

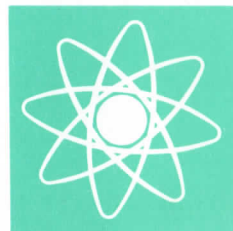
INSTRUCTION BOOK



PETRI

COMPUTOR II

ELECTRONIC SHUTTER



PETRI CAMERA COMPANY, INC.



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MAJOR SPECIFICATION OF PETRI COMPUTER II

TYPE:

Automatic 35mm camera with built-in ELECTRONIC shutter.

FILM:

35mm film (20, 36 or 12 exposures) in color or black and white.

PICTURE SIZE:

24mm x 36mm.

LENS:

C.C. Petri 40mm F/1.7, six elements in four groups.

VIEWFINDER:

Bright line frame finder with parallax correction marks.

FOCUSING:

Helical type coupled rangefinder. A double image in the center of the viewfinder fuses into a sharp single image when a subject is correctly focused by operation of the ring. Focusing ranges from 3 feet (0.8 meter) to infinity.

SHUTTER:

Seiko ESF shutter with programmed Electric Eye system. Speeds range from 2 seconds to 1/1000th of a second. Lock devices for a prevention of inadvertent release and a cable release socket. With built-in self-timer.

EXPOSURE SYSTEM:

Super sensitive "Electric Eye" CdS exposure control system accepts a wide scope of lighting condition ranging from EV 0.5 to EV 17 with ASA 100 (DIN 21) film.

When the shutter button is being depressed, A/F Switch at "A" position, an orange lamp goes out in normal lighting condition (more than EV 6.5), and the lamp keeps lighting in poor lighting condition (less than EV 6.5) to signal a slow shutter speed.

ASA: 25 to 800

DIN: 15 to 30

POWER SOURCE:

Two Eveready E-640, Mallory RM-640, Eveready RM-640-H, Mallory RM-640-H Batteries.

Lighting of a lamp by depressing the shutter release button at its half way shows the proper battery condition.

FLASH PHOTOGRAPHY:

Automatic Flash system by setting the Guide Number Ring at the certain mark from A to G. If the A/F Switch is set at "A" position, the flash mechanism will not work with the light condition of more than EV 6.5, but the EE mechanism will work. For flash photography, brighter than EV 6.5, the A/F Switch must be set at the "F" position. The EE mechanism will work in every case unless the flash equipment is inserted into the accessory shoe. When the camera is set for flash, a (Z) mark will appear in the viewfinder instead of the orange lamp.

FILM LOADING:

Hinged camera back and Petri's unique simple loading system.

FILM TRANSPORT:

Single stroke movement (120° drive) film transport lever, which advances film and prevents double exposure.

FILM COUNTER:

Automatically re-set by opening the camera back.

FILTER SIZE:

52mm screw-in type.

LENS HOOD SIZE:

54mm slip-on type.

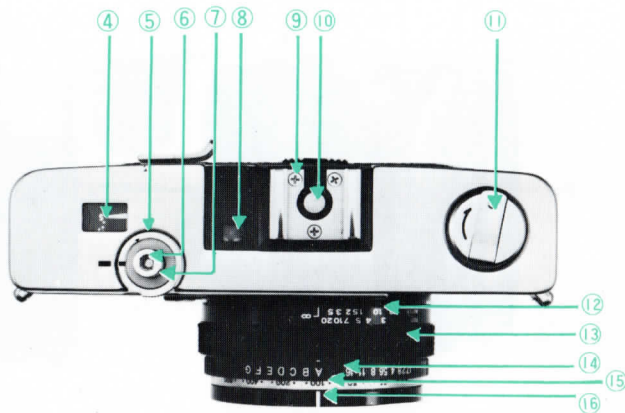
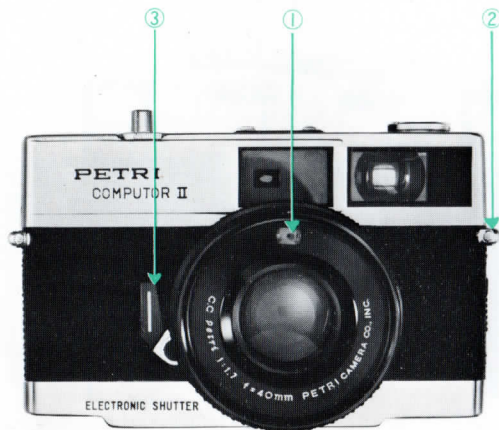
DIMENSIONS:

4.9 x 3.1 x 2.3 in. (125 x 80 x 59mm)

WEIGHT:

19.4 oz. (550 gr.)

