

KEEPING PACE

A Monthly Newsletter Devoted to the art of Darkroom Photography

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The High Price of Photographic Darkrooms

Alternative registration equipment for making masked prints.

Do you need to have expensive equipment for making Ciba prints?

It depends on the quality and the completeness of your operation.

Without reservation, Condit's equipment is the best.

The pins that he uses are custom made and are hardened in order to give the systems a long life. I have one of his original film punches (8x10 diagonal) and it is almost 40 years old. I recently sent it back to him to get the punch re-vitalized. The punch worked fine, except with very thin film. It had a tendency to jam the opening, so he put in a new set of punches and dies and returned it.

It will probably last another 40 years or more.

The original registration film carrier was made for an old 8x10 Elwood enlarger. It was made for Evans and Peterson. I had the pleasure of using it for the very first time. It worked like a charm.

In fact, when I decided to go on my own, I purchased the original carrier from Ed Evans for \$100.

Today's prices are higher, of course, but the equipment is still worth it.

When making prints via the Ciba process, it is a good idea to have a registration carrier.

Masking is a fact of life when it pertains to Cibachrome.

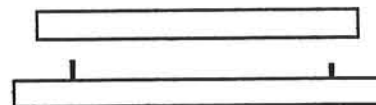
However, let us examine just what is needed.

The transparency and mask must be able to be placed in register in the carrier.

Must the carrier also be locked into the carrier base? Not necessarily.

As long as the transparency and mask are in accurate register, this is the most important part of the process.

Why not just purchase a film punch, and a sheet of glass with the two matching diagonal (or otherwise) pins cemented into it, and a cover glass with the two aligning holes cut into it. This is a registration carrier that works.



The glass will fit into the area where the enlarger's carrier would nonnormally fit. Black tape placed accurately on the bottom of the bottom glass will mask off the clear

areas and eliminate any possible unwanted flare. The glass carrier can be removed at any time and replaced.

However, replacing the glass carrier to the same exact place may be difficult unless some provision is made to place it against two stops.

This system is basic.

Making the mask, placing it in register and making the exposure on the Ciba material is about all that can be done. Is this enough? Maybe not.

Suppose you want to remove the carrier and change the mask to a highlight "bump" mask and re-expose the material. Is this possible? **No.**

In this case the carrier must be able to be placed precisely in the exact spot each time it is removed.

In this case, I would recommend the **Condit system**. His carrier comes equipped with a housing that is fastened to the enlarger so that the carrier can slip into and out of the enlarger all day with losing its registration accuracy.

The only addition I would recommend is the use of an oil carrier.

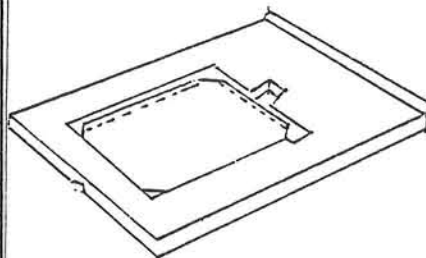
Making prints from small originals is full of surprises. The size of the print, and the kind of light source used to make the print are very important.

If you are working from 35mm and are using a diffused light source, you may get away with resorting to using some sort of immersion oil system.

However, if you are like me, and hate very long exposures, you may feel inclined to purchase a condenser system. In this case, every speck, scratch, or smudge will be seen in the final print.

The use of an "oil" system allows the image to be kept clean, keep the two sheets of film in a tight register and fit, and allow you to eliminate the two scourges in photographic printing, namely Newton's rings and refraction.

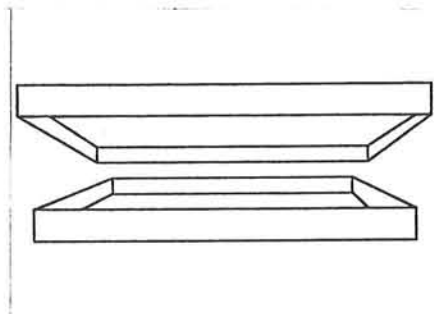
For this kind of accuracy, the simple two sheets of glass may be used, but the Condit Cibachrome carrier will be more advantageous.



What about the other end of the system. **The easel.** Is a registration easel really necessary? No. it isn't.

It is nice to have but I have a suggestion for those of you who do not yet have a registration easel.

