

Lens Flare

Lens flare is created when non-image forming light enters the lens and then hits the camera's digital sensor. A lens flare often appears as a characteristic polygonal or circular shape, with sides which depend on the shape of the lens diaphragm. It can lower the overall contrast of a photograph significantly and is often an undesired artifact.

Flare can take many forms, and this may include just one or all of the polygonal shapes, bright streaks, or overall washed out look (veiling flare) shown above.



The image to the left shows tell-tale signs of flare in the upper right caused by a bright sun just outside the image frame. These take the form of polygonal bright regions (usually 5-8 sides), in addition to bright streaks and an overall reduction in

contrast (see below). The polygonal shapes vary in size and can actually become so large that they occupy a significant fraction of the image.

How to identify if it is happening:

Look for flare near very bright objects, although its effects can also be seen far away from the actual source (or even throughout the image). However some types of flare may actually enhance the artistic meaning of a photo. Understanding lens flare can help you use it — or avoid it — in a way which best suits how you wish to portray the final image.

Flare is thus ultimately under the control of the photographer, based on where the lens is pointed and what is included within the frame.

How to stop it from happening:

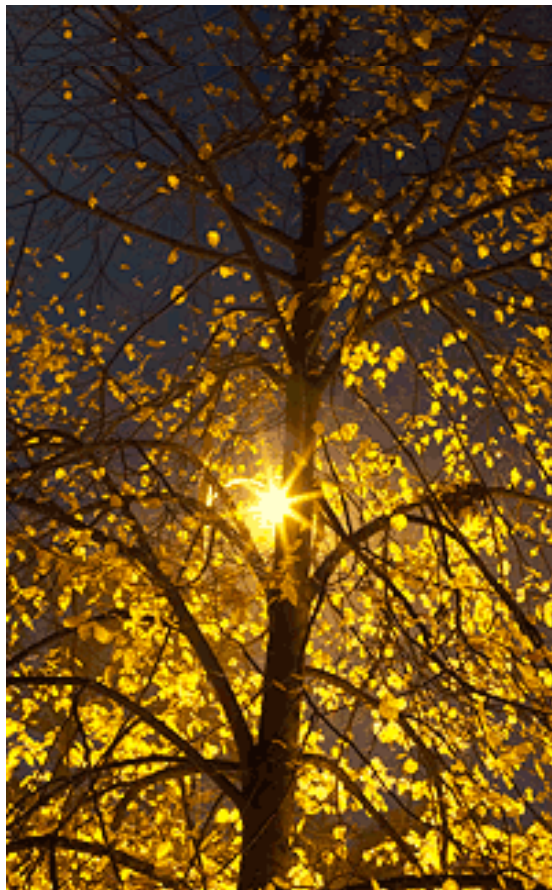
LENS HOODS



A good lens hood can nearly eliminate flare caused by stray light from outside the angle of view.

HAND SHADING

Placing a hand or piece of paper exterior to the side of the lens which is nearest the flare-inducing light source can mimic the effect of a proper lens hood.



OBSTRUCTION

Place objects within your image such that they partially or completely obstruct any flare-inducing light sources. The image on the left shows a cropped region within a photo where a tree trunk partially obstructed a street light during a long exposure. Even if the problematic light source is not located within the image, photographing from a position where that source is obstructed can also reduce flare.

LOCATION & ANGLE

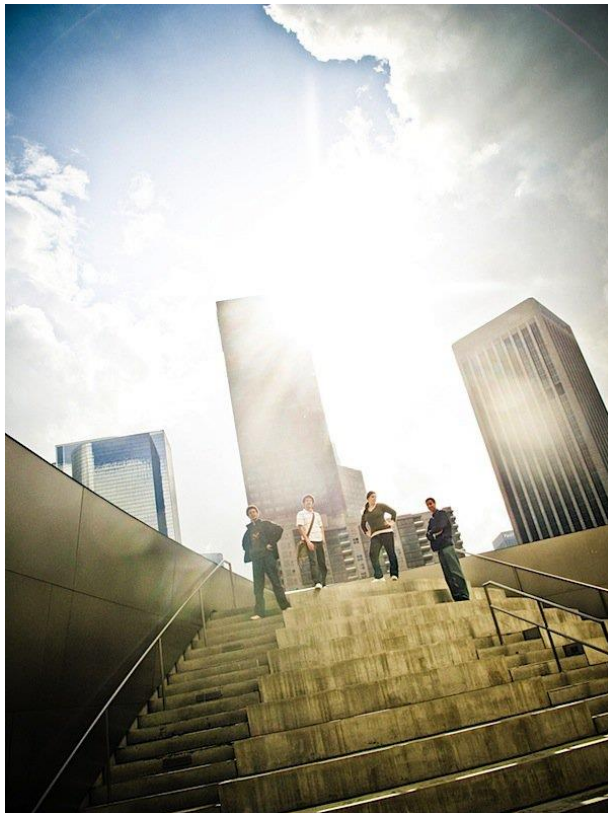
shoot with the problematic light source to your back, although this is usually either too limiting to the composition or not possible. Even changing the angle of the lens slightly can still at least change the appearance and position of the flare.

USING LENS FLARE AS AN AESTHETIC EFFECT

A recent trend among many professional photographers is the use of Lens Flare. Simple in theory, it doesn't take a lot of advanced knowledge to add this technique to your list of photographic tricks. A few considerations will help you achieve your best Lens Flare capabilities without breaking into a sweat.

1. Shoot into the Sun: Lens Flare is caused by strong rays of light directly hitting your lens and causing a slight sun burst. Capitalizing on the direction of your light is the key to capturing Lens Flare.

2. Think Silhouette: Place your subject in front of you, with their back to the sun. Your subject will be backlit as though you were capturing a silhouette.



3. Use Manual Mode: Your camera will expose the scene for the total amount of light in the photo. If you follow the camera's metering, you will be left with a silhouette as it tries to compensate for the amount of light. Shooting on Manual will enable you to over-compensate for the backlight, so your subject is perfectly lit – even with the over exposed background.

4. Shoot at an angle: Because you want an image with Lens Flare [and not simply over exposure], you need to remember one thing: Camera position to the sun. This will largely depend on what time of day you shoot. In the mornings or evenings, you will have an easier time of shooting directly into the sun. But at midday this changes.

You will need to position yourself fairly low to the ground in order to shoot into the sun. Typically, 11am or 2pm is most conducive to midday lens flare.

5. Watch your focus: Your camera typically will focus on the object best lit in your frame. Shooting into the sun will make it more challenging for your camera to focus on your subject. You may need to switch from auto focus to manual focus.