

January 7, 2007

Dear photographers and racquetball enthusiasts,

I have been asked to share my secrets of racquet photography many times over the last four years, and I'm always happy to share what I know. My answers have been refined over that time as I gained experience and knowledge. It is most important now, however, to grow new photographers for the CVRA. My wife and I are moving to Quito, Ecuador, this August for a three-year assignment, and I will need to be replaced. The article below summarizes my techniques so that you too can take great shots. Knowledge of digital photography is assumed, however, so contact me if you need additional help with the technical aspects.

Exposure: Exposure is critical. Underexposure results in excessive digital noise (similar to film grain), especially when using high ISO. Keep an eye on the histogram and keep the right side occupied, but not blown out (over exposing the image). For most tournaments, I'm using F 1.4–2.0 at 1/500 of a second with ISO at 1600 using my standard 50mm and 30mm prime lenses. When I use the Nikon 17-55 zoom, I have to drop the shutter speed down to 1/125 (remember to check the histogram) because F 2.8 is as open as it gets (F 1.4 lets in more light). At F 2.8 you will have to put up with more motion blur, but will have improved depth of field. Life is a compromise. I only use the 17-55 at the 17-30 ranges, by the way, and find the wide angle useful for doubles matches. Finally, I generally set the camera exposure setting in manual mode, and when shooting at 1/500 you can still get motion blur. Racquetball is a really fast sport.

White balance: White balance is also critical. I preset the camera white balance setting for each court during the tournament. Otherwise you get an ugly yellow colorcast. The sidewall or back wall seems to work for this, by the way. A purist might recommend a grey card to set color balance for best results, but color varies a bit depending on court position and light flicker, making it almost impossible to get perfect color. Racquetball courts are not photo studios.

Light flicker: Light flicker is an issue caused by the 60-cycle power we use in the U.S., and could be confused with a bad color balance. Light flicker is nearly impossible to deal with unless you use slow shutter speeds. Quoting writer and photographer Thom Hogan, "Shutter speeds have to be no higher than the cycle itself and a derivative of the cycle in order for the color to be guaranteed between shots. That means 1/125, 1/60, 1/30, and 1/15 in the U.S. The easiest way to tell if you're dealing with non-continuous lighting is to take two shots at 1/60, then two at 1/500. If the 1/60 shots are the same color and the 1/500 aren't, you're dealing with non-continuous lighting" flicker. I keep track of what athletic clubs have bad light flicker in their racquetball courts (they all have some) and I try to avoid them. If I end up shooting in a tournament with bad light flicker, I take Thom Hogan's advice and use 1/125 of a second, and put up with motion blur. Hand processing thousands of photos for bad color and exposure due to light flicker is a real pain and the results are disappointing.

Focus settings: My D2X is usually set for single area, with the focus mode set to continuous and release priority. I sometimes use group dynamic & closest subject priority as well. I also set the CSM a4 Lock On option to off. For other cameras, set them up for the focus setting that is best for tracking fast moving objects. Pumping ½ shutter release or AF button to reestablish focus, especially just before the person you want to focus on starts moving, helps you stay

focused on your subject. Camera focus is based on contrast and will lock on to, for example, the interface between the glass and white wall. It is, therefore, easy to focus lock on to the back wall when shooting from the sidewall. Having players wear clothes with black and white stripes would be great for getting good focus, by the way. To sum it up, focus is quite challenging with fast moving subjects, narrow depth of field, and indoor lighting.

Getting the shot: Take lots of them. Use the elbow drop as a timing device to initiate shutter release during the racquet swing. I shoot about 10,000 high-resolution JPEG photos in a weekend with my D2X set at high-speed crop (8 shots per second). Taking so many photos covers most of the tournament and takes a lot of patience (stubbornness on my part). I shoot JPEG and strive to have the camera set up properly for good results. RAW takes too much hard drive space, and requires extra effort for post processing. After the tournament I cull out the duds. The keepers, less than 1/2 the shots taken, are batch processed using Photoshop CS2 (auto contrast, for example) and Neat Image for noise reduction and sharpening.

Dealing with glass: Clean the glass by scraping with a razor blade & washing with Windex. I use several techniques to manage glare on the glass. One is to fashion an L shape out of black foam core (see your art store for this), duct tape and black fabric. A more portable method is simply duct taping and draping black fabric over my head. I often use a rubber lens hood and my hand in a pinch. My ultimate glare solution is a dark sheet that covers part of the sidewall.

Courtesy: Never ever use flash pointed towards the players in the court.

Camera choice: My old D100 is capable of shooting 3 frames per second, and I got great shots with it before obtaining the D2X professional camera. Camera setup, patience, and good timing are the keys to successful racquetball photography. Having a professional camera helps, but as you can see above, the photographer's technique makes the photo. Any camera that has adjustable white balance and a setting for high ISO can potentially capture good racquetball photographs. So what would be the ultimate racquetball camera? Maybe the rumored Nikon D3H professional sports camera that might be released this year.

Happy shooting!

Your CVRA Photographer,

A handwritten signature in black ink that reads "Ken". The letters are cursive and fluid, with a prominent 'K' and 'n'.

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