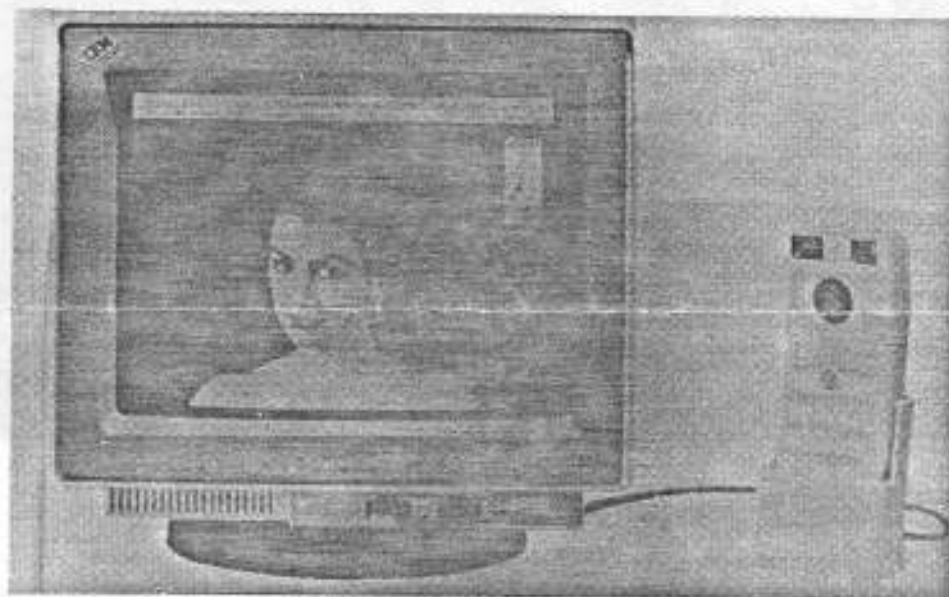


THE SUBMINIATURE TIMES

The Subminiature Times is published monthly by Doylejet, P.O. Box 60311, Houston, TX. 77205 (713) 440-4744
Supporting 110, 16mm, 9.5mm, 8mm, 4mm, 1mm, Microdot, & Electronic Still Photography.



THE FOTOMAN ELECTRONIC CAMERA ARRIVES

Photography and computing have only managed to work together through optional peripherals such as scanners and digitizers. Even pictures that are recorded by electronic cameras such as Canon's Xapshot must be fed into a computer through a video port on an image-capture board, not standard equipment for most systems. Now Logitech, a company in Fremont, Calif., is introducing an electronic camera that transfers images over a cable into the serial port—a jack that's on almost every computer.

The camera, called FotoMan, stores up to 32 black-and-white pictures in its solid-state memory. The \$799 one-pound camera has an automatic built-in flash and contains a rechargeable battery. Logitech recommends that the camera be returned to its AC-connected dock within 24 hours or images will be lost.

Advanced photographers may be disappointed with the fixed-focus lens, which means that you must stand at least three feet away from the subject. Novices, however, will appreciate the simplicity of aiming and shooting.

When you connect the camera to an IBM compatible computer, FotoMan's grey-scale image-editing software displays all the

pictures in the camera as a series of mini-frames that mimic a proof sheet. You then select the pictures to transfer to the computer. It took approximately 1.5 minutes to download one picture using the pre-release software. Logitech hopes to decrease this time to 20 seconds in the final product, which is scheduled for shipment this month.

The software, which runs under Microsoft's Windows, allows you to enlarge the picture up to 800 percent, crop, rotate, retouch, adjust contrast and brightness, and posterize.

Each image consumes about 72 kilobytes of disk space. Pictures can be saved in several popular formats and used with other applications. Logitech is targeting personnel departments and real estate agents, among others, looking to add images to their data bases.

Because the camera doesn't have a cartridge and disk that can be removed, you should have another computer to off-load images after 32 pictures have been shot. FotoMan beeps at that point. If you want to continue shooting, the camera clears out its entire memory to accommodate a new set.



16mm PLUS-X

The photos on this page were both made with 16mm Plus-X film. Both were made incorrectly.

