

An Alternative Exposure (Zone) System



Valley of The Ten Peaks, Canadian Rockies

It seems as photographers we are usually loathe to testing. I understand that. In fact in my experience those who love to test and do it consistently usually have little to offer in dynamic images. I know there are always exceptions to the rule, but it is just something I have noticed over a long period of reading the photo magazines that rest on the newsagents shelves. If we get closer to our goal by testing certain things and refining our methods I think that's fine, but please don't make a habit of it. Make a habit of getting out there and making photographs that represent how you feel and respond to the thing you are photographing.

When we do test though, we get what we think is close enough and that'll do. Usually we only know what is right when we go too far the other way. Back in Issue #11, I wrote an article on an Introduction to the Zone System. Copies of that issue are still available I think, should you wish to read it. If it is not write or Email me and I'll send you a typed copy without pictures.

I would like to in a sense, update that article, or more to the point give you an alternative way for finding your personal Exposure Index (E.I.) and development time test. It's a system that gets you a little closer than close enough. It's not as precise as how it was explained in Issue #11, but it's guaranteed to give you better exposed and developed negatives. Firstly let me in a few words explain what the Zone System means.

It is a method of finding where a certain level of light responds to film (which determines your personal E.I.) that will then enable you to get sufficient detail in shadow areas when exposure is determined and subsequently when transferred to a print will give you (hopefully) what you want. It will return certain tones or shades of gray that you decide are appropriate to the subject you are photographing. Some will fall automatically and some will be "placed" on purpose. If you are using colour negative film it will give you similar returns, but in shades of orange on the negative and glorious colour on the print. You just have to learn to read them like you read a black and white negative. Hopefully what follows will enable you to do that.

But the one thing to remember is that like any artistic medium it comes at a price and that price is dedication and practice. If you play music you'll know that you don't improve unless you practice. Photography is no different!

The one thing that is important to remember is that you can have the control from start to finish. For so many it is just guess work. Too much reliance on what the camera has determined. A lot of times the average exposure seems to work out fine when you have almost predictable scenes, but when certain elements in a picture hinge on the amount of light afforded to them, well then, that's when more critical placement is vital.

Most negatives seem to fail because insufficient exposure is given to the important shadow area. With "in camera" meters it seems that most people who photograph use their light meter on "average" and so all the reflected light that is seen in the view finder gets "averaged" and a speed and F Stop are determined for you to take the picture, so as to give you a satisfactory result. Well hopefully! If you have an overly lit scene the camera meter responds to the brightness and tends to tone things down and the opposite is true if the scene is darker. More than likely the subject brightness is not represented properly and so flat and dull negatives are often the result.

It is important to state here that the shadow detail in a negative is determined by camera exposure and so is fixed (almost) when you take the picture and highlight detail is fixed when development of the negative is completed.

Built in Camera Meters only.

If you rely solely on your camera meter and the exposure it gives you and you can't be bothered going down the test road, then an alternative is this. Make your exposure as the meter says, then open up a stop. The worst you can do is give yourself a denser negative. If you do this every time for one, two or three rolls, then look at your negatives and look at how much detail is in the shadow area where you want detail, you will quickly see which exposure in that area is best. It could even turn out to be half way in between. No problem. You have given one negative twice as much light or half as much light than the other. Now let's say that almost every time the frame that has been given the extra stop of light is best. What this means in another way is that a film that is ISO 400 can be set at ISO 200 (one stop difference) and then your average camera reading will be close to being right each time. The chances of you going higher than 400 are next to none as almost all films are not quite what their ISO number is.

By consistently looking and "reading" your negatives you can fine tune as you go.

Now let's say that once you have developed the film to the film maker's recommendations, which again is only a guide, and you find that your shadows look good, but your highlights are a bit too dense, then reduce your development time by 20% to start with and "look" again. If the negatives are looking good and not overly dense then this becomes your new film development time. If your negatives look a little flat in the highlights then increase your development time. It really doesn't take much and before you know it you'll be able to "read" your negatives with confidence and you'll be in control of what comes out on the negative and do you know what, your negs will be easier to print. The whole aim is to make

negatives that are easier to print and will return you a print that oozes light. Have you ever tried building a house with warped timber? Get the negative right and life is so much easier.

Now this isn't the perfect approach, but for those who can't and won't test it is better than trusting the film maker's recommendation and the electronic / mechanical camera which has no aesthetic input. All the camera meter does is record the light value and convert it to 18% gray. Nothing more nothing less. It sees a bright object and converts it to 18% gray. It sees a dark object and converts it to 18% gray. It is you, the photographer, who makes the decision on whether or not you wish for a particular object to be light or dark. Your decision is vital to the quality and impact of the image, not the camera. The oven only bakes the cookies, it doesn't make them. In both cases they only record what they have been programmed to do. Nothing more, nothing less.

