



Olympus
Pen

EM

Olympus
Pen

EM

Olympus
Pen

EM

1000, 1000, 1000



This manual is for reference and historical purposes, all rights reserved.

This page is copyright© by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

**If you use Pay Pal or wish to use your credit card,
click on the secure site on my main page.**

www.butkus.us

www.PayPal.me/butkus

CdS light-sensing cell

synchronized flash connection

shutter button

viewfinder

carrying strap ring

OLYMPUS-PEN EM

PEN-EM

OLYMPUS F. AUTO 1:2 f=35mm Lens made in Japan

lens

Digitally signed by mike butkus
DN: cn=mike butkus,
o=orphancameras, ou=29,
email=mike@butkus.org, c=US
Date: 2020.01.08 19:30:42 -05'00'

mike
butkus

film

ring

film speed (ASA) setting knob

shutter release locking mark

film speed (ASA) scale

Shutter release locking ring

PEN-EM

focusing ring

film take-up pilot mark

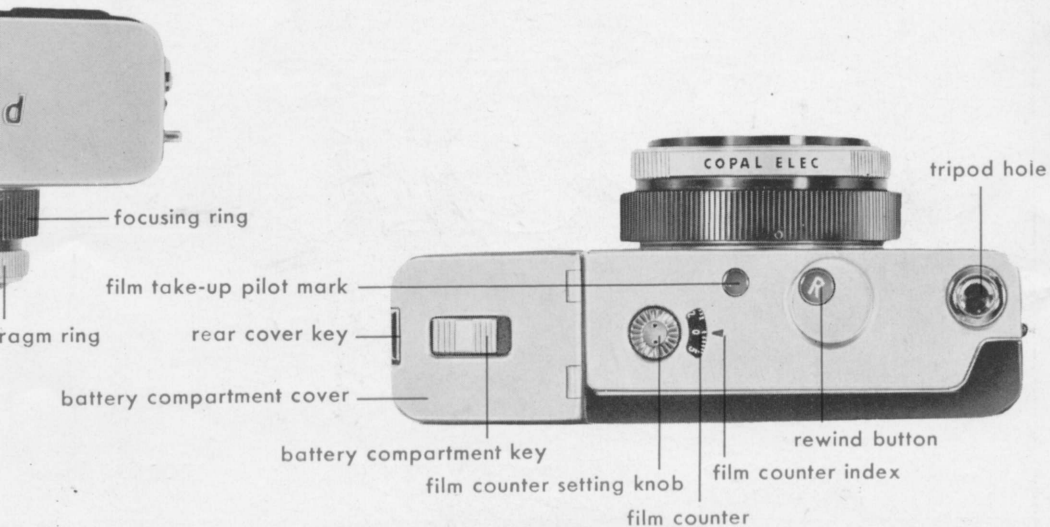
rear cover key

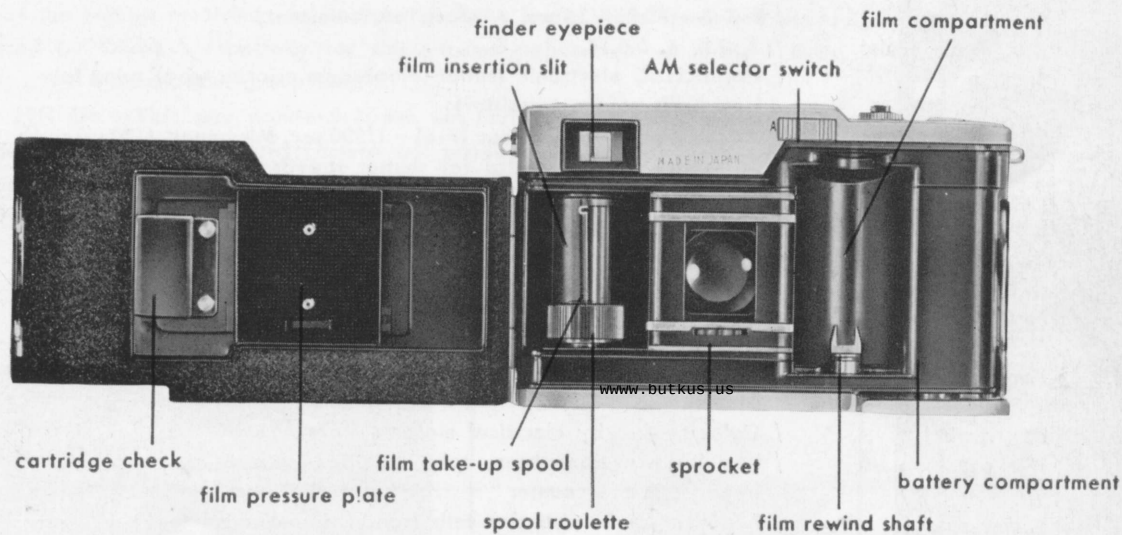
battery compartment cover

battery co

diaphragm ring







PEN EM FEATURES

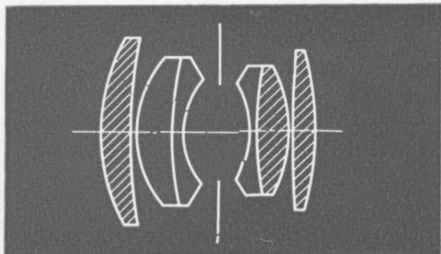
Picture size	/ 24mm×18mm (Single Frame PEN size)
Lens	/ F Zuiko F2.0, f/35mm, 4 group of 6-element.
Diaphragm scale	/ 2, 2.8, 4, 5.6, 8, 11, 16,
Shutter	/ Copal ELEC electronic shutter (diaphragm priority type), using four high performance transistors
Shutter speed	/ A (automatic) about 30sec (F16) – 1/500 sec, M(manual) 1/30second, no visible scale indicator for shutter speeds
Synchronizing	/ X contact point
Film speed scale	/ ASA 10 – 400
