

PHOTOGRAPHING FIREWORKS

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PREPARATION

You will need to take:

- Camera with wide angle lens (full frame equivalent 14 to 35mm)
- Tripod
- Cable release
- Seat, water, mosquito repellent

... And get there early to choose your spot close to the fireworks action, but not close to a streetlight, aiming roughly where the fireworks will go off. If you can, try to get a water reflection.

EXPOSURE AND FOCUSING

Forget autofocus and exposure metering. Everything is manual on the Bulb setting.

When you have set up your camera on the tripod, using manual focus and Live view, focus on a distant object, such as a streetlight. Focusing is now complete for the whole photoshoot. Because of the small aperture and wide angle lens, the depth of focus will be huge. Alternatively set the hyperfocal distance for the aperture you have chosen.

Fireworks are moving lights, and are photographed the same way as lightening or a swinging torch. The philosophy is that exposure time does not affect the lightness or darkness of the image, because the moving fireworks paint across the frame. Only aperture and ISO affect the lightness / darkness, and colour saturation of the fireworks image. As fireworks are set off at night, a long exposure is used. The longer the exposure, the more fireworks you capture in your image.

With the low ISO and small aperture settings below, exposure times of 30 seconds or more will be required to over-expose the ambient scene.

ISO Setting	ISO 100
Aperture	Try f/8 first. Check your first images and if the colours are washed out, close the aperture down if necessary, to get more saturated colours. You probably won't need less than f/16
Shutter setting	Bulb setting. Open the shutter and allow two or three fireworks to go off while the shutter is open. Probably about 1 to 5 seconds, just count the fireworks. Repeat while watching the fireworks.

You may want to reframe the image if the fireworks are not aligned where you want.

INCLUDE THE FOREGROUND USING AN IMAGE STACK

You may want to blend two exposures in Photoshop, one of the fireworks and another of the foreground lit by the fireworks. Don't reframe the two images. You only need to refocus on the foreground if it is very close to the camera. At the finale, when lots of fireworks are going off, open the shutter on Bulb for a couple or more fireworks. Check the image to see if there is enough foreground detail. This exposure will take 3 to 10 seconds.

To process two images as a stack of layers, open both in Photoshop.

Photoshop Menu > File > Scripts > Load files in a stack. Using the dialog box, choose your two images, then check the Align Images box.

Put the fireworks image on top of the two layers. Add a mask to the fireworks image, which will initially be white. With a black, broad, soft edged brush at 100%, roughly paint the bottom of the image to reveal the foreground image below. You may want to apply a levels or curves adjustment.

