

THE SUBMINIATURE TIMES

The Subminiature Times is published monthly by Doylejet, P.O. Box 60311, Houston, TX. 77205 (713) 443-3409
Supporting 110, 16mm, 9.5mm, 8mm, 4mm, 1mm, Microdot, & Electronic Still Photography.



NEW BIRTH

Roadside, FM 2920, Houston, Tx. New Year's Day.

Someone's herd just increased by one.

I was glad to have been first to see the gleam in her eye. Nothing like having a camera in your shirt pocket.



DEEP BLACK ELECTRONICS

A full year after the Mayor of Washington, D.C., appeared on home screens smoking the infamous pipe, surveillance professionals are still buzzing.

The general public may never know who set up the photographic equipment. It isn't important. The technology is available.

The PC-1 Supermicro is the world's smallest videocam. The exact size is 3 x 2 x 1". It produces 240 lines resolution, has a wide angle lens, requires 7-15v 85mA, and

will run for 4 hours on a standard 9 volt transistor battery.

The camera will return an image in light as low as 2 lux "through a layer of stocking material", making the lens invisible for all practical purposes.

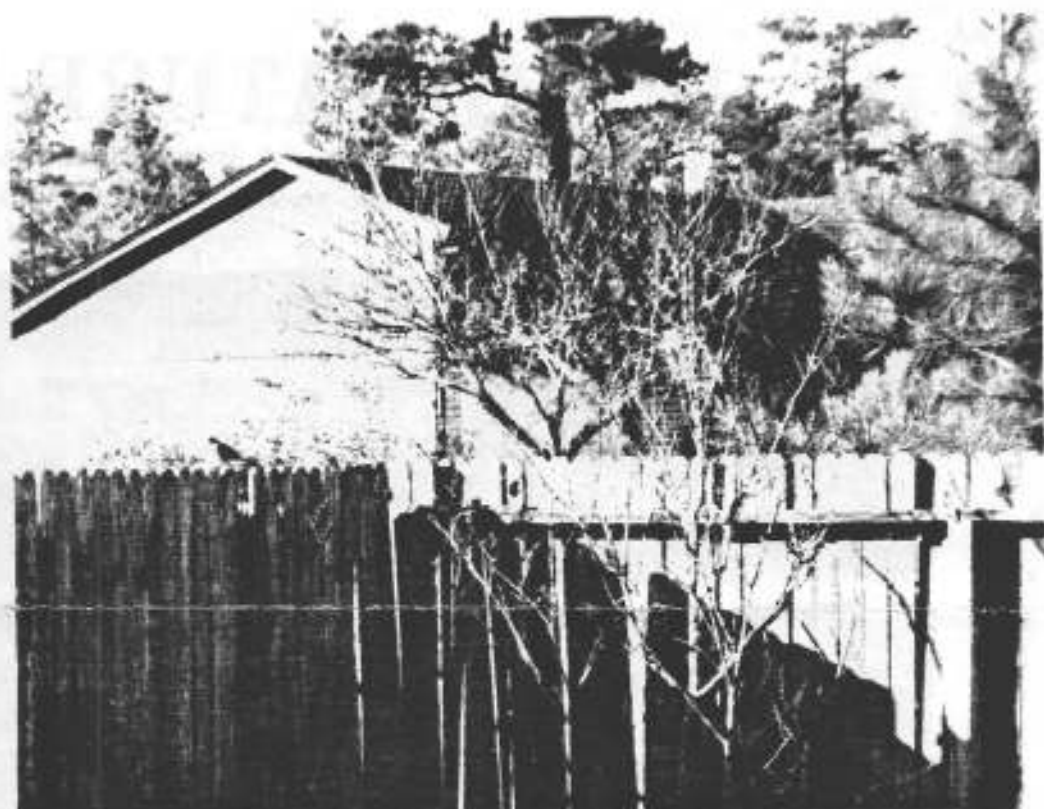
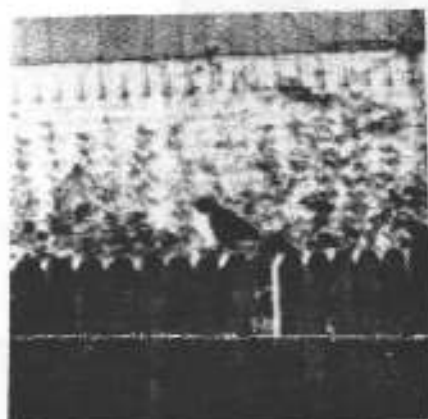
SUPERCIRCUITS

1403 Bayview Dr.
Hermosa Beach, CA. 90254
(213) 372-9166

\$299.95 + \$6.50 s + h.

