

An Extension to
The Textbook of Digital Photography

Caring for your Camera



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Extension

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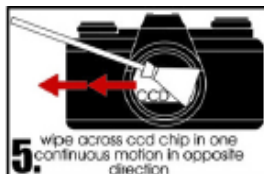
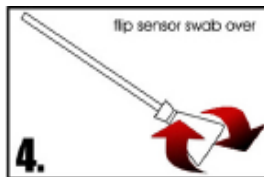
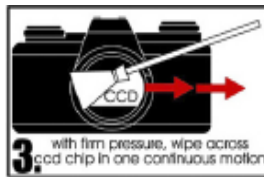
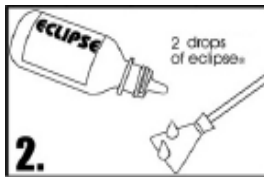
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CARING FOR YOUR CAMERA

Once you have invested in a digital camera, a few precautions and a little maintenance go a long way to ensuring a long, reliable life.

Animation

Click to see the effects of dust on your images.



Here are the five steps recommended by Photographic Solutions for cleaning your image sensor with their sensor swabs and Eclipse cleaning fluid. <http://www.photosol.com>.

CLEANING THE IMAGE SENSOR

When you change lenses on an SLR it's surprisingly easy to get dust on the image sensor that then shows up as dark spots in your images. One way to check if this has happened is to take a few photos of a clear sky or white card. Open the images in your photo-editing program and flip through them. (On a PC running Photoshop, zoom the pictures to the same size then Ctrl-Tab through them quickly and the dust spots jump out at you.) If all of the images have dark spots in the same place, that's dust on the sensor. To clean the sensor yourself you need more than courage. You also need sensor swabs and cleaning fluid. NEVER used compressed air, or other cleaning products, on the sensor. Cleaning supplies are available from B&H and Calumet. Some of the most popular products are from Photographic Solutions (<http://www.photosol.com>). For more information Google "cleaning image sensor" but proceed at your own risk. One of the best Web sites I've found on this topic is *Cleaning Digital Cameras* at:

<http://www.cleaningdigitalcameras.com/howto.html>

To clean a sensor you use the camera's command designed for this purpose that locks the mirror up and out of the way and holds open the shutter so you can get to the surface of the image sensor. This is a high-risk procedure and we recommend extreme caution. It's more prudent to have it done by you camera company's service center.

CLEANING THE CAMERA AND LENS

Clean the outside of the camera with a slightly damp, soft, lint-free cloth. Open the "flaps" to the memory and battery compartments occasionally and use a soft brush or blower to remove dust. Clean the LCD monitor by brushing or blowing off dirt and wiping with a soft cloth, but don't press hard and be sure there is no grit on the cloth that can scratch the surface. Cleaning kits are available at most office supply stores.

The first rule is to clean the lens only when absolutely necessary. A little dust on the lens won't affect the image, so don't be compulsive. Keep the lens covered when not in use to reduce the amount of cleaning required. When cleaning is necessary, first use a soft brush, such as a sable artist's brush, and a blower (an ear syringe makes a good one) to remove dust so it won't be there to scratch the lens when you wipe it. Fingerprints can be very harmful to the lens coating and should be removed as soon as possible. Use a lens cleaning cloth (or roll up a piece of photographic lens cleaning tissue and tear the end off to leave a brush like surface). Put a small drop of lens cleaning fluid on the end of the tissue. (Your condensed breath on the lens also works well.) Never put cleaning fluid directly on the lens; it might run between the lens elements. Using a circular motion, clean the lens surface with the cloth or tissue, then use the cloth or a tissue rolled and torn the same way to dry. Never reuse tissues and don't press hard when cleaning because the front element of the lens is covered with a relatively delicate lens coating. There are special lens cleaning cloths available. You can find them by Googling "camera lens cleaning cloth."

PROTECTING YOUR CAMERA FROM THE ELEMENTS

You'll find that some of the best opportunities for interesting photographs occur during bad weather or in hostile environments. You can take advantage of these opportunities as long as you take a few precautions to protect your camera.

Blowing sand, like that shown here on an Oregon beach, is one of the worst possible environments.



Use an umbrella or plastic bag to protect your camera from mist and light rain.

Your camera should never be exposed to excessively high temperatures. If at all possible, don't leave the camera in a car on a hot day, especially if the sun is shining on the car (or if it will later in the day). If the camera has to be exposed to the sun, such as when you are at the beach, cover it with a light colored and sand free towel or piece of tinfoil to shade it from the sun. Dark materials will only absorb the heat and possibly make things worse. Indoors, avoid storage near radiators or in other places likely to get hot or humid.

When it's cold out, keep the camera as warm as possible by keeping it under your coat. Always carry extra batteries. Those in your camera may weaken at low temperatures just as your car battery weakens in winter. Prevent condensation when taking the camera from a cold area to a warm one by wrapping the camera in a plastic bag or newspaper until its temperature climbs to match that of its environment. If some condensation does occur, do not use the camera or take it back out in the cold with condensation still on it or it can freeze and affect camera operations. Remove any batteries or flash cards and leave the compartment covers open until everything dries out.

Never place the camera near electric motors or other devices that have strong magnetic fields. These fields can corrupt the image data stored in the camera.

Always protect equipment from water, especially salt water, and from dust, dirt, and sand. A camera case helps but at the beach a plastic bag is even better. When shooting in the mist, fog, or rain, cover the camera with a plastic bag into which you've cut a hole for the lens to stick out. Use a rubber band to seal the bag around the lens. You can reach through the normal opening in the bag to operate the controls. Screwing a protective filter over the lens allows you to wipe off spray and condensation without damaging the delicate lens surface.

TIP

When cleaning your camera only use products specifically designed for cameras.



A lens cleaning cloth from Pentax.



Nikon's Lens Pen is typical of the brushes used to clean dust from a lens surface.

PROTECTING WHEN TRAVELING

Use lens caps or covers to protect lenses. Store all small items and other accessories in cases and pack everything carefully so bangs and bumps won't cause them to hit each other. Be careful packing photographic equipment in soft luggage where it can be easily damaged. When flying, carry-on metal detectors are less damaging than the ones used to examine checked baggage. If in doubt, ask for hand inspection to reduce the possibility of X-ray induced damage. It's also not wise to check camera equipment as baggage since the US has a third-world rate of baggage theft by airline and security employees.

STORING A CAMERA

Store cameras in a cool, dry, well ventilated area, and remove the batteries if they are to be stored for some time. A camera bag or case makes an excellent storage container to protect them from dust.

Digital cameras have many components and accessories including batteries, chargers, cables, and lens cleaners. It helps if you have some kind of storage container in which to keep them all together.

CARING FOR YOURSELF

When hiking outdoors, don't wear the camera strap around your neck, it could strangle you. Don't aim the camera directly at the sun, it can burn the eye.

Giotto makes the rocket-like blowers everyone seems to use.