Get hold of a discarded film or paper box that is larger than the easel. Cement some flexible magnets to its bottom. Spray with flat black paint the inside corners of the top and bottom parts of the box.



Contact cement a piece of 20x24 sheet metal to the table area under the enlarger. Paint this area flat black.

This will allow you to place the box on the metal table top and have the magnets hold the box in place.

Then place the easel in the box and tape it in place. What kind of easel? It really doesn't matter as long as it will hold the paper and won't move. Even a "Speed Easel" would work well.

Why go through all this trouble?

Well, if you plan to exchange the masks in the carrier, you

would either have the system with a box lid to close the box and eliminate any light leak problems, or a registration vacuum easel with register pins and a matching paper or film punch.

The high cost of the film punch and registration vacuum easel could be prohibitive. The simple paper box with a light tight lid will also work well.

If you become adept at the various tricks that can be performed by changing masks and re-exposing the image again, you will understand the need for registration at the film plane of the enlarger and at the easel level.

The need for an accurate easel meter is very important. Your eyes are not equipped for reading the slight differences between color balances.

There are many easels on the market.

The Jobo Star easel is great and is repeatable, but not as easy to use as the Speedmaster.

The latest easel meter from Speedmaster has a memory bank that will allow you to place 8 specific colors in memory, and they can be called up again, and the filter packs can be re-balanced to be able to produce these colors.

I find that the use of expensive meters is almost a

waste of time when using Cibachrome materials. The color balance of the paper, rather than the transparency, becomes the factor in making a print.

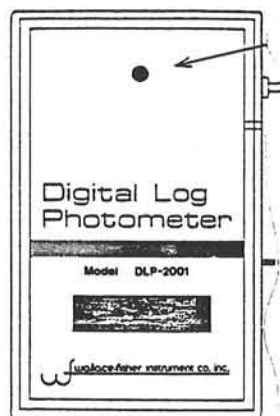
You can place 20 original transparencies on an easel, cover them with glass, in order to hold them flat, make an exposure based on the last color balance and light level, and you will find that most to the images will be within striking distance.

Why spend the money just to find that the balances are based on the paper rather than the transparency image?

A simpler approach is to purchase the right kind of meter.

An easel meter that is digital, and most important, repeatable, is all that is necessary. Is there a meter on the market that will do just that? There certainly is.

It is the **Wallace Fisher meter.**



It has a 6.0 density range, is color sensitive (if necessary) and will enable you to make

a print, based on the high-light reading of a transparency on the easel, then record the light level of the enlarger when changing filters or sizes.

How much is this meter? Less than \$400.

It is obtainable from:

Bob Wallace
Wallace Fisher Instrument Co
Fall River, MA 02724
508-673-4744

Do any of you use your enlarger as the light source when making contrast masks for use with Cibachrome or Dye Transfer? I will bet that your exposures for the low level gamma's are very high.

The reason is easily explained.

You more than likely have a diffusion dichroic light source in the enlarger head. This is a very weak light source when compared to other systems.

Then you probably use a lens that is around an f 4.5 aperture. This slows it down even further. Why use the enlarger as a light source? Is it convenient, or perhaps too expensive to make an exposing system that is faster?

It is better to use a simple 250 watt enlarging bulb placed in a Kodak Acorn Safelight, with a simple 3 "filter holder, separation filters, and a contact frame for making masks, instead of

using the enlarger as a light source.

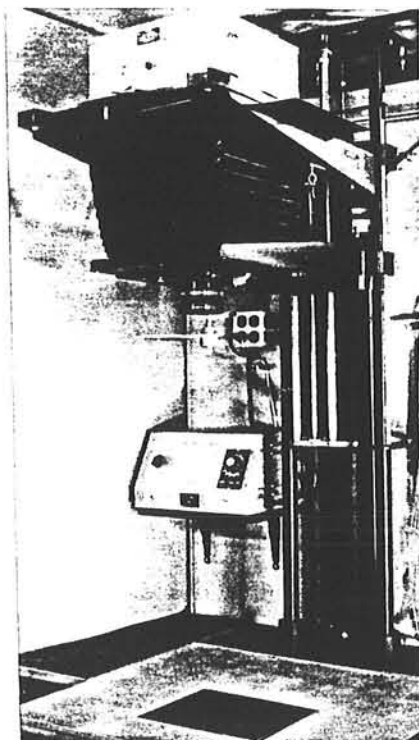
Condit makes a great contact frame equipped with registration pins that match the film punch you probably already own.