The Panasonic Video Printer PV-VP1 can make instant prints of your video images. It's a VCR size unit that pops out color prints every 82 seconds. Some interesting special effects include zoom-in and picture-in-picture.

An optional character generator VW-CG1P lets you add titles. 1-800 365-1515 X123.



LETTERS

Dear Al,

I have used every stop on my Minolta-16 from f2.8 to f16, for twenty years. I never have problems with my pictures. If f16 is so bad (Subminiature Times #35) why do they put it on the cameras?

Billy Rodgers
Atlanta, GA.

Dear Billy,

There were times I would have used f45 if

it were available. f16 isn't bad. It just isn't very sharp. Your letter doesn't say what size prints you make. After years of looking at extreme enlargements I go all out to set my camera at f5.6.

I made the photo above at f16. Compare the enlargement with the prints on page 4. Same camera, same film, same developer. What do you think?

I'd be interested in hearing from you again after you make a test.

Al D.

SOMEBODY UP THERE LIKES US.

Throughout the past year we poured through stacks of references in an effort to find the best 16mm film/developer combination above E.I. 1000.

The chart at right from the Photographic Lab Handbook (Amphoto) is the 'official' way to get high film speeds with Agfa Rodinal and Kodak materials.

We had also been pursuing information on Agfa's high speed motion picture films.

Agfa's Teterboro, NJ, office (201) 288-4000 referred us to an Agfa office in Irving, TX (214) 258-1441, which referred us to Industrial Photo Supply, in Bellaire, TX., (713) 664-5678. IPS gave us 1-800 926-3456, which led us to a distributor in California. Their quote of \$68 for the 400 ft. roll stopped us cold.

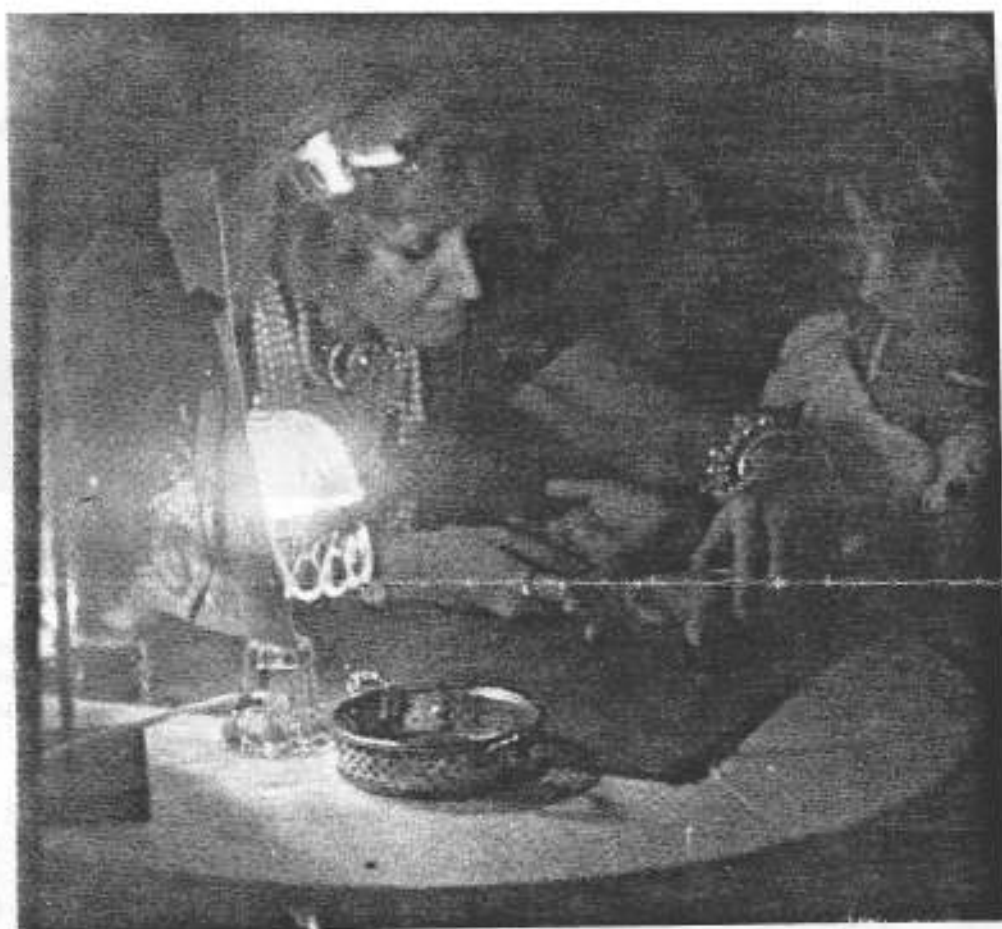
Apparently word about "The Subminiature Times" circulated to some kind soul in Agfa, because we received a short length of Pan 250 free of charge.

