

There is a point in every photographer's career when experimentation begins. It may start innocently enough by just using special filters and then migrating to pushing film or even venturing into using different developers. Eventually, the search for new and different techniques will lead the adventuresome photographer to some obscure films that are usually hidden in the back pages of film catalogs. That's when the real fun begins.

Most of these films were originally designed for some type of scientific or industrial application and have magically been transformed into artistic media by adventuresome

photographers. We looked back over the years at some of the "weird" films we have used, trying to find a common thread. At first we didn't see it, but after reviewing the tech sheetsha! The common thread was red. All these films had an extended red sensitivity. Most went into the infrared area, others used high speed, and a couple concentrated on fine grain. Whatever their original application, over the years these films have had just about everything possible done to them by photographers in the name of creativity. In this article we will look at just six of these films. Some are old, some are new, a couple are hard to use, but they're all a lot of fun.

ILFORD SFX 200

Ilford entered the special-effects film market with SFX 200, a medium-speed (ISO 200) panchromatic film with a peak red sensitivity at 720nm and an extended red sensitivity up to 740nm, so it can produce an effect similar to that of infrared film. SFX 200 has a very good grain structure and produces less blooming in the infrared highlights. The trade-off is that the infrared effect is less than with the true infrared films. When you expose SFX 200 without filtration, contrast and exposure latitude are very similar to HP5. Adding a yellow,

light red, or dark red filter will increase the contrast in the scene and produce an infrared effect. The deepest red filters produce the most infrared-like effect—the Kodak Wratten 89B, B+W 092 and Hoya R72, for example.

You can start your metering with ISO 200 (using TTL metering with the filter in place over the lens, or applying the filter factor), but we suggest at least a twostop bracket at one-stop intervals. Even when you think you have the exposure figured out, you can still miss. You should load the film in total darkness if possible, or at least in subdued light. We did get some fogging on the end of one roll when we loaded it in full shade.

Processing can be in Ilford's ID-11, Microphen, Perceptol, Ilfotec HC or Ilfosol-S, or Kodak's D-76 or T-Max developers. We're

sure that almost any other black-and-white developer will probably work too, because it has been tried by some "weird" photographer in his or her basement darkroom.

KODAK RECORDING FILM 2475

We don't even want to remember how long ago we started using this film! When it was first introduced, ISO 1000 (ASA 1000 at that time) was an unheard-of film speed. Photographers pushed their Tri-X films using extended film development in hopes of reaching that 1000+ film speed. With an extended red sensitivity, 2475 works well in tungsten

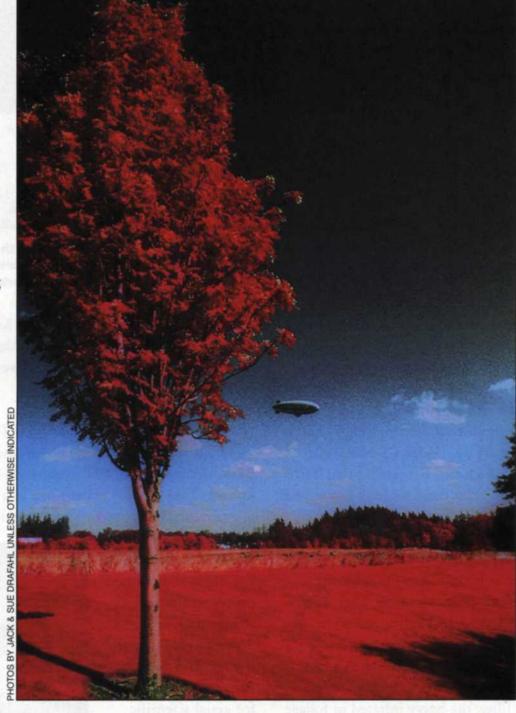
lighting. This film was actually designed as a military instrumentation film, but expanded its use to law enforcement and photojournalism. It was the artistic photographer who took this high-speed, grainy film and used it to create a new effect. Grain normally was considered a negative aspect of film, but as the grainy effect became popular, so did 2475. Today the film is still around (and so are we), and it fills a niche in the weird family of films.

