

Arctic Butterfly Review by Alain Briot

1-Introduction

Cleaning your digital sensor is a necessity. My favorite approach is to use an anti-static air ionizer made by Kinetronics. Two models are available: one uses canned air while the other connects to an air compressor. Because I use a silent air compressor to operate my computerized mat cutter and my air-powered framing tools, I use the air compressor model. My compressor has filters for water and oil, guaranteeing that the air is free of contaminants that may otherwise get sprayed onto the sensor. Because it is a silent model, this compressor makes no more noise than a refrigerator, making it a pleasure to use in a studio environment.

However, when it comes to cleaning digital sensors, compressed air can only do so much. At some point physical contact with the sensor is necessary to remove stubborn dust particles that adhere to the sensor. This is where the Arctic Butterfly comes in as my second tool of choice.



The brush comes apart easily

2-The Arctic Butterfly

The Arctic Butterfly is made by Visible Dust. Basically, it is an anti-static brush mounted on a small electric motor powered by two AAA batteries. The purpose of the motor is to spin the brush at high speed to load the bristles with static electricity. Once electrostatically charged, the brush is swept over the sensor, thereby collecting dust particles, which literally "jump" onto the brush.

I was wondering how well this process actually worked. The brush is very soft and relatively small, about half an inch wide, and I wasn't sure if it had the power of pulling out dust particles that would not be dislodged by powerful blasts of compressed air. After using the Arctic Butterfly to clean the sensors of my Canon 1DsMk2 and Digital Rebel, I am pleased to report that it works flawlessly.

3-Air Travel

Canned air is necessary to load regular sensor brushes with static electricity. However, when you travel by plane, Federal regulations prohibit that you bring canned air onboard the airplane. Not being able to carry compressed air means you either have to purchase canned air locally once you reach your destination, something which isn't always easy or possible, or you do not clean your sensor during your trip, something which is rarely an option.

The Arctic Butterfly was designed to remedy this problem. Instead of canned air it uses ambient air by spinning the brush at high speed. Since what loads the brush with static electricity is fast air movement on the bristles, the goal is achieved. A very cool fast moving object, hence, in my opinion, the name Arctic Butterfly.



The Arctic Butterfly spinning

4-The cleaning process

To clean my sensors I first spin the brush 3 times for a couple of seconds. I then sweep the sensor several times, spinning the brush to reload it and eject dust particles between each sweep. I also shine a small flexible desk lamp onto the sensor to see exactly how much dust is on the sensor. I take my time while doing this, preferring to get a little bit of dust out each time rather than clean the sensor in a single sweep.

It is tempting to sweep other areas of the camera with the brush. However, I discourage you from doing so. I tried to clean the mirror in my 1DsMk2 and this resulted in smearing a residue onto it. I then had to use a soft Kinetronics anti-static cloth to remove it. Cleaning the inside of the camera itself (the areas painted black) is also discouraged as these surfaces have a residue which will be later smeared on the sensor when you clean it. Finally, do not spin the brush while you are cleaning the sensor!

What's left for you to do after cleaning your sensor is check that no dust is left. To do that, photograph a white sheet of paper, or the sky, or any uniform surface, and inspect the image carefully in your raw converter, looking for dust spots. Increase contrast with a curve to make the dust easier to see. If some dust is left, do another cleaning, focusing on the area where dust is located. Repeat this process until your sensor is totally clean. In my case, it took only 2 tests to get a perfectly clean sensor with both cameras.



The whole package: brush, brush carrying case, even battery cases for spares or to protect the batteries when you take them out for plane travel

5-Sensor Size

You may be wondering if the Arctic Butterfly will work for your particular sensor. In my experience the Arctic Butterfly is a one-size-fits-all tool when it comes to sensor size. It worked equally well with the full frame sensor in the 1DsMk2 and the reduced frame sensor in the Digital Rebel. In my estimate it would work just as well on sensors smaller than the Digital Rebel, or on larger sensors, such as those in medium format backs.

6-Ionizing air gun or Arctic Butterfly?

If you can get only one of the two tools I mentioned --anti static ionizing air gun and Arctic Butterfly-- I recommend you get the Arctic Butterfly. I personally prefer to avoid any physical contact with the sensor unless absolutely necessary, hence my use of the anti-static ionizing air gun. However, the Arctic Butterfly is so soft that it may be completely harmless to your sensor.

As they say, that's all folks. This process is very simple. Do it regularly and you will save yourself a lot of time spotting your digital files with the clone tool or the healing brush.

The Arctic Butterfly is available from Visible Dust and from Michael Tapes at RawWorkflow.com. I got mine from Michael. He's a great friend and we have been working together for several years. Michael also offers several other products -software and hardware- including WhiBal which I have reviewed previously. His web site is <http://www.rawworkflow.com>

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Arizona
January 2006



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