

# How to Shoot the Night Sky (Introduction to Astrophotography)

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*The following post on photographing the night sky is by [jgomez65](#) – one of dPS's forum members.*



Several people asked me to post a simple tutorial on how [I took some night sky pictures](#). I am not an astrophotographer in any way, shape or form, nor do I have any expensive equipment. I simply read several tutorials, picked a dark spot on the beach and tried to do my best.

Anyway, here is how I did it.

## 1. What you need:

You need a camera that has manual exposure mode. Most SRL camera come with a feature called Bulb which does exactly that.

You will also need a remote control or a shutter release cable in order to minimize shaking the camera when taking the pictures.

You will definitely need a tripod

## 2. Selecting the spot to take your picture

The darker the place, the better it is. Taking stars pictures in your back yard is possible, however for better results select a place away from city lights. Those lights tend to pollute the image and make the stars less visible.

### 3. Camera settings

First, try to use a lens with a large aperture. In my case I used a Sigma 28 mm lens at f/3.5

Next, set your camera at a high ISO. I tried with both 1,600 and 800 ISO and I got good results.

Finally, in order to avoid the star trail (that is avoiding capturing the movement of the stars as the earth rotates) you have to use the RULE of 600 which is very easy: Divide 600 by the focal length of the lens you are using. In my case I divided  $600/28 = 21.42$  ( I can leave the shutter open for 21 seconds and avoid capturing the star trail)

Finally, put your lens in manual focusing and turn it to infinity focus (that would be the symbol at the end of the numbers on your lens)

### 4. Taking the pictures

Set the camera in your tripod and take at least 5 consecutive images at the stars using the correct exposure time (using the RULE of 600) Do not move the camera to a different spot or change the settings unless you are done with that series of pictures.

**Tip:** Every time I am done with a set of pictures, I place my hand in front of the lens and take another picture. That way I know that the picture where everything is black is where the series end.

### 5. Editing the images

Don't be disappointed if you don't see any color in your images. This is normal. You will need to bring the colors up in PS or any other editing software.

The first step is to stack the images. That is to superimpose one image on top of the others (not all the images, but pictures belonging to the same series). You can do this with a free software called [Deep Sky Stacker](#). Just use the default settings on the software.

The final image will be a large TIF file that you will use to bring up the colors in Photoshop.

Next open your TIF file in Photoshop and edit the curves and levels. You can follow this easy tutorial on this video:

I also edited the blue, red and green colors in the level in order to make the nebula more visible.

That's it.

Here is the original image and the final result:

**Original Image:**



**Final Image:**

Read more: <http://www.digital-photography-school.com/how-to-shoot-the-night-sky-introduction-to-astrophotography#ixzz1ddMJ5hm8>