16mm Plus-X is movie film, complete with sprocket holes. The useable area is perfect for the Minox and the 10 x 14mm subminiature format. Cameras with the larger 12 x 17mm format (Gami) or 13 x 19mm (Narciss), will always have some of the image cut out by those holes.



The loss of the puddle reflections, above, could have been avoided by using another camera, or by putting the more interesting parts of the subject closer to the center.

There are two film speeds available. The photo at left was made in bright sunlight with the right format, but the wrong film. Shooting with the slower stock would have prevented the use of f16. Subminiature negatives produced at f16 are of such poor quality, they make passable wallet size prints, little more.

There are various ways to avoid using f16. Among them: carry a filter, choose a camera with higher shutter speeds, or use a slower film.

One can readily see that good picture taking results start with knowing which Plus-X to buy, which camera to put it into, and when to use it.

Three major pools of stock are still available to subminiature enthusiasts:

1. The 20 exposure Minolta cassettes occasionally advertised in "Shutterbug" magazine.
2. The same, in a white box, stamped "Develop by October 1978".
3. Rolls of 16mm x 100' or 250' which you must load into your own cassettes in a darkroom.





What's the difference?

The 1978 stock. Don't blanch at the thought of using fourteen year old film. It was used to take the 'available light' shot of the video shop. The camera was set at f2.8 @ 1/30 sec., and was held against the dashboard (with the motor off).

The film is advertised as ASA 100 speed. And believe it or not that's exactly what you get, a solid 100 response, whether you process it yourself, or send it to a photofinisher.

It can be pushed two stops with extended development and a whisper of pre-fog, or it can be pulled two stops for high key special effects and added grain.

The white box stock. This is usually seen at camera shows. Let's be grateful it's still available. Also ASA 100.

The long rolls. This is fresh emulsion 7276 available from Kodak.

Even if you don't own a complete darkroom you should buy the new film and process it yourself. The 100' rolls are a bargain at \$8.00 apiece, which will give you about 1700 pictures. Mail the negatives you want printed to a photofinisher and discard the rest, to avoid having hundreds of test shots piling up in your house. Ironically, you'll have to buy the old film stock to get the reusable cassettes.

Emulsion 7276 is a reversal film officially rated at ISO 40. Forget that. Set your meter at 400 and hold onto your hat.



A GOOD THING JUST GOT BETTER

The Micronta handheld microscope has been available for a number of years from your local Radio Shack.

Handy, cheap (\$5.95), and powerful, it's a great tool for looking at the grain on tiny negatives. Current models now have an 8X magnifier, which makes the Micronta twice as handy, at the same price.

The 30X image is inverted. You'll have to turn your negatives upside down to view your work right side up.

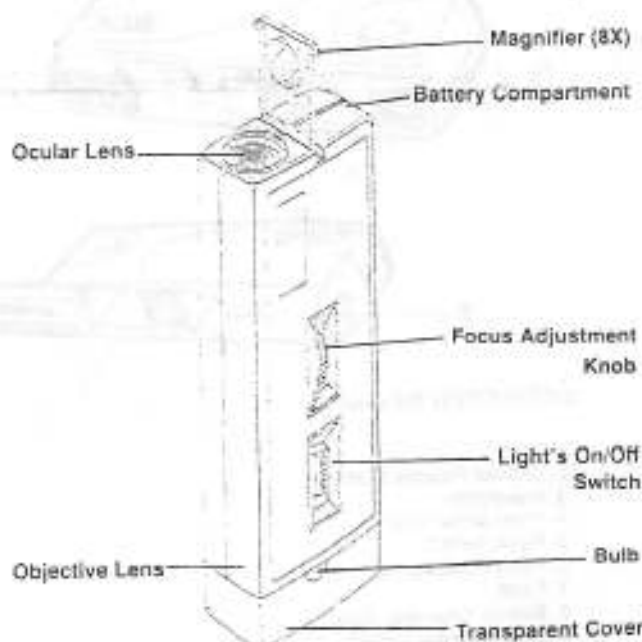
MICRONTA®

Cat. No. 63-851

30X ILLUMINATED MICROSCOPE

Your new Micronta® 30X Illuminated Microscope lets you see objects in great detail. The microscope's bulb projects concentrated light directly on the object you want to view, giving you clarity you cannot achieve with conventional microscopes.

