

Night photography tutorial

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Propose of the tutorial

This tutorial will cover, obviously, night photography techniques. No photoshop editing or other methods to turn an image in a night photo. But only a way to do regular night shots with your camera.

The basics

To make a photo we need light, no light, no photos! However a little amount of light is enough to make a great photo. Low light equal long exposure or/and fast "film" or/and bright lenses. But basically, night photography is about long exposure.

Used equipment

Here is small list of the equipment you should have:

- Camera Regular SLR, Digital SLR or whatever you can have, you need just to be able to control your exposition manually.
- Tripod As told before, night photography is mainly about long exposure, so a tripod is a must.
- Remote trigger Not mandatory but very useful, it avoid that you shake your camera when you fire off your shot. Small trick, you can also use the time trigger on your camera.

I won't cover here the regular crap we photographer hauling around with us. Or the film type for the regular SLRs cameras. The films will be covered in the same section as the iso and white balance for the DSLR.

Filters

I got often asked which kind of filter I use for my night shots. The answer is quite simple: I remove all filters I have on my lens! Even the UV protection filter. As it happen often that you got direct light sources in your composition, removing the filters avoid reflections between the filter and the lens.

Let's start

Once you got your stuff together and night is here go out and find a place where something is lighted. Setup your gear and create your composition think about the light, the colors, the dark shapes, the reflection, etc ...

Settings / Film choice

ISO settings or ISO film choice

DSLR or regular film, the choice of iso "speed" is the same: As slow as it's possible ! why that ? Easy, with a slow iso there will be less noise or grain ! The consequence of this is longer exposure time.

White balance or Daylight/tungsten film

This is up to you ! Warm or cold tone ? That is the question. Take a look to the surrounding colors. Here are some example with the 2 major choice, day or tungsten light.

Daylight



Tungsten



NB: Be aware that in these examples the effect is intentionally stronger as normal.

Saturation settings or film type choice

Color night shots obviously work with colors, even if they are dual toned so a bit more saturation is great ! On DSLR enhance the saturation a bit and for regular SLR a Velvia film is good choice.

Camera mode

For night photography don't trust the camera ! So turn your camera to "Manual" mode.

Aperture

For this kind of photography a big depth of field is mostly suitable. But it's preferable to not use the biggest F-stop we can. We should use the one where our lens performs the best. On wide-angle and wide-angle zoom this is mostly around F8.

Shutter speed / exposure time

So far we got the film speed, the aperture we use and our composition with the available light. That mean that the shutter speed will be the result of this

all. As you can guess, low light, slow film and big F-stop will result in long exposure time. In night shot it's not rare to get 20 seconds to 2minutes. The good side of long exposure time is that you get nice colors, a big depth of field (due to relation with the F-Stop), moving person will not show up on your photo, any moving light will make a trail, water will show flat. The down side is that you need to be stable for a while, moving object will be blurred (like tree with wind, flags), any small moving light will show with a trail (person with lamps, person lighting a cigarette, cars).

F8, 20sec @ ISO200

To make it short my basic settings for night shots is Daylight film/WB, ISO200, F8 and exposition time of 20 sec. This is a good starting point. Start with it and correct the settings following the need of the composition.

Here is just a short table for the lazy people which show the equivalence of the "golden rule":

ISO	F-Stop	Exposure time
200	F8	20sec
100	F8	40sec
50	F8	80sec
60	F8	~48sec
200	F11	40sec
100	F11	80sec
200	F16	80sec
100	F16	160sec

I think you understood how to calculate it, else take a look at wikipedia ;-)

Regular SLR

As with a film camera your not able to get the result before the film get proceeded you will need to fire a serie of shots with different settings. You will get a huge amount of lost photos (so don't ask a paper print for all shots on a film). I recommend to use 36 expo films and do sequences of 9 shots and 2 sequences per composition. As said use F8, 20sec @ ISO200 as medium value, if you use slower film speed, which I recommend, just recalculate it. So a sequence would look like this:

	ISO	F-Stop	Exposure time
1	200	F11	10sec
2	200	F8	10sec
3	200	F8	15sec
4	200	F8	20sec
5	200	F8	30sec
6	200	F8	40sec
7	200	F8	60sec
8	200	F8	80sec
9	200	F5.6	80sec

This sequence covers a range of 5 F-Stop. Your composition will probably be in that range; of course if you got something really dark or on the other hand really bright you will need to shift this sequence.

Just do it

Finally, get you gear ready, set your camera to daylight, ISO200, F8 and 20sec and go out and give it a try!!!

Tips & Tricks

Before the night strikes

Night photos look better with a dark blue sky! So the best time to do night shots is not during the night, but right after sunset. Be aware that this is a small time range and that this range shift with the seasons. Take a look to the example to see the difference.

People walking in you frame

It happens often when you are shooting cityscape that people walk into your frame. Don't worry they will not be showed on the photo so far you use long exposure time, they don't stop and as long they don't carry light with them. Don't bother, just let them walk trough.

Avoid noise with DSLR

With a DSLR, shoot in RAW format ! This will lower the noise. And of course, you can change you camera settings in post-production.

