooting. If you don't clue in the lab about your lighting, your prints could come back with an unacceptable reddish orange cast, or, at the other end of the spectrum, a bluish or a greenish one. If that happens, a good lab will often re-do them at no extra charge, though they may not be too cheerful about it. (A side note: don't shoot either kind of color film - slide or print - under fluorescent lights. Flourescents impart a nauseating, greenish cast which makes wood and people's skin look awful.)

The slickest approach to lighting is to use electronic flash, but without fancy studio equipment, you can't study how your lighting setup looks in the brief moment of a flash. Unless you use expensive Polaroid film for preliminary lighting tests, you have no real idea of the outcome till you get your film back. Working on a budget, you have much more control using hot lights instead.

There are conventions about how and where to set the lights when shooting works such as furniture, carvings, or turnings. Light bulbs or flash guns (which in photo slang are often mistakenly called "strobes") should not be pointed directly at the work but faced back into reflectors, such as photo umbrellas, which then bounce and disperse the light back onto the subjects, creating softer light with fewer hot spots. For reflectors, you can also use such things as sheets of white Styrofoam insulation board or Foam-Core, as well as low white ceilings and nearby walls. If the light striking the subject is still too hot visually, try diffusing it through a translucent vinyl shower curtain or something similar (take care, though, not to let lights get close enough to melt the plastic).

A common setup for shooting furniture is to have the lights positioned roughly six to eight feet away from the object at 45° off either side of the lens and at a height of about seven feet off the ground. Rather than robotically following a formula it is better to experiment, and see how the lighting actually looks through the viewfinder, shifting things around if you don't like what's happening with the shadows, reflections, glare, etc. Sometimes, for example, things looks good when one light lights the backdrop, the other the subject, or when one light is positioned high up and just off to the side of the camera, and the other 45° and some distance away on the other side. Whatever the lighting setup, be especially attentive to keeping glare and hot spots off the image.

Photographing turnings, forms might look fuller with the lights set 180° apart, or lit from below as well as or instead of above, the object set upon a surface of sandblasted or frosted glass or Plexiglas.

Backgrounds must not be distracting. When shooting on site rather than in a controlled studio setup, a neutral background like a truly blank wall (no outlets, no electrical cords, no dust-bunnies) and clean floor will do, but in general, photos shot against a backdrop are much to be preferred. Paper backdrop material, called "seamless," is available from photo supply houses in rolls 9 feet and, in a few colors, 12 feet wide. The roll of paper is suspended from a horizontal pole securely supported at both ends. Carefully unroll the paper so that it drops plumb and drapes, without crimps, to a softly curved cove on the floor (which should be swept clean underneath), and then rolls out ten or twelve feet along the floor. Even before you unroll it, weight the end of the paper (tape it to a length of thin wall conduit or something similar, which will function something like the stiffening stick used to weight the bottom of a windowshade). Remove your shoes and in your stockinged feet set your object down carefully on this "sweep" (another word for

"seamless"), positioning it far enough forward of the "wall" so that the shadows cast by the lights don't curve suddenly back up the sweep. A middle gray color sweep works well for shooting almost anything made of wood. White is nice too, and so, sometimes, is black, but both are hard to keep clean, and may confuse your camera meter, forcing you to compensate to get the right exposure. If the meter reading is suspicious, take the camera off the tripod and meter manually, up close, right off the subject - not off the backdrop - taking care not to block the light that will be falling on the subject, and set your exposure for that reading, ignoring what the meter says when the camera's mounted again back on the tripod. Another method is to meter off a "gray card" held in front of the object. Gray cards are available from most camera stores. Yet another method is to take an "incident light" (rather than the in-camera meter's "reflected light") reading with a separate hand-held meter.

When the shot is all set up, use the camera's depth-of-field preview button to check that the whole piece will be in focus front to back when the lens stops down to the set aperture (a rule of thumb is to focus on a spot or imaginary plane parallel to the lens about one third into the depth of the work). Shoot one or two overall views of the piece, perhaps trying a few variations, changing not only the lighting setup but also the angle of view, and possibly, the camera's height. Generally, furniture looks better shot from lower down, from about the height of eye-level when seated, not standing. Compose with the camera positioned vertically if vertical is a better way of framing the image, e.g., when shooting a grandfather clock or a ladderback chair. Whether the composition is vertical or horizontal, try to keep the verticals of the object (legs, posts, etc.) parallel to the edge of the picture frame, and be bold - fill the frame with the object, so it doesn't rattle around like a lonely B-B in a big bowl of space.

It should be noted that print film, in comparison to hypersensitive slide film, is much more forgiving of exposure errors. Shooting slides, you really have to try to nail the correct exposure, whereas an under- or overexposed negative can still yield a decent print. To be absolutely sure of getting a good exposure when shooting slide film use the technique known as “bracketing,” i.e., shoot exposures a half-stop above and below what your meter says. If you're confident your exposure is accurate, you might consider shooting duplicates while you're at it, to avoid the greater expense of having duplicate slides made later on.

Your overall views of the piece will make people want to draw in closer, so shoot some details too. The details represent the world you were in when you were building the work, and photos of them can carry great meaning to a viewer (especially another woodworker) who might never get to see the piece in person. Photography is a matter of seeing for strangers what they cannot be there to see for themselves. You are their eyes. The trick is to try to detach yourself from your own familiarity with the piece and see it for others for the first time. In the process, you can learn a lot about your own way of looking at things, and it can bring a sharpened perception to the next work you design.

Recommended film and equipment:

- Tungsten color slide film: Ektachrome Professional 64T, Fujichrome 64T
- Daylight color slide film, for use with flash: Fujichrome 100D, Fujichrome Sensia 100, Fujichrome Provia 100, Ektachrome 64 or Ektachrome 00
- Black and white films: Kodak Tri-X 400 for action, low light, and people at work; Kodak T-Max 100 for furniture, still-lifes
- Cameras: Nikon, Canon, Olympus, Minolta, or Pentax are all good. Older manual models of these are in some ways preferable, because newer automatic cameras often lack the critical depth-of-field preview feature. For used equipment, check Shutterbug, the monthly camera classified-ad magazine.
- Lenses: The author can recommend these two from personal experience:
    - Tamron 90 mm ff2.5 manual focus Tele/Macro
    - Nikon 105 mm ff2.8 manual focus Micro-Nikkor AIS

  (Both are excellent for overall shots and perfect for shooting details. Besides a camera company's own brands, which are always more expensive, good after-market lenses are made by Tokina, Vivitar, and Sigma, as well as Tamron.)
- Tripods and tripod heads: Bogen, Slik, Gitzo
- Hot lights: Smith-Victor makes inexpensive light-stands and reflectors for photofloods. For quartz-halogen, Lowel Tota-Lites are very good, but expensive. Jury-rigged setups using arrays of ordinary clamp-on reflectors with household tungsten bulbs have also been known to work: instead of facing into umbrellas, the lamps are aimed directly at the subject through homemade fabric-covered diffusing frames.
- Light stands: Bogen, Calumet, Giotto

- Umbrellas: Photogenic Eclipse, Photoflex... 30", 32', or 45" (best) dia.

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