A fairly narrow exposure latitude requires some tweaking with your exposure meter. Recommended processing of 2475

is in T-Max RS, HC-110, DK-50, and D-19 but other brand-name developers will work as well. The film base is Estar, so it is very thin but unbelievably strong and requires the use of a sharp pair of scissors in the darkroom.

KODAK TECHNICAL PAN

As far as we are concerned, this is a sleeper film. Of all the weird films we have used, we have experimented with this one the most. Tech Pan has unbelievably fine grain, excellent sharpness, and more flexibility in development than any other black-and-white film. It's the only film we have seen with an RMS granularity rating of "3" and it is listed as having "Micro Fine" grain. Exposure indexes can range from 16 to 320

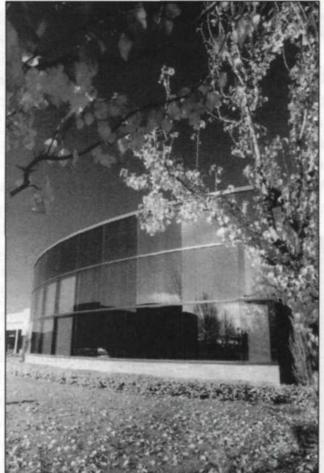


KODAK INFRARED EIR

Kodak Ektachrome Infrared EIR is a lot of fun and a big challenge because it produces unreal colors and exposure is a guessing game. Experiment with colored filters, and bracket exposures!

depending on which developer you use. Red sensitivity extends to 690nm, and Tech Pan makes an excellent portrait film when processed as a low-contrast negative as it suppresses blemishes.

There are three basic ways to process Tech Pan. Lowcontrast development allows photographers to create extremely fine-grained pictorial images with a full tonal range. Photographers use Kodak Technidol developer to maintain low-normal contrast negatives. For high-contrast applications





Above Left: Ilford SFX 200 has extended red sensitivity to almost simulate the effect of infrared film, without the hassles. Above Right: Kodak High Speed Infrared is a true infrared-sensitive film that produces black skies and white foliage when used with a No. 25 red filter. This film must be handled in total darkness, including loading and unloading the camera.

such as photomicrography, solar photography, laser recordings and microfilming, Dektol, D-19, HC-110, D-76 and Microdol developers will all yield the required high-contrast effect (develop the film in D-19 and print on grade 5 paper, and you'll get extreme-contrast images with black and white tones, but no gray tones). To produce slides from high-contrast subjects such as line art you must use Kodak's T-Max 100 Direct Positive Film Developing Outfit. Remember that Tech Pan is laid down on a thin Estar film base, so don't forget your scissors when processing in the darkroom.

KODAK HIGH SPEED INFRARED

If you want to reach as far as 900nm into the infrared spectrum, this may be your black-and-white film. High Speed Infrared Film (HIE for short) has no ISO rating, requires filtration, and may not be suitable for a high degree of enlargement. So, why would anyone want to use such a film? The answer is easy—the end results are really bizarre! When photographed through a red filter, the heavy infrared in foliage records as white and skies become very dark. The film grain structure is coarse, and the infrared blooming gives a glowing effect to objects that reflect infrared. Way cool! Besides special effects, the film is also useful for aerial, astronomical, biological, medical, legal, and industrial photography.

Kodak gives a starting exposure "guess" of 1/25 second at f/11 in full sunlight through a red filter. But exposure constantly changes because of things you can't see (your eyes can't see infrared, and your exposure meter can't read it), and it even differs with varied distances. This film helps you fully understand the phrase "bracket, bracket, bracket." HIE can be

processed in almost every developer Kodak makes, but heed the warning on the film box that states that you must load and unload the film in total darkness—we have the fogged film to prove the validity of this warning.