The light source is not inhibited by being diffused or put through a lens.

If you need to vary the amount of light coming out of the system, use neutral density filters.

The 8x10 enlarger from Condit

is finally being unveiled. The photograph describes the unit and how it can be placed into the proper place for use.



The list of equipment that accompanies the enlarger are as follows:

The light head

An Aristo cold cathode lighthouse with relay (the relay allows the use of any timer). Additional counterweights are available to accommodate different lighthouse balances.

Registration

8x10 film held both left to right and front to back on register pins in the carrier. Four masking blades are also built-in.

Anti Newton ring top glasses, and coated bottom glasses are available for the negative carrier.

Mounting

Wall mounted top, bench-top mounted base plate (no baseboard) Bench should have a slide out top in front of enlarger base to allow projections down to floor level.

Size and weight

5 ft. high double columns. Approx.. 175 lbs. Unpacking and set up can be done by 2 people.

Lens to column distance approx. 20".

Bellows extension approx. 20".

Lenses

150mm to 240mm, mounted on a circular beveled edge lens boards.

Filtration

Under the lens: built in swing away holder accepts 3" by 3" filters.

Under the lighthouse: up to four 8x10 Roscoe filters are magnetically held on steel filter holders in any of four filter slots.

Enlargement

8x10 enlarged to 40x60 image using 240 lens, projecting to the floor level.

Reduction

8x10 film reduced to 2x3 using a 150 mm lens.
8x10 film reduced to 5x6 using a 240 mm lens.

Re-positioning/ focusing

Counter balanced head and counter weighted lens stage, lever release of both negative and lens stage permit free movement up or down for rapid sizing and focusing and independent fine positioning focusing controls of both the negative and lens stage.

Fabulous lenses are available for this fine enlarger. A Computar 55mm f 1.9.

(Apo-chromatic) and all other Rodagon and Apo Rodagon lenses are available, 1/3 off list price.

Also available is a testing easel that can be placed anywhere on the image without disturbing the locked in main easel.

Call Condit if you are interested.

203-426-4119

The Tri color Carbon process is not as exclusive as once thought.

The system know as UltraStable is the brainstorm of Charles Berger.

His pigments and procedures were first "invented" by him.

In his early days of working with the procedures and trying to find a company that would coat the pigments, he became involved with the Polaroid Co.

They did not come to an understanding and parted company. In the interim, the Polaroid company had coated quite a bit of material. Another company called Ataraxia Studio in Bensalem, PA. has opened a service co. making Tri color Carbon prints and is using the original Polaroid coated pigments.

This newly formed company has their own scanner which can produce continuous tone film negatives that can be used to produce the Carbon print.

As yet, I have not seen the results of their process, but I have seen the work produced by Bill Nordstrom and Charles A Berger, using the UltraStable materials, and they are absolutely beautiful. Soon, another group consisting of Charles Berger, Bill Nordstrom and others will be involved with producing the necessary separation negatives for anyone interested in producing his own

work. They will become a service company as well as a lab and will produce fine quality prints for an ever growing populace that is interested in quality imagery.

The difference between the continuous tone negatives and the screened negatives is important to understand.

Screened negatives will produce a sharp dot regardless of it's size. It will therefore be able to be hold detail in very light areas. The dot makes it possible to hold the very lightest degree of density. This will be important when it comes to longevity. The dot is a raised pigment. Fading will be less of a problem with this kind of system.

The continuous tone image will have a weaker coverage of color in the highlight areas and could possibly lose some image due to fading.

Basically, what has happened is that other people can devise their own pigments and methods and can also play in this new revival of color printing.

Reece Vogel of Los Angeles is making Carbro prints using the old system that was once in vogue in the 1940's.

Rene Pauli of San Francisco is making his own pigments based on formulas

from Luis Nadeau's book on "Modern Carbon Printing."

His prints are made by contacting the enlarged separation negatives onto pre-sensitized carbon pigments. He uses an old street lamp (modified, of course) to expose the images.