I know with 35 mm film you have to compromise sometimes with development because you get some varying densities on the same roll of film. Your best approach is develop for normal. If most of your negatives look good and some have higher density in the lighter tones then live with it. It is easier to print a more exposed negative than an underexposed negative.

If you have two camera bodies once you are settled with what you are doing you can use one body for normal and the other for plus development. Or use short rolls and change mid stream. There are no excuses. You want the results, you need to work at it. You will probably find that normal and plus are the most common. If you use medium format then interchangeable backs are good for N development, N+1 development and N-1 development. Using sheet film and you can tailor each neg to your liking.

The procedure I have just outlined is more suited to roll film, 35mm and 120 and for those who can't be bothered cutting their film and developing some lengths at different times. Make a start on this and see the improvement in your film. It's guaranteed and we'll even throw in the steak knives, right Mr. Editor?

I hear you asking, what is N+1 and N-1. It basically stands for Normal development plus one more stop of light or level of brightness than you would ordinarily get if you just developed for your normal time. It raises the high values or gives the high values a doubling of light. This can only be done for the lighter tones or higher values during development. It is a way of expanding or contracting the contrast of the negative. I would suggest that first you sort out the film speed and development time before you look at expanding or contracting development. One thing at a time.

Now if you're unsure what a good negative looks like, try this. Pick a scene that is not over-contrasty and has a variety of "shades" in it. Point your camera at it take an average reading and make an exposure. Call this normal exposure. Then give one more stop of exposure, then another, then another. Write down what you do. Then make another exposure as the meter says, same as the first one, you can check for consistency, then make another exposure by closing the aperture by one stop, then another, then another. Again write down what you do. Develop your film and then look at the negatives on a light box. If you don't have a light box angle a piece of white board to the light and hold up your negs with that behind. You should do this for ever when you look at your negs. This way you are consistent with the light hitting them.

By this you should be able to see in the low (shadow) areas which looks best. You will probably be able to “feel” it. Don’t try reading a newspaper through your negs as the story goes. I could waste 10 lines on why this is not accurate. A blank white card and light is all you need.

You will learn also what high contrast looks like, what an overexposed negative looks like and what a thin negative looks like. You may also get an idea if you should reduce your development time by checking the high values on the 2 and 3 stops more exposed negatives. It just takes a little time, but worth it in the end and unless you change film you wont have to do it again for some time. By the way, by not changing film all the time is a crucial factor. Learn to understand the film you use and get to know it. Don’t chop and change every time there is a red hot special on film. Stay with one and be consistent. In the darkroom be flamboyant. Make prints that ooz light.

Now if you use a hand held spot meter or a spot meter in your camera, then things change again. In the next issue I will explain that approach and tell you how I check light levels when making an exposure. Till then good luck and keep at it.

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Alternatively fill out the reader information card

Captions for photographs.

The two 400 ISO film 4 x 5” contact prints (of the workroom) show how **NEG A** was given average exposure and lacks clarity in the shadow area especially bottom middle and the upper top right wall. **NEG B** was given one stop more exposure which has opened up all shadow areas to what I think is a suitable level. Look through the window and see how the extra stop has effected the outside area. Although a little more dense it is still controllable through printing or you could reduce development by a stop to bring the highlights down. This would of course bring down other high values as well perhaps not to the same degree. For this small area I wouldn’t bother reducing development as the contrast gap is not big enough.

If you were to change the ISO setting of the film to 200 and exposed for average you would effectively be doing the same as opening up a stop.

If reproduction is good you should be able to see the thin areas of **NEG A** as opposed to **NEG B**.

The corresponding prints of **NEG A** and **NEG B** show what the negatives do. The shadow areas in **NEG A** are thin and struggle to show good or important detail, whilst **NEG B** displays good detail in all important shadow areas.

The prints of Valley of The Ten Peaks show a few things. Firstly I have balanced all the prints for the mountain mid tone area. **Print 1** shows what happens in a print when the negative has been given insufficient exposure in the shadow area. When printed it renders black on the print or a dark or dull gray. The negative of **Print 2** has been given sufficient exposure for the shadows which has also moved every other value up as well. The high values have shifted off the range of the paper when a straight print is made. **Print 3**. The detail is on the negative and so extra exposure is given to the sky during printing to bring out the sky detail. Some of the uninitiated say that this is manipulation (as in falsify) of the print. Look at your negs. If it's there you can print it. The paper just needs a little help.