A QUICK LOOK AT THE MICROSCOPE





SPECIFICATION

Lens: Normal 22mm f/7
Telephoto 43mm f/11

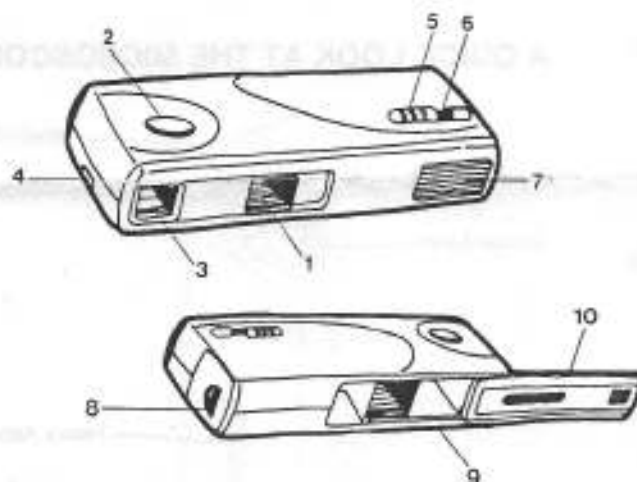
Shutter: 1/90 second

Film: All 110 size cartridge films for black and white or color prints.

Flash Range: ISO 200/24" - NORMAL 5 - 10 ft. (1.5 - 3m)
- TELEPHOTO 8 - 10 ft. (2.5 - 3m)
ISO 400/27" - NORMAL 5 - 14 ft. (1.5 - 4.5m)
- TELEPHOTO 8 - 14 ft. (2.5 - 4.5m)

Daylight Range: NORMAL 5 ft. (1.5m) - Infinity
TELEPHOTO 8 ft. (2.5m) - Infinity

Batteries: 2 AA size alkaline type



INSTRUCTION MANUAL

1. Lens
2. Shutter Release Button
3. Viewfinder
4. Wrist Strap Post
5. Flash Switch
6. Flash Ready Light
7. Flash
8. Battery Chamber Door
9. Lens Selector Switch
10. Film Chamber Door

THIS LITTLE 110 CAMERA

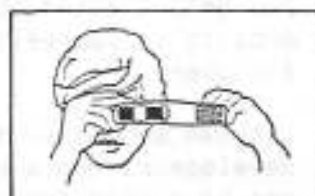
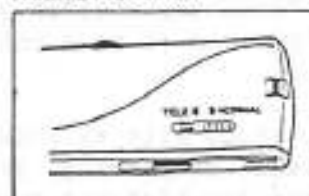
The new Anco Motorized 110 Twinvision is stylish. The two swooping curves in the case make the camera easy to hold, and provide a degree of protection for the shutter release button, which is raised above the surface.

The camera is light enough to mount in a model plane with minimal weight penalty. The basic specifications and instructions are shown here.

There was one last note. "Remove batteries when camera is not in use for extended periods to prevent possibility of camera damage due to leaking batteries." There's another reason you might want to remove the batteries.

The TwinVision has no shutter lock. Stuff this camera into a suitcase, and it will happily click off 20 exposures of your luggage. The motorized advance works perfectly.

TAKING PICTURES

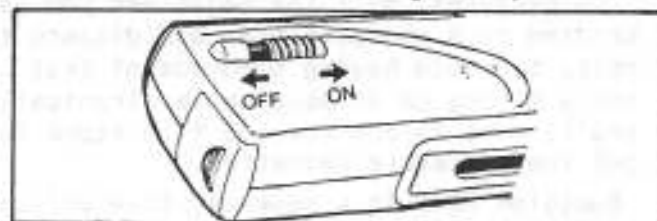


1. Slide the Lens Selector Switch to either NORMAL or TELEPHOTO position. The viewfinder will adjust automatically to show what will be included in your picture.
2. Compose your picture carefully while looking through the viewfinder and press the Shutter Release Button gently to fire the shutter.

