

Photographing Fireworks

Suggested steps to photograph fireworks:

1. Start by using a Tripod
2. Use a Remote Release
3. Frame Your Shot
4. Choose the best Focal Length
5. Select the right Aperture
6. Get your Shutter Speed Right
7. Set your ISO
8. Switch off your Flash
9. Shoot in Manual Mode
10. Experiment and Track Results

1. Use a tripod

Very important to secure your digital camera to something that will ensure it doesn't move while the taking your images of fireworks. This is especially important with fireworks photography because you'll be using longer shutter speeds which will not only capture the movement of the fireworks but any movement of the camera itself. The best way to keep your camera still is with a tripod. TIP: When using your tripod shut off your vibration reduction or anti shake on your lens. (if it has one)

2. Use a remote release to further reduce camera shake

To ensure your camera is completely still during fireworks shots it is good to have a remote release device for your camera. These will vary from camera to camera but most have some sort of accessory made for them. The other way of taking shots without touching your camera is to use the self-timer. This can work but you really need to be able to anticipate shots with fireworks and a self timer will be hit and miss.

3. Plan your shot will need to anticipate the camera framing

One of the most difficult parts of photographing fireworks is working out where to aim your camera. The challenge in doing this is that you generally need to aim your camera before the fireworks that you'll be photographing goes off – anticipation is very important. Below are a few points for good camera framing.

Watch your Horizons – One thing that you should always consider when lining up fireworks shots is to make sure your camera horizon is straight for your image framing. This is important if you're going to shoot with a wide angle lens and plan to have other

items such as buildings, trees or skyline as your background. As you put your camera onto your tripod make sure it is level right from set up.

Vertical or Horizontal? – There are two main ways of framing shots in all types of photography, vertically (portrait) or horizontally (landscape). Horizontal shots work well if you're going for more of a landscape shot with a wider focal length or if you're wanting to capture multiple bursts of fireworks in the one-shot.

Remember your framing – When photographing fireworks if set up correctly you will spend less time looking in your viewfinder and more looking at the sky directly. As a result, it's important to remember what framing you have and to watch that segment of the sky. Doing this will also help you to anticipate the right time for a shot as you'll see the light trails of unexploded rockets shooting into the sky.

4. Experiment with focal length

The most difficult part of photographing fireworks is having your camera focused on the right area of the sky at the right time. This is difficult if you're shooting with a longer focal length and are trying to take more tightly cropped shots. It is better to shoot with a wider focal length. Keep in mind cropping of your wider angle fireworks shots can always be done later to get a similar impact in your photography in post processing.

5. Use apertures in the mid to small range

A common question when photographing fireworks displays is what aperture to use. Many people think you need a fast lens to get them but in reality it's quite the opposite as the light that the fireworks emit is quite bright. Apertures in the mid to small range tend to work very well we suggest shooting somewhere between f/8 to f/16.

6. Keep the shutter open, but not too long

Fireworks are a moving subject, so it's more important to get your shutter speed right more than your aperture. To capture this movement you need a long exposure. One technique that works well with fireworks is to shoot in 'bulb' mode. This is a mode that allows you to keep the shutter open for as long as you hold down the shutter (preferably using a remote shutter release of some type). Using this technique you hit the shutter as the firework is about to explode and hold it down until it's finished exploding.

You can also experiment with set shutter speeds to see what impact it will have but I find that unless you're holding the shutter open for very long exposures that the bulb technique works pretty well. Don't keep your shutter open too long. The temptation is to think that because it's dark that you can leave it open as long as you like. The problem with this is that fireworks are bright and it doesn't take too much to overexpose them. This is very important if your shutter is open for multiple bursts in the one area of the sky. By all means, experiment with multiple burst shots.

7. Use low ISO for the cleanest shots

Shooting at a low ISO is best to ensure the clean shots. Stick to ISO 100 to 200 and you should be fine.

8. Turn off your flash

Shooting with a flash will have no impact upon your shots except to trick your camera into thinking it needs a short exposure time. Switch your flash off.

9. Shoot in Manual Mode

The best results when shooting fireworks is manual exposure and manual focus modes. Auto focusing in low light can be very difficult for many cameras and you'll end up missing a lot of shots. Once your focusing is set you'll find you don't really need to change it during the fireworks display – especially if you're using a small aperture which increases depth of field. Keep in mind that changing focal lengths will mean you need to need to adjust your focusing on most lenses.

- Find Out the Direction of the Wind – You want to shoot upwind, so it goes Camera, Fireworks, Smoke. Otherwise, they'll come out REALLY hazy.
- Take as many pictures as possible.
- Be ready to take shots of the first fireworks. If there isn't much wind, you are going to end up with a lot of smoke in your shot. The first explosions are usually the sharpest ones.
- Get some black foam core or a piece of hard black cardboard and set your camera to bulb mode. Start the exposure when the fireworks start with the piece of foam core in front of the lens. Every time a burst happens, move the foam core out of the way. You will get multiple firework bursts in one exposure.

What gear you'll need

- A camera that allows you to shoot manually
- Wide angle lens is good for fireworks
- Tripod
- Shutter release cable
- Black card made of foam core or cardboard

Final thoughts ... be patient and have fun.

