New Camera   03/17/07 286 W - **+** 15 **-** 15

From a reader, how do you shoot a structure fire with a digital SLR? Mike made the transition from point-and-shoot film to point-and-shoot digital about three years ago. He made the switch to SLR in July. His first adjustment was using an optical versus LCD viewfinder. Mike's beloved Fuji point-and-shoot showed what the camera sensor saw, which made exposures exceptionally easy. Plus, the captured picture was displayed in the viewfinder for a second or two. Exposure is everything at structure fires at night. Shoot into the heart of a fire at night and you capture the flames and little else. So you learn to focus on the fringe of the fire, or a darkened area around the fire, so the camera thinks you are shooting something not as bright and thus allows more light. And/or, you fiddle with the settings. Notably, you change the ISO. For night fires, 1600 ISO is fast and sensitive and helps (a.) get more light and (b.) reduce blur. Note that these are all non-flash observations. Mike rarely shoots with a flash at a fire. It tends to wash out a scene. Plus all that reflective trim sticks out like sore thumbs. Both SLR and point-and-shoots have picture modes, selectable using a knob. In the point-and-shoot days, Mike let his Fuji figured out everything. Thus the camera was left on fully automatic. With his SLR, a Canon Digital Rebel XT, the fully automatic mode also enables the flash in darkened situations. This is annoying to no end, so Mike uses Program Shift. That's the almost-automatic mode. It does everything except select ISO. Works like a charm, except in VERY low light, like last night's transformer fire. End of lesson.

Since I triggered this post here is some more questions I have been wondering……

Do people use tripods or shoot everything by hand?

My lenses are 14mm-50mm and 50mm-150mm? What size lenses do others use?

Does the larger zoom lenses help on night shots or should they be avoided?

What filters are used? etc.

Do you wear some type of safety vest?

Any/all suggestions?
nc-ghost (Email) - 03/17/07 - 11:01

these are great tips! – i was also going to ask about whether you are using a bean bag or car mount – do you ever choose any night-time settings and does color temperature need to be adjusted? does the camera need extra protection from the smoke (I have a waterproof case for my mini-canon SD500 but have no such protection for my dslr)
[hnizdo] - 03/17/07 - 11:15

Tripod? Rarely since I started shooting with SLR. In fact, the problem with night shooting is less MY movement than that of the subjects. Using a longer or timed exposure is great for adding light, and producing that cool red-orange bathing effect, but anything moving in the shot is almost always blurred.

Filters? Only UV on each of my lens, and that's mostly for scratch protection.

Vests? Roadway incidents are more dangerous for the less visible. Bright Hawaiian shirts also work. Vests at structure fires are probably not necessary, and may serve to attract attention if you are trying to discretely take pictures at a distance closer than farther to the scene. If you are affiliated with an agency, however, better to wear a vest than not.

Zooms at night? Faster means more light. I am still learning about lens speeds, but zoom lens tend to be slower than non-zoom (from what I have heard). Still learning here.

Color adjustments for night shots? I adjust in post-processing and usually all at once. e.g., batch processing using PS Elements. Sometimes it

helps, sometimes it doesn't.

Smoke protection? I have not encountered a problem in that regard.
Legeros - 03/17/07 - 13:34

Perhaps the greatest challenge of incident photography is both ignoring and paying attention to your surroundings. Try to ignore everything EXCEPT your physical proximity to responders as well as hazards. Focus on your craft, no matter how exciting / scary / discracting / chaotic the situation is. And, at the same time, remain aware of your physical presence so you are (a.) always out of the way and (b.) never placing yourself in harm.
Legeros - 03/17/07 - 13:51

I made the switch to DSLR this past fall. I have taken more pictures in the last five months than I have in the last five years. In the early 90's when I was taking pictures for Raleigh, I invested in a ton of film equipment, and it now has an E-bay tag hanging on it….

The DSLR helped me rediscover the joy (and challenge) of photography.

First of all, give yourself a break. I can't think of any other type of photography that is more difficult to do well than fire photography. There are so many challenges: access, hazards, staying out of the way, light/no light, reflective everything, confusion on the emergency scene, etc. You also stand a fair chance of perhaps getting you and your equipment wet if you get too close. Shooting in the rain is rarely productive or fun.

