

Manual Exposure, Step by Step

What you need to know in advance: *Be sure you fully understand how your camera works in manual exposure mode. All models and brands are slightly different, so study your owner's manual. If your camera is borrowed or older and you have no manual, search online. Most are available as downloads from the manufacturer's Web site or elsewhere, and some geek may have made a YouTube video about it. You can also ask me for help in figuring it out. Be sure you know how the meter tells you that an exposure is correct. You also want to be sure to know what your meter sees through the lens. Is it a center-weighted or spot pattern? A multi-segment pattern? You will need to fill all of it's view with a middle tone for correct exposure to be ensured. You will also need to know how to set your camera for manual focus.*

Step 1: Evaluate the scene

When I walk into space — indoors or out — the first thing I do is look at the light there. Is it uniform? Or am I looking into the shadow side of a face if I aim a certain direction?

Where is the middle-toned object? Is it someone's clothes? Or should I use my hand or something (like a gray card or a fleece) that I have with me?

What kind of image am I expecting to make? Do I need to stop the action or do I want a specific depth of field?

Where is my main subject? What direction is he or she facing?

Step 2: Set either the desired shutter speed or desired aperture

If I am most concerned about stopping action, for example, I will first set my shutter speed to one that will stop the action well for me. For example at a bike race I might choose 1/500 or 1/1000 sec. to make sure the action is caught. If I want the bikes to blur I will choose a speed slow enough for that to happen to the bikes but not the surrounding still objects — perhaps 1/60 sec.

If my biggest concern is a wide aperture to isolate a subject I will first open the lens aperture all the way — to the smallest number, perhaps f/2.8. If I am most concerned with having deep depth of field to get all the people or details sharp I will set my aperture to the middle of the range or to one of the smallest openings (a higher number — like f/16).

Step 3: Adjust the exposure

If my subject is wearing middle tones or has a middle complexion I will fill my meter's point of view with them to set the exposure. If I can't get close enough I will hold the palm of my hand (or a gray card or middle-toned object) at the same angle as their face and read the meter from it. Be sure your palm or other object is in the same light as the subject.

If my most important tool for that picture is the shutter speed, I will leave it set to the desired one from step 2, and adjust the aperture until the meter read a correct exposure. If I get there with no trouble I'm ready to shoot.

If adjusting the aperture doesn't get me to a correct exposure I have two options: I can then either adjust the shutter speed a little (faster or slower) until the meter says all is good, or I can adjust the ISO of a digital camera to give the sensor more or less sensitivity.

If aperture is most important to that shot I will use the desired aperture from step 2 and then adjust shutter speed until the meter tells me the exposure is correct. With this one I need to stay aware of what that shutter speed ends up being. Is it so slow that I can't hold the camera steady enough? If so I need to rethink what I'm doing or raise the ISO to allow my desired aperture and shutter speed combination.

Step 4: Compose, focus and shoot.

Aim your camera to the subject and look at what is in the frame. Are you close enough? If not, move. As long as the light on your subject is the same, no exposure change is required (even if your meter looks freaked out — it's not aimed at middle gray anymore). Fill your frame with the important stuff. Maybe that's just the subject's face, maybe that's them and the person they're talking to. Maybe it's them and the vast storytelling space around them.

Focus critically on the most important subject. An easy way to see focus is to look at eyelashes or other fine details on a face. Practice a bit so you develop an ability to see accurate focus.

Watch for a *moment*. After all is set and aimed, anticipate when your subject may do something as small as smile or frown, when they might make an interesting gesture or when they might spontaneously combust. Shoot when there is an action or a gesture.

Shoot again. Work the scene looking for new angles and new gestures. Stick with it. A pro may shoot a dozen frames of a very simple scene, capturing a variety of gestures and expressions or looking at the scene from new angles.

If the light changes or your angle to that light changes, go through steps 2-4 again. But if the light hasn't changed much, just keep shooting.