Camera focusing system	/ Zone focusing rotary helicoid, eye measuring type
Distance	/ m (meter) ∞ 5, 3, 2, 1.5, 1.2, 1, 0.9 ft (foot) ∞ 15, 10, 7, 5, 4, 3.5, 3
Finder	/ Albada type light frame finder, magnification 0.6 time, with parallax (visual difference) aid marks for short range photography.
Film advance	/ Electrical motor driven; advances film at rate of one frame per second.
Film rewind	/ Quick rewind by electrical motor
Film counter	/ Remaining number type, take-up stops automatically whe "O" appears in the counter
Power source	/ Two size AA 1.5volt dry cells (preferably alkaline type) will last for over 5 rolls (72 frames per roll) of film.
Dimensions	/ 123 (width)×73 (height)×54 (depth)mm (5"×3"×2")
Weight	/ 540 gr. (1¼ lbs)

ZUIKO LENS AND PICTURE SIZE:

The very heart of any fine camera is its optical system. The PEN EM utilizes one of the highest resolving and sharpest F Zuiko lenses developed and manufactured by Olympus especially for single-frame application. It is the F Zuiko F/2.0, a six element, four-group lens.

Your PEN EM utilizes any standard 35mm film cartridge and will take twice the number of pictures a standard camera will produce (72 exposure roll on a 36 exposure roll, 40 on a 20 exposure roll). The great savings inherent in single-frame photography will be of particular interest to the budget-minded photographer.

F ZUIKO F2 $f=35\text{mm}$



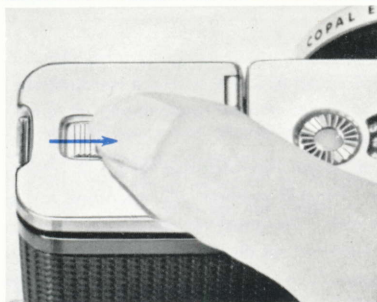
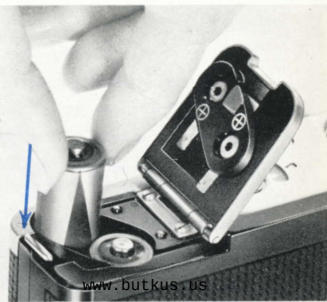
Color Slide Mount

www. BOKUS-15



Before loading your camera, let's familiarize Yourself with its operation.