First of all, learn all that you can about your camera. Read the owner's manual from cover to cover, usually more than once. Also look for books and guides that are produced by someone besides the camera manufacturer. These guides typically will have an unbiased opinion on good/bad features of a particular model.

Once you learn what how your camera operates, focus on one or two things you want to get truly proficient in. As in most things electronic, you'll use 15% of the features regularly, and almost never use the other 85%.

Mike is correct, because of the length of zoom lenses, you'll be able to bring in less light than a fixed focus lens.

Here are some random thoughts:

- Try shooting with your flash DURING the day, to bring out faces, etc.

- At night, shoot WITHOUT your flash, or at least shoot one frame with and one without.

- Learn to meter the amount of light, then focus and re-compose.

- As important as ISO is, also learn how to change the exposure compensation on your camera. Some cameras will automatically bracket several frames.

- Learn about shooting in RAW, and then file it for future reference. It's good and important to know and understand, but who really has time to manually tweak every picture? Take more shots, delete the bad ones, keep the good ones.

- Get two medium size cards instead of one big card. That allows you to swap them out.

- For night shooting, put yourself near something solid: a fence, a tree, a truck, a car, a wall…. something to brace yourself against. On my camera, when I shoot in "Scenic Landscape" mode, that setting automatically does two things: turns the flash off and sets the aperture for maximum depth of field. As a result, when I'm quickly shooting at night, I'll take some pics in that mode.

- I carry a big flash, and two lenses: 28-80 and 70-300. My next purchase will probably be a 14 or so, something with a really wide angle. Anything much bigger than 300 will be big, heavy, expensive and probably rarely used. I've found more often than not I need a wide view as opposed to a zoomed in view.

- With digital, you can essentially shoot for free, unlike the days of film. So as with anything else you want to become proficient in, practice as

much as you can.

- For night shooting, carry a small pen light/mag light.

- I am a big vest advocate, so I'll disagree with Mike and say wear a vest for your own safety. Don't be clandestine, make sure you are seen. Wear a vest all the time.

- I used to have a real small tripod in my camera bag, and my best night shots were usually done with the tripod, but I haven't put the new camera on one yet.

- Maybe invest in a second battery.

- There is no such thing as an ANSI-compliant Hawaiian shirt.

Harkey
Harkey ([Email](#)) ([Web Site](#)) - 03/17/07 - 14:27

Here's what's in my camera bag:

Canon Digital Rebel XT with 4 gig card, scene photos saved as highest quality JPG
Second memory card, 1 gig
Kit lens, 18-55mm
Zoom lens, 28-135mm with image stabilization
Lens shields for both
Soft covers for both
External flash, bought used
Spare batteries for flash
Second camera battery
Both extra batteries in soft holder that can clip to belt
Camera battery charger
Lens cloth
Rubber puff blower for sensor dust (at home)

I think that's it…
Legeros - 03/17/07 - 19:27

With the size of pics how do you store them? Short term on the hard drive then burn them to CD or DVD? If CD or DVD do you group by month, day, etc?
nc-ghost ([Email](#)) - 03/17/07 - 19:32

Great tips! Thanks! Anyone tried a polarizing filter or infrared filters at a fire scene (color and/or BW IR)? The safety tips reminded me that as soon as winds were above 50MPH where I used to live, I was out in search of a good location for water shots. Anyone have any setting pointers for heavy mist? The storm photos ended up very grayed and washed out, blurred from all the mist and needed a lot of post-processing in PS Elements.
[hnizdo] - 03/17/07 - 19:34

And here's what's in my trunk:

Monster tripod with pistol-grip ball head, Manfrotto for both (I believe)
Folding stool (from Target, $10-$15)
Assorted safety vests
Jumpsuit
Turnout coat
Fire boots
Pair of sneakers and socks

Traffic cone
Legeros - 03/17/07 - 19:55

My file storage naming convention is the same as seen on my photo site, 2007-03-17-rfd-glen-eden-drive-mjl. I use the program Flash Renamer (http://www.rlvision.com/flashren/about.asp) to incremental name and number files, and re-name and re-number as needed. Files are stored on a couple external hard drives. Highest resolution versions are saved. Low-res versions, created for posting and CD copies to responders, are deleted prior to archiving.
Legeros - 03/17/07 - 19:57