I have been advising my students to clean transparencies using the "Anchor" brand film cleaner developed for the litho field. I use three different plastic bowls filled with film cleaner, in which I place an oily or dirty transparency into the first bowl, shake it a bit, then, using a tweezer, remove it and place it into the second bowl, shake it some more, then finally into the third bowl, shake it some more, and remove it, and hang it to dry.

This works fine, unless you get a batch of dirty film cleaner.

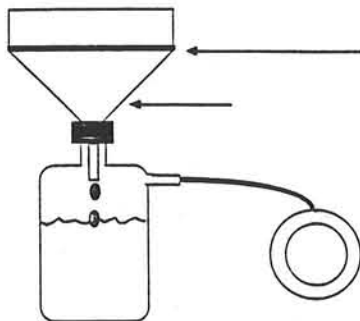
You can filter the liquid as follows:

Visit a chemical supply firm, and purchase a small size plastic Buckner funnel, some fine Whatman filter paper, (5 microns) that fits the funnel, and a one gallon bottle and a rubber stopper.

Drill two holes in the rubber stopper, one for the funnel to pass through, and the other to insert a vacuum hose.

You will need a vacuum pump or at least a water aspirator.

Moisten the filter paper, place it in the funnel, and turn on the vacuum system. Slowly pour the film cleaner into the funnel, it will pass through the filter paper with relative ease. That's it. Dump the filter.



One of my recent subscribers has written to me describing a solution to a problem that I hadn't thought of recently.

He is making exposures for contrast masks and is using his enlarger as the light source.

His exposures using HC 110 were quite long. 100 to 200 seconds for the red filter were average. The green was 2.3 times longer.

He also discovered when using Kodak's HC 110 developer, he found that the Pan Masking film curve shape actually had a steep curve, and was finding difficulty in repeating correct exposures.

However, he decided to use Kodak's Technidol developer

and a rotary drum processor. He has experienced a much straighter curve shape, and has dramatically reduced the exposure times required for his contrast masks.

Now his exposure times for a 25% mask are 35 seconds for the red filter and 95 seconds for the green filter.

In effect, the use of this Technidol developer has actually doubled the film speed, produced much more accurate masks and has reduced the make-over rate

The developing times for processing Pan Masking film with Technidol developer is much longer, compared to HC 110, but if you are using a Jobo type processor, time is no problem.

The use of an enlarger as a light source is fine, if you can get the exposure times within reason.

Many of my students use the Jobo processor with great results, whether they are making contrast masks or processing Ciba prints. The beauty of the Jobo systems is that they are absolutely repeatable in temperature, and with the rotating speed of the drum, and if you are fortunate enough to own the automatic version, then the prints can be made in volume without loss of density, because it is a "one shot" chemistry system.

Joe Holmes, one of the finest photographers and color printers in America, uses the top of the line Auto Jobo with great results.

He will expose many sheets with the same image.

He then loads as many 16x20 drums as he can, with each drum containing one print. The processing begins with tube # 1 and when that print has been processed, the tube is removed from the system and replaced with tube # 2 while he is removing the first image from the first tube, and preparing it for hanging. And so on.

In this way, Joe is able to make a limited edition of his work with the assurance that each print will look exactly like the previous ones.

When I had my large lab, I owned a Colenta 30" processor. I thought that this was a big machine.

Today's machines are enormous.

The accuracy of the exposed image had better be right. The material cost for a sheet of 40x60 Duratrans is quite expensive.

The latest machines are replenished accurately and can deliver many prints without fear of losing their color balance or density levels.

The Jobo system is probably the best processor for a small lab. However, the Cap 40 and the newer ICP 42 can deliver prints with ease.

One of the problems facing photographers today is to decide on what kind of print they want to portray their work.

The choices are numerous.

Black and white,

Carbon,

Platinum,

Bromoil,

Carbro,

Type C,

Type R,

Cibachrome,

Dye Transfer,

The new UltraStable tri-

color Carbon print,

Polaroid color,

Polaroid black and white,

the new computer enhanced

Dye Thermal print,

The Lithographers proofing material called the

Iris print.

The list could actually go on longer as new technology keeps increasing.

Which system do you think will portray your photographic skills better than another?

It all starts with you, your eyes and your camera.

The medium you choose will be measured by others about your competence with a camera. This really isn't fair, but it is the way some people look at photography. In my early days, I began my color darkroom work as a Carbro technician.