Take two size AA 1.5volt dry cells. (preferable alkaline type)



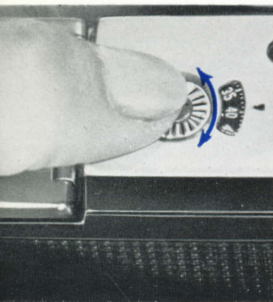
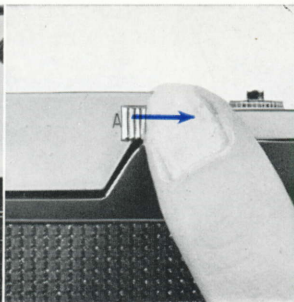
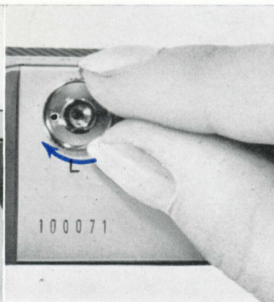
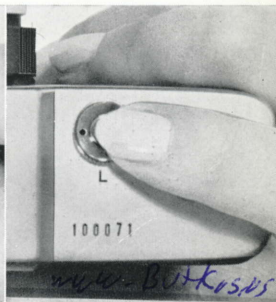
● **Open the battery compartment key.**

Move the key on the camera bottom towards the film counter and open the battery compartment cover.

● **Insert the batteries.**

Insert both batteries with positive terminals (+) facing upward. Close the cover and slide the key to its locking position.

When not using your camera for long periods of time, remove the batteries and store them in a cool dry place.



● **Setting the film counter.**

With the ball of your finger, turn the counter setting knob on the camera bottom to position other than zero. In the zero position, the motor does not work.

● **Set the AM switch on the back of the camera to A.**

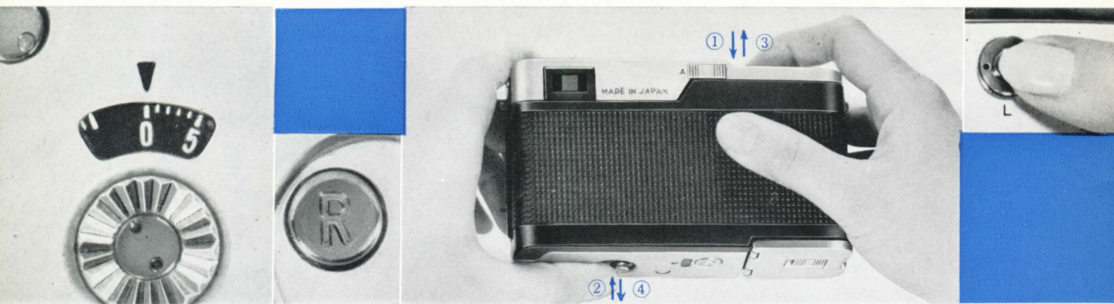
Move the switch to the right and "A" appears. Move it to the left and "M" appears. For the use of "M", see the section on flash photography appearing on page 20.

● **Turn the release locking ring.**

Turn the ring clockwise till it stops. (When the red index and L are in line, you cannot activate the shutter button.)

● **Release the shutter.**

Press the shutter button, and the shutter clicks; release your finger, and you will hear the sound of the motor advancing the film.



● To rewind the film.

When the film counter shows zero upon completion of shooting the roll of film, the motor stops.

REMEMBER

When rewinding the film, be sure to put the lens cap on.

- (1) Press the shutter button;
- (2) Keep the rewind button (R) pressed;
- (3) Release the shutter button.

These three steps are necessary to rewind the film.

- (4) Release the rewind button (R), and the rewind motion stops.
- When a film is in release the rewind button (R), as promptly as the counter stops turning.