Are you ready for this?

The photo at right was made at E.I. 2500 with Pan 250 (Rodinal 1:100, 20 mins @ 75°F) and we've gotten useable images all the way up to E.I. 100,000 with HC-110.

There are no plans to market Pan 250 to amateurs. Subminiature isn't perceived as much of a market for motion picture film.

During the year we'll keep you updated on experiments with Pan 250 and various developers. You can obtain it for 17¢ per foot from: Steadi Systems (213) 461-6868.



PUSH-PROCESSING KODAK FILMS IN AGFA RODINAL

Agfa Rodinal is a very highly concentrated developer which can be used at dilutions of up to 1:100. By varying the concentration its activity can be controlled to a fairly large extent, and many photographers find it particularly useful for push-processing. The table below was compiled by Agfa-Gevaert, Inc. for two popular films of Kodak manufacture; it is suggested that the user make some tests on unimportant subjects before using the recommendations for highest emulsion speeds.

Light Intensity	Subject Contrast	Meter Setting	Developer Dilution	Time in min. 68 F or 20 C
KODAK PLUS-X ROLL FILM AND 35mm FILM				
Bright	Highest	80	1:100	10½
Bright	High	125	1:100	11½
Bright	Moderate	160	1:75	11½
Bright	Low	400	1:50	12
Dim	High	400	1:75	12½
Dim	Moderate	400	1:50	13
Dim	Low	640	1:50	14
Very dim	High	800	1:75	15
Very dim	Low	800	1:50	16½
Normal	Moderate	200	1:85	12 (at 75 F)
KODAK TRI-X PANCHROMATIC ROLL FILM AND 35mm FILM				
Bright	High	250	1:85	14
Bright	Moderate	400	1:75	14½
Bright	Low	400	1:50	14½
Dim	High	640	1:75	15½
Dim	Moderate	800	1:50	16½
Very dim	High	1200	1:65	17½
Very dim	Low	1600	1:50	18½
Very dim	High	3200	1:65	20
Very dim	Low	6400	1:50	22½
Available Light	Moderate	800	1:100	17½ (at 75 F)



DON'T TRY THIS WITH A HASSELBLAD.

Spring, Texas, is the home of the Good Year blimp. The local behemoth. Whatever else is in the sky you can't ignore it hovering overhead. A 747 in frame 2 is barely visible.

We learned recently that the blimp will be moving permanently in April. Although I was in a hurry, I took an extra minute to follow it back to the base. Camera to eye, saying goodbye with one last set of subminiature negatives.

Camera: Minolta 16





SPOTONE

The DROP CONTROL METHOD of Retouching

In the good old days before shrink wrap and blister packs, it was possible to spend a leisurely afternoon in any well stocked photo store reading instruction sheets.

The information would sift out in your head, and the following week you felt as though you were ready to spend your money wisely.

No more. One would expect to see a little tag saying "Wrapped by Omar the Mummy Maker" on the bottom of the Spotone package. You can barely read the name of the product under the layers of plastic.

There's no need to make a decision about buying Spotone. Making prints from subminiature negatives without it is like owning a car without carrying a spare tire. Eventually you'll regret it. Maybe you already regret it but you keep coming up with creative reasons for not exhibiting your subminiature prints.