I can remember looking at prints made by my competition and wondering why they were considered "great."

I found out that most

people looked at the print as the work of art and not the photograph.

One of my contemporaries was a famous name in the field of art.

In fact, even after he passed away, his work was re-discovered and given much publicity because the works were Carbros.

People will look at an old Carbro and think that they are looking at the greatest art work ever invented.

Not so.

The original photograph is still the to be examined.

The print is an extension of this "eye" that the photographer has used.

In my case, I never thought of myself as a photographic artist, but rather an extension of the true artist, the photographer.

My job was to make a print, regardless of the medium, to make sure that the wishes of the photographer were fulfilled.

In a sense, I became a good listener and had to feel as if I were in the photographers shoes.

When I worked with "art directors" the job was even more intense. The art directors job was to make sure the image being printed would excite the viewer and hold his or her attention.

This meant that I had to listen very closely to the instructions. In some cases, I couldn't deliver what the

Art director wanted.

I found myself without a client.

As photographers, some of you have used other labs for getting your work printed.

Have you always been happy with the results?

I know you haven't.

This is the main for making your own prints.

You and you alone should know when your prints satisfy your needs.

If you are gallery conscious, you are aware of the kinds of prints being offered for sale.

Choose your kind of print quality and make sure that you learn "how" to make your images come alive.

There is nothing wrong with any of the processes that I have mentioned, but if you want to be recognized, choose the process that enables you to make the most and the best of your original images.

Can you imagine a fine artist using inferior paints and cardboard for the final "canvas?"

Choose the best process for you.

My list of fine processes include the Dye Transfer, The Cibachrome, and the new 4 Color UltraStable Carbon print.

Any of these three systems will be recognized by any gallery as a serious approach to fine art.

This I know.

In answer to a letter I received recently, I was asked for my opinion about specific materials and equipment. I try not to be an advertising agent for anyone, however, when I do see and use a piece of equipment that I feel is out of the ordinary, I speak up.

I try to honestly answer the questions based on my experience in darkroom work as well as with specific processes.

The Saunders enlarger is a fine piece of equipment. The dichroic light source is fine. A bit slow, perhaps, but fine. Condit Mfg can make any registration equipment that you will require. It will fit the Saunders.

Lenses
Some readers mention that they shoot both 4x5 and 35mm, but that I only mention the 150mm Schneider lens for the enlarger. The choice of lens is great for the 4x5.
I would also consider the new Rhodenstock lenses. I would suggest that you also purchase a 50mm Apo Rhodenstock (or any good Apo) for the 35mm.

Easels.
Saunders easels are fine. Any size Saunders easel will do the job. However, for quality work, and for the ability to do some incredible "tricks" with

an image, I recommend using a vacuum easel with register pins.

Washing Cibachrome or Type C prints.
Is it necessary to wash prints properly so that they will have a longer life? Absolutely.
For black and white prints as well as some color prints, the best archival print washer that I have seen is made by Zone VI. However, any archival print washer will do the job.

Processors.
For processing C prints, Cibachrome prints, Type R prints, or any of their related materials, **Jobo**. I think it is the best machine for quality work. The fact that you will be processing with "one shot" chemistry is the best way to go for an individual who is serious about fine work.
There are other considerations, such as the Fujimoto processors, that enable one to make beautiful prints with the added convenience of replenishment.

All of your serious work should be "tipped in" or pressure mounted without heat, and with a professional beveled mat board and framed properly, regardless of size.

These questions were only a small fraction of the kinds of

questions I receive every day.

If you have a specific question or feel that I have given you an incorrect answer, please let me know. I will do my best to make the answer right.

My video and book on Cibachrome has been reviewed by Mr. Ctein in Creative Camera. I have been receiving calls from everywhere.
Thanks, Mr Ctein.

The major change in my Cibachrome book is that I changed the format of the book by making it a totally black and white version, and have added a 1 1/2 hour color video to the package. I think it is much simpler to understand, and I know that it makes much more sense to illustrate things that are difficult to explain, and to explain things that are more difficult to show.

In the meantime I still have my different educational items for sale.
If you wish more information on anything that I teach, let me know and I will send you a 16 page brochure describing what I do best.
Thank you.

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