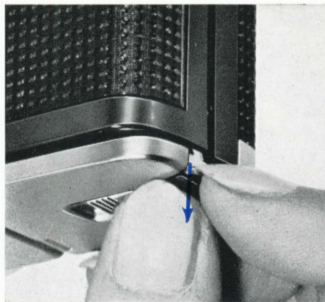
Dry Run Completed, You Are Now Ready to Use Your PEN EM

Load the camera with the 35mm film of your choice. In bright light, during the warm summer months, we suggest use of a low speed film with a rating of ASA 40, or a medium speed all-purpose out-door film with an ASA rating of 125.

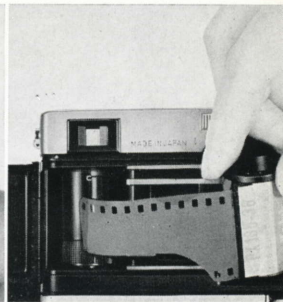
These excellent films will assure you of maximum quality under normal shooting conditions.

In dim or poorly lit situations, use film with a higher ASA rating (ASA 400). When shooting color, it is advisable to confine yourself to slower films (in bright sunlit situations).

Remember: the PEN single-frame format enables you to take 72 pictures on a 36 exposure roll, or 40 pictures on a 20 exposure roll.

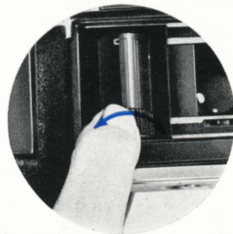


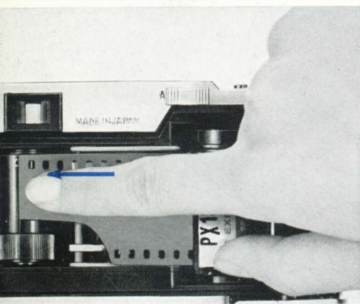
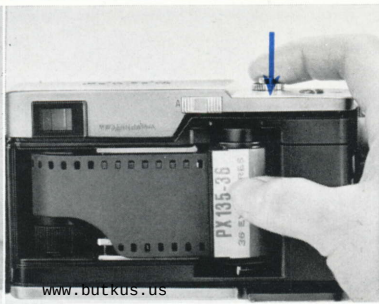
Pull the rear cover key and open the rear cover.



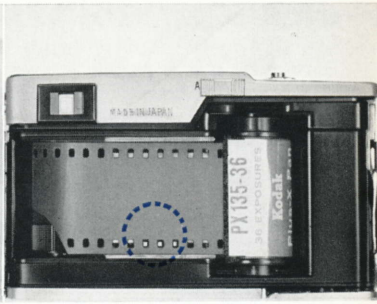
Insert the film cartridge into the film compartment with its projection facing upward.

Turn the take-up spool (with spool roulette) in the camera until the film insertion slit faces upwards you.





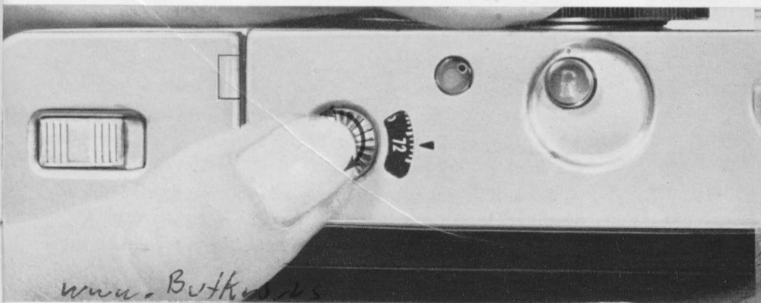
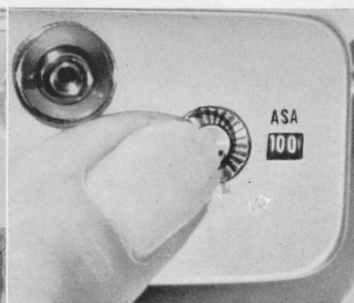
www.butkus.us



Pull out enough leader (the cut-in side of the film) to engage in the sprockets, then push the end of the leader into the insertion slit of the take-up spool.

While holding the cartridge light, press the shutter release button until the film perforations are engaged by the sprockets. At this make certain the film is properly positioned between the two guide rails.

Close the rear cover (it is self locking).