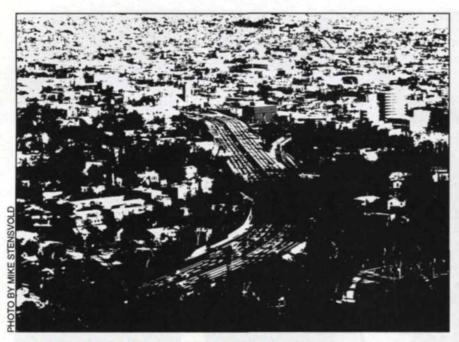
KODAK EKTACHROME INFRARED EIR

Of all the special-effects emulsions on the market, Kodak Ektachrome Infrared EIR color-slide film is probably the best known. This product started out as a E-4 process emulsion, migrated to AR-5 process, and recently was upgraded to

utilize the widely available standard E-6 color-slide film process. Infrared sensitivity is from 700nm to 900nm, and the rest is false color. Primarily designed for aerial scientific photography, the film renders color images that differentiate between healthy growth and diseased



Konica Infrared 750nm lies somewhere in-between SFX 200 and High Speed Infrared in sensitivity, and is the only true infrared film available in 120 rolls.





Two faces of Tech Pan: Developed in Kodak D-19 and printed on high-contrast grade 5 or 6 paper, it yields images containing no gray tones, just black and white (left). Developed in Kodak Technidol, Tech Pan produces full-toned images with virtually no grain and incredibly high resolution (right). The film can also be processed to produce positive slides-see text.

vegetation. Of course, we know you will be using EIR for more-artistic endeavors. With a yellow Kodak Wratten No. 12 filter on the camera lens, blue subjects record black, red becomes green, green is blue, and infrared becomes red. The starting ISO depends on the process you use for EIR. If you go with the older AR-5 process, then ISO 100 is a good starting point. The contrast in AR-5 is lower and the exposure latitude is wider. ISO 200 is your starting point when EIR is

processed in E-6 chemistry. The exposure latitude with E-6 processing is very narrow, and a wide bracket at 1/2-stop intervals is advisable. You still may miss the exposure, because you're still guessing just how much infrared is actually in the scene.

Cross-processing EIR in C-41 color-print film chemicals yields excellent color negatives with a wide exposure latitude, yet without the typical orange mask. Bracket your exposures at one-stop intervals if you use this method.

KONICA INFRARED 750nm

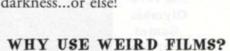
Konica's Infrared 750nm blackand-white film is sensitive to wavelengths out to 820nm, but peaks at 750nm, hence the name. Designed for use in scientific and special infrared applications, Konica 750nm can be used as a normal black-and-

Kodak Recording Film 2475 is the grainiest film available in 35mm cassettes, so it's great for grain-effect images. It's also very fast-it can be exposed from EI 1000-4000 with pushprocessing in Kodak DK-50 to accentuate the grain.

white film without a filter, and as an infrared film with a filter. ISO ratings without a filter start at 32, but as with all infrared films, that is only a starting point. The grain structure is very good for an infrared film, and resolving power is excellent. If you want really fine grain, you can get the same film in 120 size and reduce the effective grain because of a larger negative. Yellow, orange, and red filters give progressively greater infrared effects, increased contrast,

> and darker blue skies. Exposure latitude is somewhat narrow, and we would recommend exposure bracketing in 1/2- to 3/2-stop increments.

> Konicadol DP, Konicadol Fine, Konicadol Super, Kodak D-76, Kodak DK-20, and Ilford ID-68 are the recommended developers for this film. Final film contrast can be adjusted by changing the standard development times. As with all infrared films, handle the Konica Infrared 750 in total darkness...or else!



Photographers use these films for the simple reason that "weird" films exist. They are something different to try, they offer valuable learning experiences, and they provide tools that take us to a new creative dimension. If you're looking for a new way to spark your photographic creativeness, be gutsy and give the weird side of photography a try.