This is the important information you'll find in the package. To get to the top of the club quickly see: "Retouching your Photographs" Miller \$15.95. Central Camera Co. 1-800 421-1899.

Spotone penetrates into the emulsion of all prints, from glossy to matte surfaces, without leaving any residue. Thus, the retouching becomes invisible.

Spotone is made in six different colors: No. 1 (Blue Black), No. 2 (Selenium Brown), No. 3 (Neutral Black Base), No. 0 (Olive Black), No. B (Brown), No. S (Sepia). The Standard set contains three bottles: No. 3, No. 0 and No. 1.

We package a Six Pack unit of all six colors for those who want to buy the full range at one time.

All Spotone colors can be intermixed to produce a large variety of retouching shades to match any photographic print.

HOW TO USE SPOTONE

Select a place with good light for your color mixing and use the DROP CONTROL PLAN which is the basis for the COLOR CHART as listed below. You will need a small dish or water color palette, some medicine droppers, brushes and sponges. Use only ONE dropper. In this way you can be sure of the same sized drop for all colors. Be sure to rinse out the dropper each time it is used and blot off the drop of water from the end. Otherwise you will be adding one color to the other and soon get the colors out of balance.

Refer to the chart and find the printing paper which you use and note the color mix for it. After the given amounts of different colors are added together be sure to mix them well before using.

If your time, temperature and developer or methods of working differ from those as recommended by the manufacturer then you may have a slight color difference. Test the color mix on the print but let it dry before you pass final check on it. Spotone retouching will dry down a little darker and warmer.

DO NOT use any wetting agents of any kind on the print or in the Spotone mix. Prints which have been treated with flattening or hypo neutralizing solutions should be well washed before retouching.

Since the greater number of photographic papers made by the major manufacturers have a warm black emulsion image we have formulated our Spotone No. 3 color to match the most of these papers. Should you find your prints to

have a slight warmer or colder emulsion color the Spotone color mix can be modified to match the print color by adding small amounts of other colors. Refer to column IMPORTANT NOTES.

Place one or two drops of your Spotone No. 3 in your dish or water color palette and add water to produce a shade of color lighter than the tone of the spot on the print you want to retouch. Be sure your brush has sufficient solution in it so the flow of color will be even as it penetrates into the emulsion. DO NOT wet the print first but apply the color directly moving it constantly as the emulsion absorbs it. When the retouched spot is just slightly lighter than the print emulsion color stop and blot up the excess color. Let the retouching dry. If the retouching is too light add more color. If too dark lighten it by applying a brushful of clean water and blot it up after one or two seconds. Adding color is far less trouble than any lightening procedure.

Should your color mix in your dish become partly dry or fully dried add clean water to bring it back into full solution, and stir it with your brush until it is thoroughly mixed. Do not remix dried colors more than twice. Collected dust particles can give you a problem.

Keep your sponge clean by rinsing it frequently in clean water.

IMPORTANT NOTES

Test the color of your mix on a discard print or an area of your selected print which is not obvious to any retouching. If your application of the No. 3 color is to be modified follow this suggestion:

If the color is slightly too warm add 1 drop of No. 1 color to 10 drops of No. 3. If slightly too cold add 1 drop of No. 0 color to 10 drops of the No. 3.

Prints fixed in various hardening fixing hypo solutions for different times will result in different degrees of hardness of the print emulsions. The harder the emulsion the more difficult the retouching will be. To test for hardness apply a brushful of clean water to a dark area of your print and if the emulsion seems to be oily it is hard. A good treatment for hard emulsions is: dissolve one Alka-Seltzer (blue box)

tablet in eight ounces of water and shake until all the bubbles are gone. Moisten a small wad of cotton with this solution and firmly rub the spots to be retouched with it for a moment and blot up the residue with a paper towel. Let the print dry then proceed according to instructions in column one. Keep the Alka-Seltzer solution for future use. This Alka-Seltzer solution neutralizes the acid film which has been deposited on the emulsion surface. Keep the solution for future use.

Hard emulsion problems are readily evident when the print emulsion appears to be oily when the first retouching color is applied and does not penetrate into the emulsion.

Small white spots in the dark print areas are best handled by using the black Spotone mix recommended for Agfa Brovira Speed 310.