Press the shutter release three times then set the film counter to the number of exposures on the roll (40 or 72).

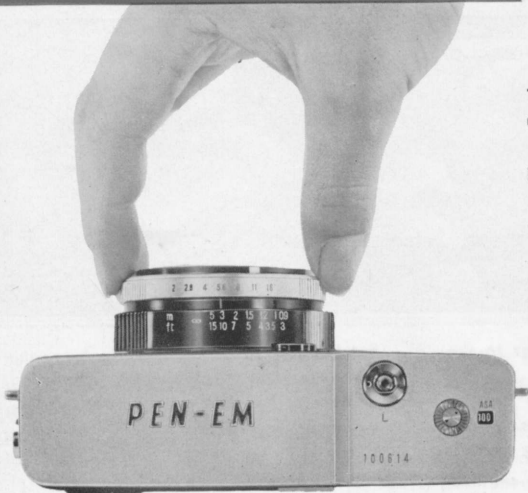
(If, in the course of operations up to this point, the film counter indicates zero and winding become difficult, turn the counter setting knob slightly to the right.) The film counter, a remaining number type, indicates the number of exposures left to shoot.

* If the take-up pilot mark (red-dotted button) on the camera bottom turns during idle shooting, it indicates that the film is being taken up securely. (Also, if you forget whether your camera is loaded or not, shoot once or twice, and if this mark turns, you can be sure the film is in.)

Set the film speed.

Turn the ASA setting knob on the camera top and set the proper ASA rating in the window.

How to use the diaphragm ring.



The F stops, engraved in three different colors, are very useful in selecting the proper exposure.

11 & 16 (in YELLOW) For bright subjects (outdoors when it's fine)

4, 5.6 & 8 (in RED) For ordinary subjects (outdoors in cloudy weather, in the shadow of a tree & in light room)

2 & 2.8 (in BLACK) For dark subjects (ordinary room, rainy weather, night, etc.)

REMEMBER: Employ a tripod to stabilize your camera when you shoot in dim light.

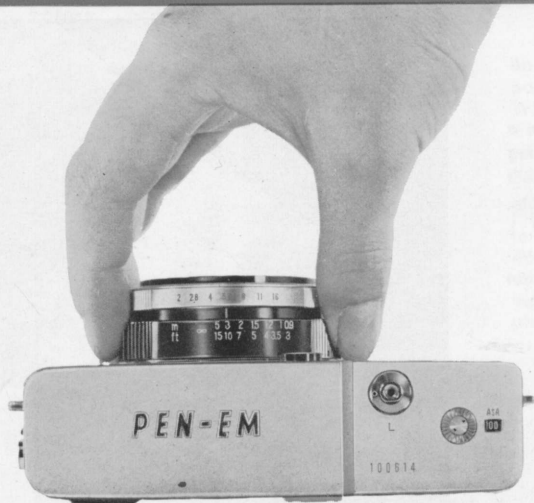
How to set the distance.

Measure by the eye the distance to your subject, turn the focusing ring, and set it to the distance indicator on the camera. The range scale is indicated in meters (m) and feet (ft), as shown below.

m 5, 3, 2, 1.5, 1.2, 1, 0.9

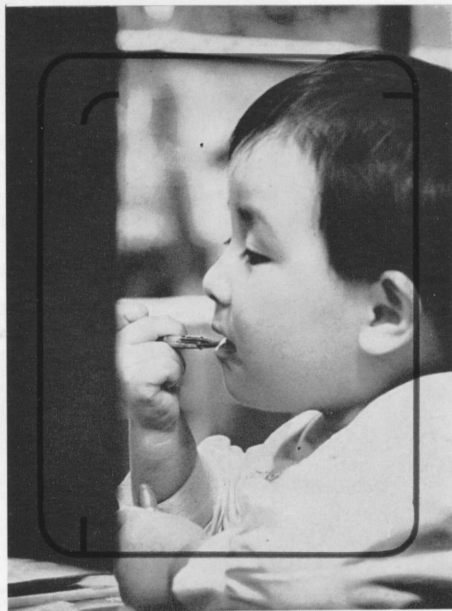
∞

ft 15, 10, 7, 5, 4, 3.5, 3

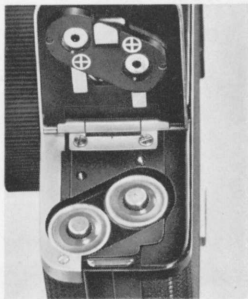


Look through the finder.

