

Qp Card 202 & FREE Qp Calibration Software for Raw Images

Getting accurate natural colors from any digital camera with RAW option has been an elusive goal for digital photographers. It can be a challenge to get photographs with correct hue; where red is red, green is green and blue is blue – and to make photographs with sufficient saturation in all channels. Believing that this is the optimum starting point for efficient picture editing in RGB, QP has been at the forefront of addressing this challenge. QP's second goal is to get the correct colors in a fast, accurate, uncomplicated, and inexpensive way.

QP has addressed these goals with the new **QP-card 202** and **QPcalibrator** software, which perform color correction using color management and profiling at the first accessible stage in the digital image workflow – the RAW image. In order to accurately monitor each camera's color property, QP has designed a new high quality, color target with modern camera sensors in mind. With only 35 carefully selected and individually manufactured color patches, **QPcard 202** can meticulously pin-point color behavior of almost any camera in any light.

QPcalibrator software compares camera performance with the target colors and creates instructions for the profile on how to "move" small segments of colors (almost 1300) into correct position in a three dimensional color space. Color saturation is controlled in two stages: primary control in the matrix, followed by "soft clipping" in the lookup table. It keeps track of color saturation making sure no color channel is over-saturated with blocked or "flat" colors as a result.

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Accurate Natural Colors in Three Easy Steps

- Take a RAW photo of **QPcard 202**.
- Process the photo using the free **QPcalibrator** software.
- In less than 5 seconds a custom, camera - and light- specific, RAW profile has been created and automatically saved in the correct folder. Next time you open Adobe Camera RAW you will find your profile under the camera icon.

After doing this the first time, toggle between Adobe normal and your custom profile to compare the difference in color rendering between the profiles. You will be amazed by the difference.



QPcard 202

The design and preparation of the color card is crucial for successful color management of the camera. **QPcard 202** has 35 coated color chips mounted on a cardboard surface. The carefully selected color samples are individually mixed in order to achieve as straight-forward spectral response as possible. This is very important in order to avoid undesired metameric effects that can ruin correct evaluation of the color performance.

The color samples are divided into four groups. The primary group has 9 saturated samples of red, green and blue picked to accurately determine the spectral midpoints of the on-sensor filters. The secondary group has 12 samples of complementary colors chosen to properly graduate saturated colors. The grayscale group has 7 neutral samples of different lightness for white balancing and linearization of individual channel response. The pastel group with 7 lighter, still saturated, color samples helps fine-tuning skintones and lighter colors.

The corner-marks of the card are automatically detected by the **QPcalibrator** software and a grid covering the color patches is created. Every color patch is measured in 6400 spots and the 3200 lightest are discarded. This prevents small dust particles and minor reflections to interfere with the measurement.

Unlike older color targets on the market, the background has been intentionally kept white. This provides an opportunity to evaluate the evenness of the exposure of the card. If the card is unevenly lit, the software compensates in the linear RAW signal with maximum 1,5 EV, assuring high quality profiles even if the card isn't perfectly photographed.

Beyond Graycards and White Balancing

White balancing must not be confused with profiling. White (or gray) balancing means fine-tuning of the balance between the three color channels Red, Green and Blue in order to compensate for color temperature deviation. Manual white balancing, using a neutral gray target in the scene, is the best way to achieve neutral grays in the picture. However, the fact of the matter is that colors are only marginally corrected using white balancing. Try taking a picture of a colored scene with three different cameras. Include a gray target in the scene and make sure all three pictures are perfectly neutralized using the gray target. Now check colors. Most likely they differ quite bit. Canon and Nikon utilize different ideas of color appearance. And Adobe adds their color ideas with their standard profile in Adobe Camera Raw.

Color management and profiling is so much more than white balancing. In color management you not only balance the position of the color curves, you actually tweak them in order to normalize color performance in accordance with neutral undistorted colors in the photographed scene. Use **QPcard 202** and **QPcalibrator** with the cameras mentioned above and you will most likely not notice any color difference between them.

QPcalibrator software is free and can be downloaded at www.qpcard.com. **QPcalibrator** is available for Windows 32 and 64 bits systems and for Mac OS X. The first version only supports Adobe Camera Raw (Photoshop, Lightroom, Elements and Bridge). The next version will also support icc-profile dependent RAW converters.

MSRP

GQP202 QP Color card 202 59.95



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