The term RC means resin coated. The polyethylene resin is coated on both sides of the paper base, under the emulsion and on the back, and is of no part of the emulsion. All RC print emulsions are of the same photographic quality as those on the regular paper base and can be retouched with the same ease and procedures.

For lightening any retouching use only plain water applied with a clean brush. The longer the water remains on the spot the lighter the retouching. For a darker tone removal use the Alka-Seltzer solution in place of the water.

GOOD BRUSHES are important. Recommended sizes are #1, #2, and #3 for print retouching and #0 and #00 for small spot work on negatives.

RETOUCH METHODS CO. Inc.
CHATHAM, NEW JERSEY • U.S.A. 07920

PHONE: (201) 377-1184

FAX: (201) 377-1184

Expo Watch Camera	389	F	Minox B W/Flash	595	D	Minox III	139	WD
Bolsey 8mm	149	BK	B	495	D	110S	129	BK
Canon RC-470 Still Vid.	995	B	B	250	C	110S	95	BK
Canon Xapshot kit	397	P	B	195	BK	Minute 16	35	M
Gami 16	599	D	B	175	BK	Pentax 110 Kit	475	CE
Gun Camera (4mm)	699	WD	B	169	F	110	450	B
J. Player KGB Cig Pack	1250	WD	C	249	WD	110	399	D
Mec 16SB	239	F	C	239	WD	110	289	BK
Micro 16 W/Flash	189	F	C	209	F	110	279	B
Minolta 16	19	M	EC	225	WD	110	249	BK
16	28	CC	EC	219	WD	110	199	D
16 MG	69	F	EC	199	WD	110	189	BK
16 P	13	M	EL	129	W	110	129	BK
16 PS	20	M	LX Black	679	BH	110 Kit	119	M
110 Z	225	B	LX Black	649	W	Rollei-16	339	F
Minox 1st B	399	WD	LX	469	WD	Rubina-16 Model II	149	B
1st B	225	B	LX	249	B	Steky	129	F
1st B	179	WD	ML	285	T	Yashica Atoron	125	C
1st B	169	WD	ML	229	WD			
2nd B	189	WD	PE	100	WD			

B Bergen County Camera, 270 Westwood Ave., Westwood, NJ. 07675 (201) 664-4113
 BH B & H Photo, 119 W. 17th St. NYC, NY. 10011 (212) 807-7479
 BK Brooklyn Camera, 549 E. 26th St., Brooklyn, NY. 11210 (718) 462-2892
 C Cambridge Camera, 7th Ave & 13th St., NYC, NY. 10011 (212) 675-8600
 CC Columbus Camera Group, 55 E. Blake, Columbus, OH. 43202 (614) 267-0686
 D Discount Camera, 33 Kearny St., San Francisco, CA. 94108 (415) 392-1100
 F Foto Cell, 49 W. 23rd St., NYC, NY. 10010 (212) 924-7474
 M Midwest Photo Exch., 3313 N. High St., Columbus, OH. 43202 (614) 261-1264
 P Peach State Photo, 1706 Chantilly Dr., Atlanta, GA. 30324 1-800 766-9653
 T Tamarkin & Co., 850 Grand Ave., New Haven, CT. 06511 1-800 289-5342
 W Wall St. Camera, 82 Wall St., NYC, NY. 10003 (212) 344-0011
 WD Woodmere Camera, 337 Merrick Rd., Lynbrook, NY. 11563 (516) 599-6013

UPDATES

Santa paid a visit just before Christmas. We were able to fill all of the outstanding requests for the rare Yashica-16 cassettes, and several boxes of the Mamiya/Rollei-16 cassettes. This brings the waiting list down to 11.

There's plenty of Yashica stock remaining @ \$10 ea. Please specify B & W ASA 80, or Kodachrome ASA 10. Both are dated 1973. Include 10% s + h.

OUR THANKS TO..

..Frank Cameron, of Selma, AL., who sent a note to inform us that the Christie's catalog of spy, detective, and subminiature cameras is no longer available.

..And to everyone who wrote in about the availability of FRESH Minolta-16 Plus-X stock. Prices may have changed by the time you read this. Please contact Minolta for current information (201) 825-4000.



Camera: Minolta 16
 Film: Kodak 1461
 Exposure: f5.6 @ 1/250
 Developer: Agfa Rodinal (Dil. 1:400)

