



Photographic Solutions

Introductory DSLR Camera Cleaning Kit

Instructions for use



INTRODUCTION

This kit contains four products.
All the products supplied must be used in accordance with these instructions.

Standard Bulb Blower - Used for blowing loose dust particles off the sensor.
Eclipse or E2 Cleaning Fluid - 15 ml sampler - Used for cleaning lenses and Digital SLR sensors - both CCD and CMOS types.
Pec*Pads - Lint free wipes for cleaning lenses
Sensor Swabs - Clean room manufactured tools for cleaning digital SLR camera sensors (CCD and CMOS types). Available in three sizes to match your camera's sensor.

After using the products supplied in this kit, please dispose of the components responsibly. You may obtain replacement packs from www.cameraclean.co.uk or your local retailer.

Bulb Blower

Use this to blow away loose dust particles from the sensor surface before cleaning the sensor with Sensor Swabs and Eclipse/E2. Open the shutter for sensor cleaning taking careful note of the warning in the red box (right). Hold the camera, lens mount pointing down. Point the nozzle into the lens throat and make several strong puffs on the blower to dislodge the dust. Don't let the nozzle touch any part of the camera.

Always test the blower before using it on your equipment, to remove any particles that may be inside the nozzle. It's a good idea to keep the bulb blower in a polythene bag to reduce the risk of dust entering the nozzle when not in use

Eclipse / E2 Optical Cleaning Fluid

ECLIPSE lens cleaner is the highest purity lens cleaner available. It dries as quickly as it can be applied, leaving absolutely no residue. Eclipse can be used to clean non-coated sensors. E2 is designed for use on all sensor types. Please refer to www.cameraclean.co.uk for a camera compatibility list.

When used with PEC*PAD photo wipes, it is possible to clean only the portion of lens which is dirty eliminating "hazy swirls". For lens cleaning dispense several drops onto a clean, folded PEC*PAD and lightly wipe surface in a single direction. Refold pad to expose a clean side and re-wipe as necessary. If streaks remain, use a clean pad each time. Other lens tissues may not work as well, and some experimentation may be required.

Caution.

Eclipse is highly flammable. Contains Methanol.
The product burns with no visible flame. Keep away from heat, flame, sparks and ignition sources. Do not get in eyes. Irritation may occur. Wash eyes thoroughly with plenty of fresh water. Harmful if swallowed. Induce vomiting. Avoid breathing vapour. May cause headache or nausea. Use only in a well ventilated area. For more information refer to MSDS.

Pec*Pads

PEC*PADs are the ideal photo wipes for those who hate photowipes! Until PEC*PADs came along, photowipes fell apart, left lint and scratched emulsions. PEC*PADs are extremely strong, lint-free and so soft and pure (99.999%) it is almost impossible to scratch an emulsion with them. PEC*PADs are so soft they can be safely used to clean most types of sensitive surfaces : scanners, CD's, mirrors, lenses, telescopes etc. When PEC*PADs are used with Eclipse they are ideally suited for cleaning camera lenses

Caution

PEC*PAD is not recommended for cleaning Digital SLR Camera sensors. It is not the same material used in the Sensor Swabs. Photographic Solutions does not approve or warranty the sensor or any camera part from any damage caused by using non approved products.

Sensor Swabs

Sensor Swabs are clean room manufactured cleaning tools designed to clean the delicate CCD or CMOS sensor inside a Digital Single Lens Reflex (DSLR) Cameras. Unlike compact digital cameras, DSLR cameras feature removable lenses. In normal everyday use, removing the lens allows dirt and dust to enter the camera, some of which will eventually settle onto the sensor. The result is unsightly spots on images, typically seen against light backgrounds such as skies.

You can easily check whether the camera sensor needs cleaning by taking a photograph of a clean light background using a small aperture (typically F16 and above). View the image on a computer monitor and if possible, perform a levels command. Any contamination will then be revealed.

IMPORTANT

To perform a cleaning procedure, it is necessary to open the shutter on the camera to gain access to the sensor. It is essential that you are fully aware of how to open the shutter and keep the shutter open while cleaning the sensor. If the shutter closes while cleaning is taking place the camera will be damaged. Please refer to the camera manufacturer's instructions on how to open the shutter for cleaning purposes. If you are not 100% confident in this process, please return your camera to the manufacturer for sensor cleaning.

Cleaning Procedure (please refer to pics below)

- (1) Check you have the correct size Sensor Swabs for your model camera.
- (2) Prepare a clean, dust-free area with space for the camera, the Sensor Swabs and the Eclipse.
- (3) Remove the lens from the camera and open the shutter according to the manufactures directions.
- (4) Cut open a Sensor Swab polythene bag at the handle end. Remove the lid from the Eclipse bottle.
- (5) Remove the swab from the bag and squeeze 2 - 4 drops of Eclipse onto the end of the swab (Pic 1.).
- (6) Insert the swab into the camera and starting at one end of the sensor (Pic 2.) carefully wipe the swab down the length of the sensor in one direction (Pic 3.) until the complete sensor has been wiped (Pic 4.) Then reverse the swab (Pic 5.) and wipe in the opposite direction (Pic 6.) until the swab is back at the starting point (Pic 7.). Note how each swipe uses a fresh side of the swab.
- (7) Carefully remove the swab and close the camera shutter.
- (8) Refit the lens and test.
- (9) Repeat if necessary with a fresh swab. Never reuse a swab.

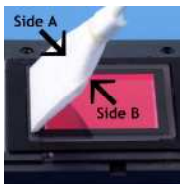
Refer to www.photosol.com for further guidance.

Precautions

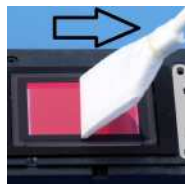
Make sure that you are confident in opening and closing the shutter for the cleaning process. Ensure that contaminating particles cannot fall from your body or clothing into the shutter chamber during the cleaning procedure. Typically, contaminating particles are too small to be seen with the naked eye. Do not over saturate the swab with Eclipse. 2-4 drops is sufficient. The fluid should evaporate almost immediately after swiping. Practice first until you are confident in the procedure.



Pic 1.



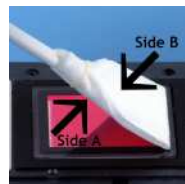
Pic 2.



Pic 3.



Pic 4.



Pic 5.



Pic 6.



Pic 7.

CCD Sensor Guarantee

Photographic Solutions, Inc. guarantees that it's Sensor Swab and Eclipse products will cause no damage to the CCD or CMOS sensor when used in accordance with the instructions provided by the camera manufacturer and/or Photographic Solutions, Inc. (PS) If it is determined that these products caused physical damage to the sensor, PS will reimburse the camera owner for the full cost of repairs upon presentation to PS of proof of purchase, camera manufacturer's repair invoice and the damaged sensor. **Use of non-approved methods, procedures or products will void this warranty.**