The finder is unusually bright and contains a fraer framer. When composing and shooting be sure to check to see that your subject occupies the frame area as fully as possible. When photographing from a distance of 1 meter (3 feet) make certain the subject is properly composed within the parallax correction marks in the light frame.

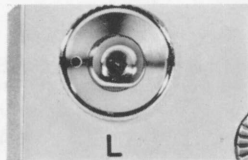


Check the following once again before photographing.

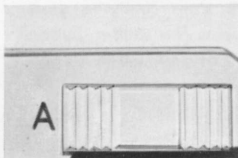


Batteries correctly in position.

When the batteries wear out, the take-up sound of the motor slows. In case of a 72 exposure roll of film, replace the batteries at the end of about five rolls. You can replace them during the course of photographing.



Red index of the release locking ring is out of the L position.



That the AM switch is correctly in the A position.



Film counter indicates the number of exposure to be made (72 or 40)



That the ASA indexes conform to the rating of the the film loaded.

Shooting hints for your PEN EM

Since the working picture size of the Pen camera is small, the absence of hand shaking is essential to produce good pictures, and is an absolute "must" for making quality enlargements.

Hold the camera firmly and press the shutter release lightly with the ball of your finger. Remember to remove the lens cap before shooting. And be careful to check that you do not have a finger or hand, or part of the camera case covering either the lens or the CdS light sensing cell.

When shooting in dim light, this camera permits the shutter to be released at a slow speed. Employ a tripod to stabilize your camera if possible.



Attach both arms firmly to your body and press the shutter button with the pad of your index finger.



Attach your right arm firmly to your body, hold your camera securely with your left hand, and press the shutter button with the pad of your right thumb.

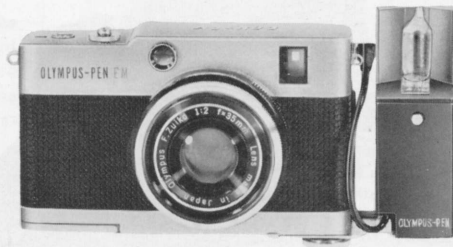
If a tripod is not available try placing the camera on a table top with a small object under the lens angling it to face the subject. Hold camera firmly and employ a cable release.

Or lean an elbow against a wall or ledge to steady yourself, hold the camera firmly against your body and hold your breath during the time of exposure.

(Each photographer will add to his picture-taking pleasure by creating a personal technique for shooting at slow shutter speeds).



Make the most of your picture-taking pleasure by using the following PEN EM accessories:



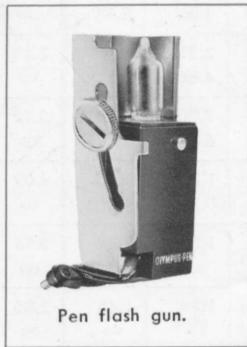
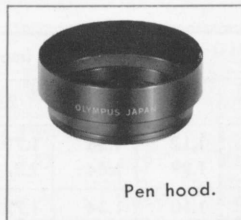
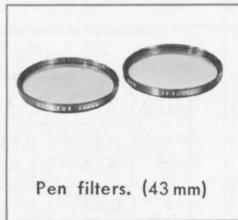
Flash.

When photographing under inadequate lighting conditions, use the PEN flash attachment. Slide the AM switch to the left, so that "M" appears. In this manual setting the shutter speed will automatically be programmed at 1/30 second. For the proper relationship between diaphragm opening and distance-to subject, consult the PEN flash exposure chart.



Self-timer.

Use any of the many available units (as shown in illustration) and screw it into the shutter release hole.



Let's enjoy color slide

Colorslides provide years of lasting pleasure. And viewing them on the PEN projector is a fine way to add to that pleasures.



