

Night and Low Light Photography- BASIC MANUAL SETTINGS

Pro-Photographer and Photography Instructor, David Denemark uses this basic blend of manual settings for DSLR cameras to get top quality images in night/low light photos. Check out all of his the advice - it always works.

First, refer to the camera's manual to find out how to set the ISO to 100 or lower. Start out on Aperture Priority and use f=16. Note the settings - if the results on the viewfinder look well exposed. That means to check what shutter speed produced a good exposure when using the f-stop =16. This gives you plenty of depth of field or sharp focus and provides the added effect of a star burst for most pinpoint sources of light. If your camera can't stop down to F=16, use the smallest you can.

AFTER YOU HAVE DONE THE ABOVE DO THE FOLLOWING.

1. Set the camera to MANUAL operation and format your memory chip.
2. Make sure that the ISO is set for 100 or lower number.
3. Leave WHITE BALANCE in the AWB MODE (AUTO) - if there is still some blue sky visible. If there is a totally black sky, then set the WHITE BALANCE to INCANDESCANT (the little light bulb icon).
- 4 Set the QUALITY MODE to its highest resolution. That sets the file capture resolution at either fine, super fine or large.
5. If you can process RAW image files in post then set the FILE FORMAT to RAW and JPEG for each image shot. At the very least, shoot in JPEG mode and your results will be fine for most uses. Shooting in RAW allows you much more post production exposure latitude.
6. Set up your sturdy tri-pod and attach the camera to it until nothing moves when it is in the shooting position. A good quality metal BALL HEAD on your tri-pod is very nice to use in the field, for night photos.
7. While adjusting the camera for the shot remember that you will be doing 3-5 exposures from the same place. The set-up should allow you to make numerous exposures without moving the camera or visual plain in the viewfinder.
8. Try to get an interesting vantage point and made sure that your subject has some dramatic perspective. Look at all four corners of your viewfinder to make sure that your perspective is correct and level. When choosing your lens remember that the longer the lens that you use, the more dramatic the final image will be. It means getting farther away from the subject. Back up a little more and shoot loose to provide cropping options of the image without much loss of quality, sharpness and color.
9. Set the f-stop for 16 and the shutter speed to the time from your best test photos done earlier.
10. Turn OFF your IMAGE STABILIZATION on your lens if you are set up on a tri-pod. The "IS" will actually create a slight blur in the photo, so turn it off. You can leave the auto focus on the lens on as long as your test photos look sharp. If they are soft, get close to sharp focus in auto and then tweak your focus in manual mode before taking the photos. Remove any filters from the camera but leave the lens hood on if you have one on the lens. Make sure your lens front element is clean and free of dust.

NOW YOU ARE READY TO MAKE SOME EXPOSURES

1. Start taking exposures using the built in timer and or a remote shutter release. If your camera has neither type of release then carefully press the shutter button with the tip of your finger or a pencil (eraser end). **DO NOT HOLD ON TO THE CAMERA OR TRI-POD.** Once the shutter is released get back away from the camera. This prevents you from shaking the tri-pod during the time exposure.
2. Leave the f-stop on 16 and bracket your exposures by changing the shutter speed only.
3. Make 3 exposures on each side of your best test photo. Three will be a little lighter and three a little darker.

Do this in 2x exposure jumps. If the f-stop at 16 and shutter speed at 2 seconds looked good then shoot six more exposures to get a good series.

SAMPLE EXPOSURE DATA: Set f-stop @16 and take 3 exposures at lighter settings of 2,4,8,10 seconds and 3 exposures at the darker settings of 1,1/2,1/4 seconds. Note: seconds have an (" or inch mark) after the number in the viewfinder info. Six seconds would look like 6" in the viewfinder for the indicated shutter speed.

This will make sure you cover the entire exposure range so you can select the best image later and allows you to make nice high dynamic range (HDR) combo images in post.

4. Once you are seeing good results at f-stop 16, start to stop down to f=22 and f=28 and run the series of exposure brackets. You can also read up about your camera's ability to AUTO BRACKET the exposure. If you can find the right settings you may save your self some manual exposure time.
5. After you get some good images from your first set-up, change your vantage point and or shoot some verticals of the subject. Try to do a range of exposures zooming into or out from the subject to vary the crop with each series.
6. Move the camera to a different angle on the area or subject. The time it takes to get set-up for one shot makes it worthwhile to get as many different views as you have time for.
7. You will notice that the light changes rapidly after sunset and you will have to compensate with exposure changes. Shoot new exposure series about every 5-10 minutes just before and after sunset until the sky is black.
8. **REMEMBER THE 50% LIGHT RULE.** If your subject has more than 50% dark areas, your results will be poor. Try to make sure at least half of the image area is well lit and colorful. You will notice the difference if your image is too dark and dull looking. We are looking for lots of drama and different blends of light will provide that element.

Good luck and take plenty of exposures so you have a lot of choices later. An acceptable success rate for amateur photographers is about 10% of total exposures taken.