For rain or heavy mist, I recommend staying indoors. Or shooting from inside your car. Or just dragging a damn umbrella around. The latter was used but didn't survive the shooting of the summer flooding and those assorted water rescues.
Legeros - 03/17/07 - 19:59

Does anyone know how (program and technique name) to separate color and B&W to produce pics like
http://www.pbase.com/pski/image/60698530

Is it just using 2 layers (1 B&W and 1 Color) and removing all from one but what is desired?
nc-ghost (Email) - 03/17/07 - 22:56

While on the discussion of new cameras and photography, some may know that I'm not actually around Raleigh these days (the main reason that updates to FireNews.net are suffering so much…)

I am currently working on a project on the tiny island nation of Grenada, in the Carribean, West Indies. I brought my new camera down to document the event we are working on and the construction, but I have been fortunate to be able to see some of the island and photograph it.

It's really hard to take a bad picture here, it's so scenic.

I have assembled a "Best of" category on the photo sharing site flickr.com (the one Lee uses). I am convinced these pics could have only been taken with a DSLR, which I now refer to as "a real camera."

To view the slideshow that has some local Fire Service elements in it, follow this link: http://www.flickr.com/photos/harkeysport.. Other related pics are here: http://www.flickr.com/photos/harkeysport..
Harkey (Email) - 03/17/07 - 23:03

nc-ghost, I don't think that a sepia gradient map was used for this photo – here's how i believe it was done (in photoshop or photoshop elements, or for that matter paint shop pro) – the flag and sunglasses were manually selected by magic wand, then similar color selected and then manually retouched until the selection was perfect – creating the perfect selection mask will be the most time consuming – touch ups to the selection mask will need to be painted on manually (with a small brush and over-selections erased) at high magnification – once you are satisfied with the selection, feather it at 1 or 2 pixels (to eliminate a harsh edge) – save the selection since you will be modifying it to create the separate glasses mask later – once the flag and glasses are selected, you will need to inverse the selection to work on removing color from the background – desaturate the colors and either manually tint them or use a third party filter (this looks like a sepia filter from paint shop pro – i don't know if pse has a sepia filter) – when you are satisfied with the sepia tone, inverse the selection and see if the flag appears too bright – if so, very slightly desaturate it – the next step is to go back to selection retouching and erase the selection around the flag so that only the sunglasses remain selected – play with the saturation settings until you are satisfied with the appearance – always work on a copy of the original – i haven't done this in a while, so if i left anything out, e-mail me by clicking on the link at the bottom of this web page http://www.hnizdovsky.com/ – also, the coffee hasn't fully kicked in yet – i may have left out a thing or two

harkey, LOVE the water shots!! are the chickens at the gfd mascots or lunch?
[hnizdo] - 03/18/07 - 07:08

sepia technique continued (after masking) – in an effort to improve my skills, i thought i'd try it out in a few programs – the first two programs have the best atmosphere effects

microsoft digital image suite editor 2006: this program has very good customizable b&w effects under the effects menu – contrast and hue adjustable – diffuse glow is good for atmosphere and may have been used in the pbase photo at the following settings, graininess down to zero, intensity down to 2, and definition as the image dictates

corel paint shop pro photo XI: use smart photo fix under the adjust menu – brightness is adjusted to create mood – saturation down to -100 (or as low as desired), black and white levels played with – color balance (temperature) under the adjust menu is an alternate way to achieve a sepia tone (must desaturate first), but still keeps some background color if that is what is desired – there is also a separate sepia effect in the hue and saturation colorize menu, but the effect is not as good as the previous one

photoshop elements 5: adjust color under the enhance menu, adjust hue and saturation and proceed to the adjust color curves menu and click on advanced options and adjust all four bars until you achieve the desired effect, (you may want to reverse the order of the previous two steps depending on your image, photoshop elements has a warming filter (both are good) (under filter, adjustments, photo filter that can look better their sepia filter, but does not work as well unless the previous advanced options are taken care of first

my first choice would be smart fix in paint shop pro

[hnizdo] - 03/19/07 - 22:27

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What are the FIRST TWO LETTERS of the word 'fire'?

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Hide email: Yes, hide my email address.

Small print: All html tags except <b> and <i> will be removed from your comment. You can make links by just typing the url or mail-address.