DAYLIGHT PICTURE RANGE:
Normal Lens - 5 feet (1.5m) to infinity
Telephoto Lens - 8 feet (2.5m) to infinity

FLASH PICTURES

Indoors or when taking pictures outdoors in the shade or on a dark overcast day you will need to use the built-in electronic flash. It is recommended to use the NORMAL lens setting for flash pictures.



LETTERS

Dear Sir:

I am interested in 110 cameras. This interest centers on cameras produced between 1972 and 1982, as this was the period when the 110 format was popular and was predicted to overtake 35mm as the snap shot film size. The camera manufacturers responded to this prediction with some sophisticated models. I would be interested in any cameras of the 110 format whether new, or used.

Richard Spence
8689 Ripton Dr.
Powell, OH. 43065
(614) 889-2181

1461. Several friends inquired about the pre-fog and developing procedures I used for Kodak 1461 Microfilm (Sub' Times #33).

I pre-fog for 20 seconds at 78" away from a standard amber darkroom safelight. Rate this film at 25 normally, 32 at the beach, and 12 tungsten. Develop it in Rodinal diluted 1:200 for 16 mins. @ 80°F, agitating 5 secs. every 30. I use a time/temperature scale and adjust the developing time to whatever temperature my filtered water and hypo happen to be when I start. If my temperatures seem high for October, credit the weather. In the winter, or early in the morning, I use 18 mins. @ 75°F.

MY DEVELOPER IS BETTER THAN YOURS: HC-110 (Part Two)

The side by side comparisons of HC-110 (Dilution E), and Rodinal (Diluted 1:200) continued until the very last day of October. I'm convinced that it produces a sharper image and increased film speed. It can also be as inexpensive as Rodinal, because you can develop three consecutive 20 exposure rolls of 16mm film with minimal change in developing times.

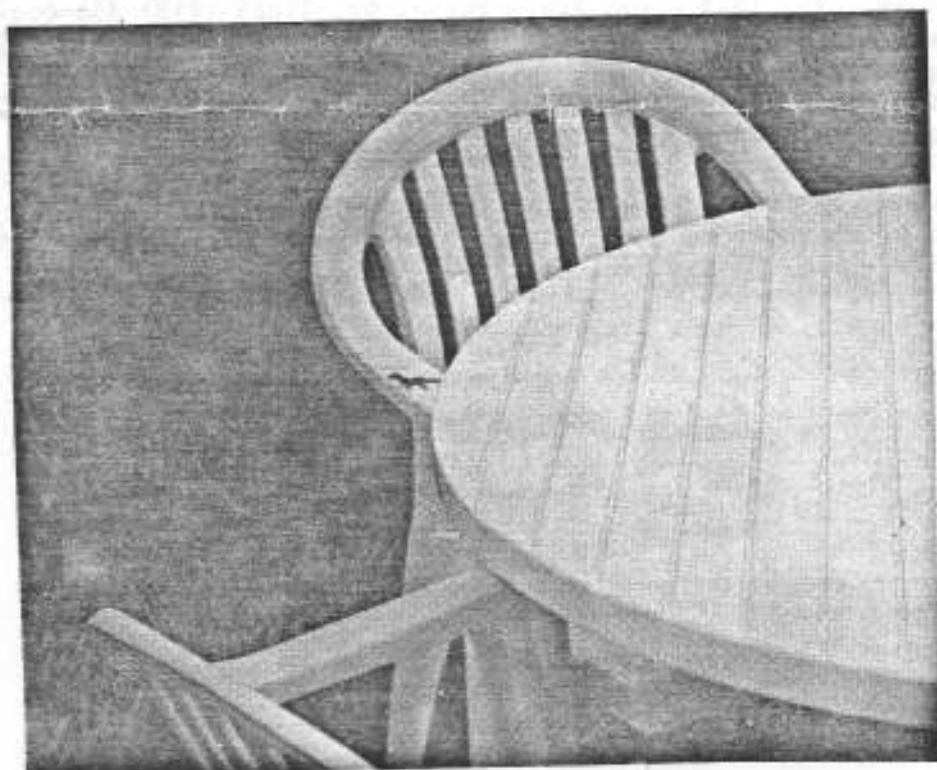
But it works too fast to completely remove the anti halation backing on films like Recordak. Newer emulsions fare a bit better.

