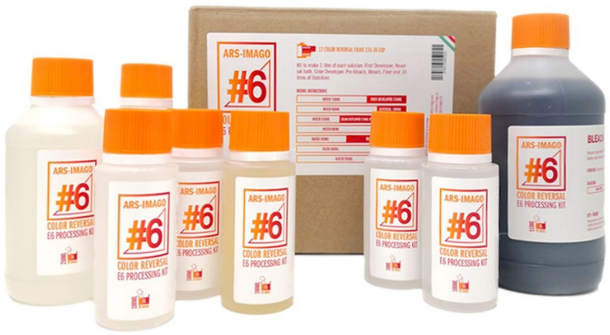
IN-DEPTH

THE COLOURED SLIDE FILM, THE SNAPSHOT AND THE E-6 DEVELOPING PROCESS



With this in-depth post dedicated to the color slide film, we will provide you with some suggestions for the best outcome possible for your work. We will see together all the steps, from the perfect shooting to the perfect slide film developing process and going through the mostly common mistakes and how to avoid them.

HOW TO DEAL WITH COLOUR SLIDE FILM EXPOSURE

Shooting and developing a color slide film allows for extraordinary outcomes for your pictures.

That said, the exposure shooting phase needs to be accurate, as the film tolerance for mistakes is at its lowest not more than half a stop for either overexposure or underexposure.
The latitude of this film is very low, compared to other more common negative film.

- OVEREXPOSURE: the outcome will present very light colours, blurred and unclear images, with the risk of 'burning' the highlights of the scenery.

- UNDEREXPOSURE: the outcome will show a too dark slide, with some gloomy and very thick colours.

The main piece of advice is to calibrate the exposure in the best way possible, but this is not always easy, as it depends on the scenery basic conditions and circumstances, on the type of light meter you use and on our skills with the photographic camera.

If you do not want to miss the chance for a relevant snapshot, do the following: work with bracketing, by shooting the same scenery with different exposures while playing with half stops above or below the measurements shown by the light meter.

After shooting with the light meter's measurements, shoot a couple of times more, once with an overexposure of half a stop and then with a full stop one, do the same again, but working with underexposure instead. Among these five shots, there will be one with the perfect exposure which will give you back the best colour performance.
The coloured slide better tolerates the underexposure, therefore it is always better to shoot with half a stop less, giving space to light (opposite to the black-and-white film negative, where it is always advisable to work with a slightly calculated overexposure).

THE SLIDE DEVELOPING - THE E-6 PROCESS

The developing of the color slide film can be done both in a laboratory with professional equipment and at home, by assuring you are provided with an appropriate equipment which can allow for an accurate control over the different parameters.
The E-6 process is made by 7 baths: 1)First development, 2)Reversal, 3)Second development, 4)Pre-Blech, 5)Bleach, 6)Fixer, 7)Stabilizer.
The first developing is a developer for black-and-white and it is what is needed to obtain a negative image on the film. After the washing and the reversal film bath, here it comes the cromogenetic second developing which generates a coloured positive image. Then there are the final steps needed to complete the process.

The ars-imago #6 kit is strongly suggested as it stands out from all other quicker kits (with a lower number of baths) for its professional outcome's quality and, in facts, it is made up of seven baths.

TEMPERATURE CONTROL
For every step of the process and, most of all, during the developing baths, it is extremely important to have a precise control over temperature. It is fundamental that the working solutions maintain a 38°C, with a 0.3°C maximum tolerance. Also, temperature must be constant for the whole process.

There are some tricks in order to maintain temperature under control -for home-made developing too-, with just a bit of DIY, it is easy to prepare a thermostated bain-marie system.

We can add the following equipment to the one we already use for black-and-white developing:
• a high-edged processing tray (to pour water in)
• a resistance with a thermostat (to warm up water at a defined temperature)
• a small hosepipe for water circulation (like the one for maintaining a constant temperature inside aquariums)
• a professional thermometer (meaning it with precise measurements)
These products can be easily found, they are quite cheap and will help us managing the whole process.

PRACTICAL SUGGESTIONS FOR DEVELOPING

1) Prepare the working tank with water kept at constant temperature for the thermostated bath.

2) In complete dark, put the film inside the tank and, once the tank is closed and the light is on, warm it up with hot air (for example with a hairdryer) both on the outside and trying to send a bit of hot air to the inside, through the hole of the lid.

By warming the plastic of the tank and the surface of the film which is inside it, we will avoid a dropping of the liquids' temperature when they are poured inside the tank.

3) Once the tank is full and rightly warmed, you have to dive it in the tray with water at 38°C for 15/20 minutes. Be careful to prevent water from spilling inside, in order for the film to remain dry. The tank will float, so keep it stuck at the bottom with some weight.

4) Once the chemicals are ready, start the developing process and leave the tank at bain-marie inside the tray between one swinging and the next one. This is a way which helps you keeping the chemicals inside at a constant temperature.

DEVELOPING TIME CONTROL

Precision is also fundamental for each bath timing. You need to be particularly careful about the developing baths, which have an error-tolerance of only 5 seconds.
Check carefully the times on the data sheet.

DEVELOPING PRACTICAL SUGGESTIONS

1) Prepare all the working solutions and keep all the chemicals at bain-marie handy and ready to be
used.

2) The treatment time starts as soon as the first chemical is poured into the tank and it ends when it is time to pour the next chemical.

3) Empty the tank from chemicals when there are 10-15 seconds left to the end of each bath, in order to end the developing exactly at the time reference of the data sheet-table and immediately pour the solution of the following bath. Please note that if you are developing Fuji dia film, it is advised to increase each developing bath-timing of 1 minute.

UNDER AND OVERDEVELOPMENT AND UNDER AND OVEREXPOSURE CASES

In order to better understand the outcomes of your developing, the most efficient gauge is the one of the dominants. We need to understand that it is not easy to find a colour cast linked to either overdevelopment or underdevelopment, as the colour casts often depend on the colours' temperature of the scenery we took the picture of.
That said, the presence of 'abnormal' dominants could be due to the following mistakes which could happen in the process:

- Underdeveloped film (reduced timing and/or lower treatment temperature, compared to the ones suggested): you risk to tamper with colours, ending up with a chromatic dominant which tends to yellow shades.
- Overdeveloped film (increased timing and/or higher treatment temperature, compared to the ones suggested): the chromatic dominant will tend to blue shades.