- ☐ Pen slide projector Model 2
- ☐ Projector blower
- ☐ Auto-changer Model 2
- ☐ Film strip adapter
- ☐ Slide mount (40 pieces per a box)

Depth of field

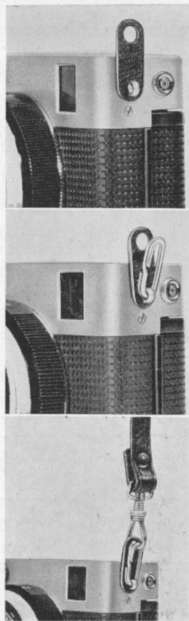
At every distance there is an area before and behind your subject matter that will be properly in focus and extremely sharp in detail. This area is referred to as "depth of field". For example, with a film rated at ASA 100, with the distance scale set at 3 meters the diaphragm is f16 and the depth of field then includes everything from 1.24 meters from the camera to infinity (∞), all in sharp focus.

F Stop	DISTANCE (meter)							
	0.9	1.0	1.2	1.5	2.0	3.0	5.0	∞
2	0.86 0.95	0.95 1.06	1.12 1.29	1.38 1.64	1.79 2.27	2.55 3.65	3.84 7.20	16.24 ∞
2.8	0.84 0.97	0.93 1.08	1.10 1.33	1.34 1.71	1.72 2.39	2.40 4.00	3.52 8.68	11.61 ∞
4	0.82 1.00	0.90 1.12	1.06 1.39	1.28 1.81	1.62 2.61	2.21 4.68	3.12 12.71	8.14 ∞
5.6	0.79 1.04	0.87 1.18	1.01 1.48	1.21 1.98	1.51 2.98	2.00 6.04	2.72 33.5	5.82 ∞
8	0.75 1.12	0.82 1.29	0.95 1.65	1.12 2.30	1.37 3.78	1.76 10.73	2.28 ∞	4.09 ∞
11	0.72 1.24	0.77 1.44	0.88 1.92	1.02 2.87	1.22 5.72	1.52 ∞	1.89 ∞	2.98 ∞
16	0.65 1.49	0.70 1.81	0.78 2.64	0.90 5.00	1.04 40.74	1.24 ∞	1.48 ∞	2.06 ∞

F Stop	DISTANCE (ft)							
	3	3.5	4	5	7	10	15	∞
2	2.86	3.31	3.74	4.60	6.22	8.46	11.77	53.25
	3.16	3.72	4.29	5.48	8.00	12.22	20.72	∞
2.8	2.81	3.23	3.65	4.46	5.96	7.98	10.83	38.07
	3.23	3.82	4.43	5.70	8.49	13.42	24.47	∞
4	2.73	3.13	3.52	4.26	5.61	7.35	9.69	26.69
	3.33	3.97	4.64	6.06	9.35	15.74	33.60	∞
5.6	2.64	3.01	3.36	4.02	5.19	6.65	8.49	19.08
	3.49	4.20	4.96	6.63	10.80	20.46	67.06	∞
8	2.51	2.84	3.15	3.71	4.68	5.82	7.17	13.41
	3.75	4.60	5.53	7.72	14.13	37.36	∞	∞
11	2.36	2.65	2.92	3.39	4.17	5.04	6.01	9.77
	4.15	5.22	6.47	9.74	23.03	∞	∞	∞
16	2.16	2.39	2.60	2.97	3.53	4.12	4.74	6.75
	5.04	6.75	9.05	17.33	∞	∞	∞	∞

How to attach the carrying strap.

See illustrations



Give Your PEN EM the Care it Deserves.

- 1) Dust and moisture are the biggest foes to your camera.
- 2) Take care not to stain the lenses with finger marks. Any finger mark should immediately be wiped off with clean unstarched cotton cloth. If not wiped immediately, fingerprints becomes extremely difficult to remove.
- 3) Avoid placing your camera near a radio or television set for an extended period of time. Megnetism is another foe to you camera.
- 4) When using your camera at the beach, take extra care to prevent sand from entering the case. And always wipe the camera with a soft cloth on returning from a shore, to prevent the harmful action of salt from the sea air.