Somme exemple

Ile de la Harpe

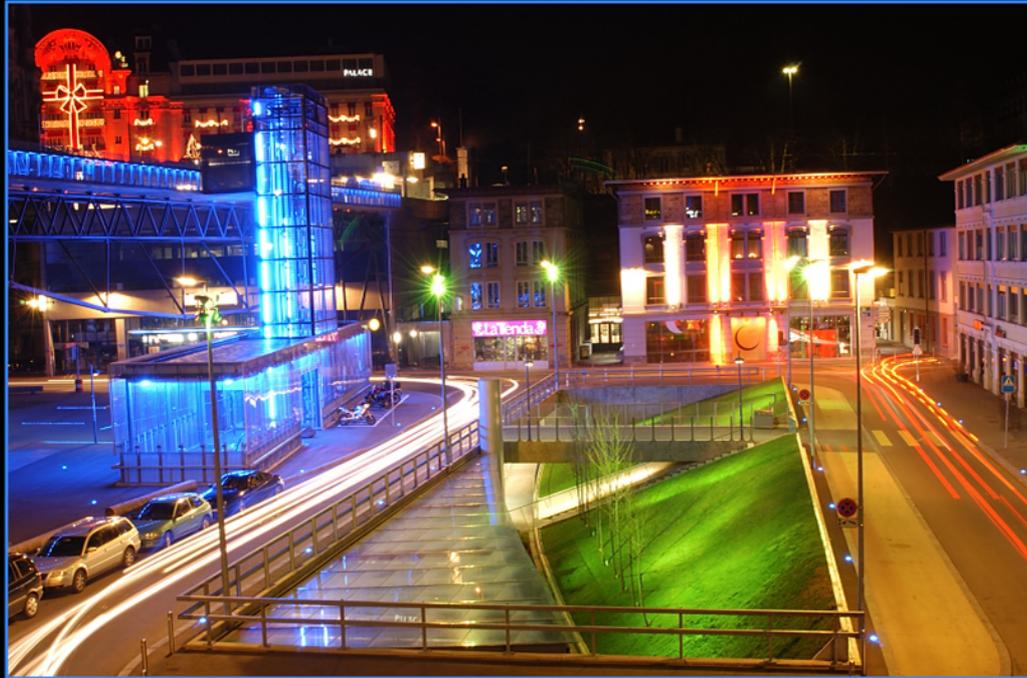
F9.5, 30sec @ ISO200 ; D200 ; 18-70mm F/3.5-4.5 G



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Place de l'Europe

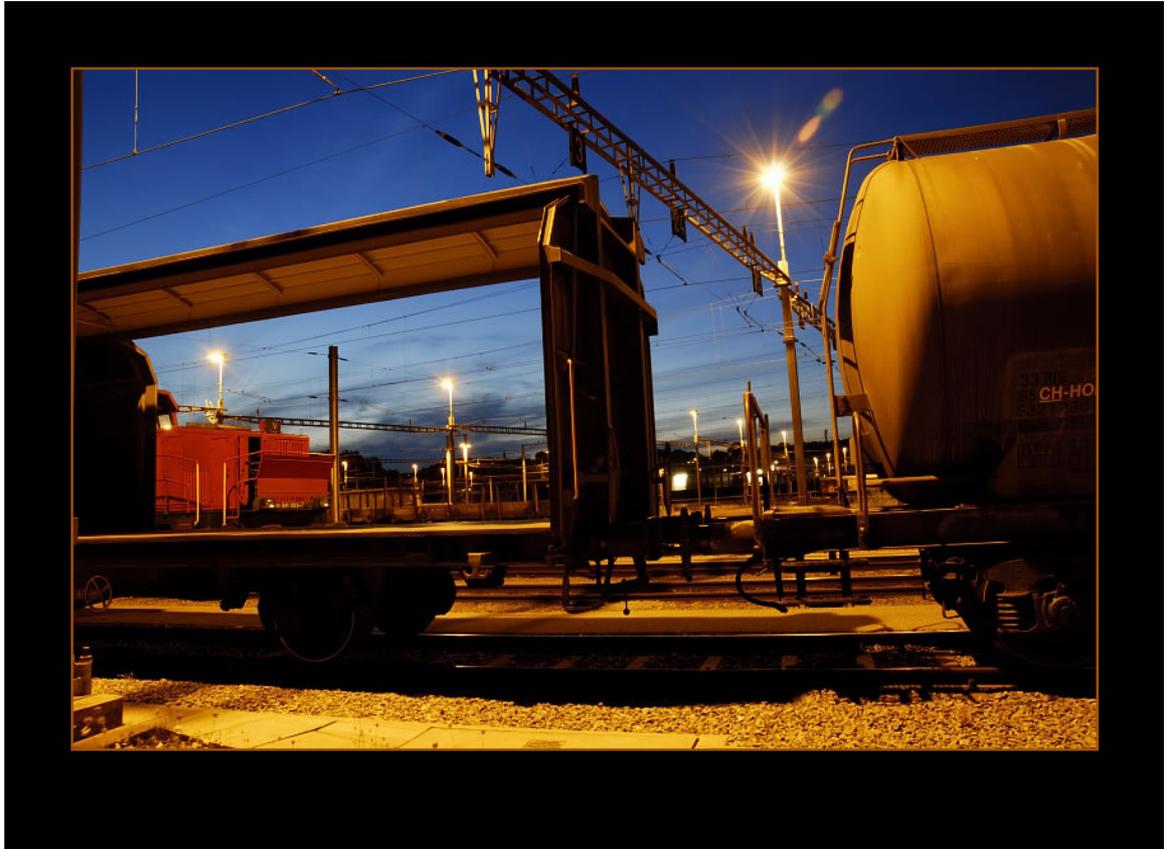
F19, 20sec @ ISO 200 ; D100 ; 28-105mm F/3.5-4.5 D



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CFF

F8, 15sec @ISO200 ; D200 ; 18-70mm F/3.5-4.5 G



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Lausanne

F11, 20sec @ ISO200 ; D200 ; 18-70mm F/3.5-4.5 G



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Lausanne St-François

F9, 20sec @ ISO200 ; D200 ; 18-70mm F/3.5-4.5 G



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