

Maintaining Your Colorimeter

By Chris Greenway – October 7, 2010

One of the most important steps you can take to ensure the accuracy and longevity of your colorimeter is to maintain it properly. All colorimeters will eventually suffer from the filter deterioration over time, although some colorimeters suffer from the effects of filter deterioration at a much slower rate as a result of design. Meters such as the [K-10](#) and Hubble are enclosed meters and allow much less 'fresh' air in. Contact colorimeters often have no enclosure to protect the filters from the environment, but as a result often cost less to produce. This will eventually happen, but can be significantly slowed by proper care and maintenance of your colorimeter. Below are the recommended steps you can take.



The most important step you can take to increase the longevity of your meter is to prevent moisture. This can be achieved by storing your meter in a container that prevents moisture getting in. [Professional grade carrying](#) cases provide excellent waterproof seals and pressure release valves to get the best possible moisture protection. Combined with preventing moisture from getting to your meter you will also want to eliminate the moisture already in your meter's case. The easiest way of doing this is to throw some desiccant into the case. The most standard desiccant is silica gel, however, it does lose effectiveness over time. For a long term solution a ['rechargeable' desiccant](#) option provides the most long-term solution.

Light can also negatively affect the colorimeter. It is best to keep the meter in a dark location. Anything that blocks light radiation from getting to your meter (and most importantly the filters) will help prevent damage from radiation.

The other cause of increased filter deterioration is heat. Your meter's longevity can be significantly increased by ensuring that you store the meter in a cool location. This doesn't mean the meter has to be kept in the refrigerator, but take care to avoid storing the meter in a location that will allow it to overheat.

These are the three things that you can control that most adversely affect the longevity of your investment. Professional carrying cases offer the top level of protection from aging filters and also add the bonus of protecting the meter from bumps and falls when properly stored. There are many lower cost options as well for protecting your meter. Just be sure to keep your meter

dry, dark and cool to insure you will get the most from your meter for as long as possible. Since the filters in your meter will slowly deteriorate over time, [annual calibrations](#) are recommended for all meters.