The spots require additional film handling, at least a sponge wipe. Rodinal is reliable. And still champ.

The last HC-110 test shots I made were of a white lawn chair group in dark grass. During the test a lizard parked himself on one of the armrests. These little guys are common in this part of Texas. Anyone with a few hedges has two or three.

I'd been trying all summer to photograph the one in my yard without a background of distracting foliage. And now here he was in my sights, and the camera loaded with 1461.

I squeezed off an exposure without moving. Barely breathing. Certain that he would bolt. He was frozen solid. So I advanced the film. And he was gone.



Canon 110ED	59	BC	EL	124	CT
Crystar 'Hit'	33	T	LX Gold	1450	G
Epochs	225	W	LX Blk	690	K
Expo Watch Cam	389	F	LX Blk	649	W
Goldeck 16	325	W	LX	625	BP
Micro 16	189	F	LX	489	BC
Micro 16	59	T	III	159	F
Minolta 16	59.50	C	IIIS	135	G
Minolta 16EE	19	C	110s	100	CC
Minolta 16EEII	100	T	Pentax 110 Sup	449	T
Minolta 16 MG	69	F	110	349	T
Minolta 16P	79	T	110	295	BP
Minolta 16P	59	F	110	289	T
Minolta 110Z	289	T	110	279	B
110Z	225	B	110	259	T
110Z	119	T	110	125	CC
110Z	109	T	Ricoh Golden 16	399	T
Minox B	249.50	C	Rollei 16S	250	C
B	199	BC	Rollei 16	249	F
B	179	BC	Satellite	25	T
B	169	F	Tessina Auto	899	D
B	165	CC	Tessina	600	T
B	79	BK	Tessina	549	BC
C	295	G	Tessina L	425	K
C	209	F	Toyoca 16	295	W
EC	225	T	Yashica Atoron	179	W
EC	219	W	Yashica Atoron	79	F
EL	129	W			

- BC Bill Cameta's, 253 Broadway, Amityville, NY. 11701 (516) 691-1190
 BP Beach Photo, 604 Main St., Daytona Beach, FL. 32118 (904) 252-0577
 B Bergen County Camera, 270 Westwood Ave., Westwood, NJ. 07675 (201) 644-4113
 CE Cambridge Camera Exchange, 7th Ave & 13th St., NYC, NY. 10011 (212) 675-8600
 CT Camera Traders, LTD, 1873 Ocean Pkwy, Bklyn, NY. 11223 (718) 336-6667
 CG Columbus Camera Group, 55 E. Blake, Columbus, Ohio, 43202 (614) 267-0686
 BK Brooklyn Camera, 549 E. 26th St., Bklyn., NY. 11210 (718) 462-2892
 CC Collector Cameras, 3119 E 25th Pl #2, Tulsa, Okla. 74114 (918) 769-4021
 D Discount Camera, 33 Kearny St., S. FRAN., CA. 94108 (415) 392-1100
 F Foto Cell, 49 W. 23rd St., NYC NY. 10010 1-800-368-6235
 G Ghitelman Cameras, 166 Fifth Ave., NYC, NY. 10010 (212) 924-3020
 M Midwest Photo Exchange, 200 Crestview, Columbus, OH. 43202 (614) 261-1264
 K Koh's 2 Heitz Place, Hicksville, NY. 11801 (516) 933-9790
 T E. & R Tillis, 337 Merrick Rd., Lynbrook, NY 11563 (516) 599-6013
 W Wall Street Camera, 82 Wall St., NYC, NY. 10003 (212) 344-0011



Camera: Mamiya Super-16
 Exposure: f5.6 @ 1/100 sec.
 Film: Kodak 1461
 Developer HC-110 (Dilution E)