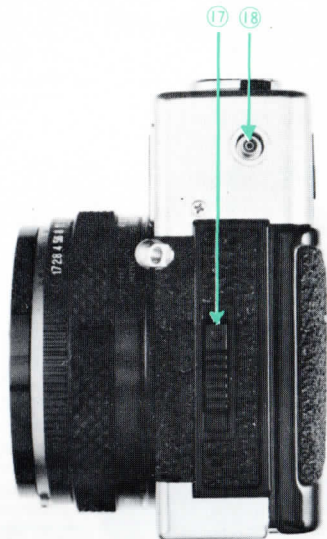
• DESCRIPTION OF PARTS



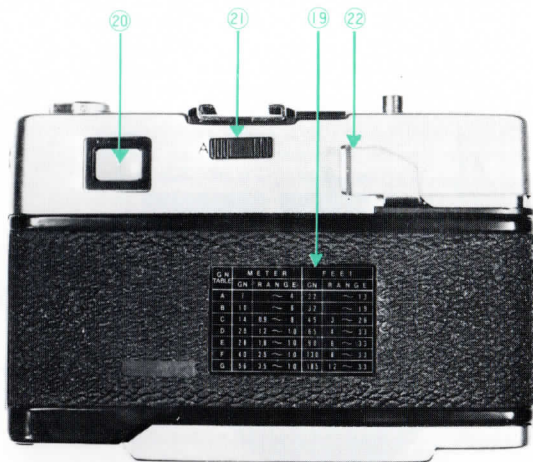
- 1 CdS Cell
- 2 Neck Strap Ring
- 3 Self-timer
- 4 Exposure Counter
- 5 Shutter Lock

- 6 Screw Thread for Cable Release
- 7 Shutter Release Button
- 8 Orange Lamp
- 9 Accessory Shoe
- 10 Cordless Flash Contact

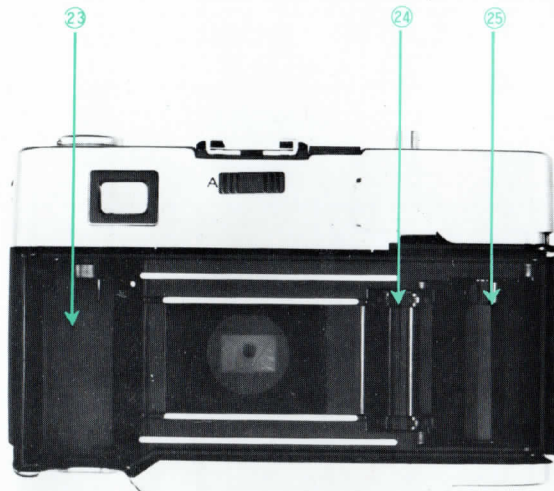
- 11 Film Rewind Crank
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- 14 Guide Number Ring
- 15 Film Speed Ring
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- 17 Back Cover Lock
- 18 Flash Socket



- 19 Guide Number Table
- 20 Finder Eye-piece
- 21 A/F Switch
- 22 Film Transport Lever



23 Film Cassette Chamber

24 Sprocket

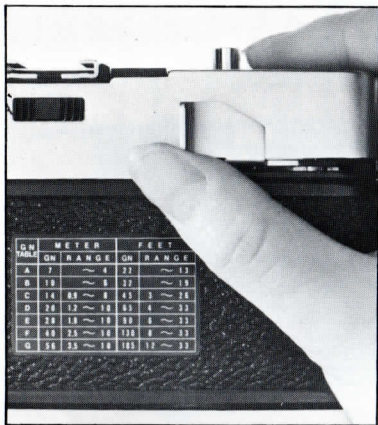
25 Take-up Spool



26 Battery Compartment

27 Tripod Socket

28 Film Rewind Button



● FILM TRANSPORT LEVER

When the film transport lever is advanced, the following things happen simultaneously:

1. The exposure control mechanism is activated.
2. The film frame is transported to the next unexposed frame.
3. The film counter is advanced.
4. The shutter is cocked.

After the shutter is released, the battery circuit will automatically shut off and the shutter button will be locked.

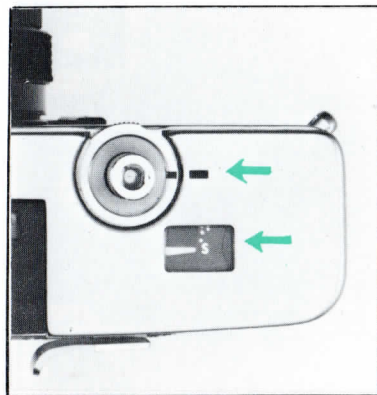
● SHUTTER RELEASE BUTTON

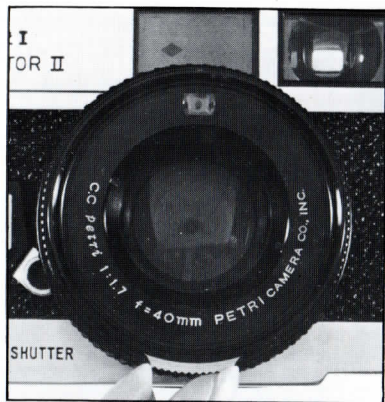
When the shutter button is being depressed after advancing the film transport lever, the battery circuit is turned on and a lamp lights. This shows that the battery condition is proper. When the shutter button is fully depressed, the shutter is released and the lamp goes out at the normal lighting condition.

The shutter release button is locked by a 30° clockwise turn of the shutter lock (5). It is recommended to lock the shutter in case you do not release the shutter after advancing the film transport lever. Even when the shutter is wound, the battery circuit is disconnected; but it is connected only when the shutter is being released.

● EXPOSURE COUNTER

The counter is located on top of the camera body. It shows the number of film frames exposed, and automatically resets to "S" (for "Start") position when the back cover is opened. Frames of the 20th and 36th are marked in red to signal end of the roll, depending on the length of the film used.





● FILM SPEED (ASA OR DIN) SETTING

After the film has been loaded, be sure to set the ASA or DIN film speed index specified for the film in use on the film speed scale. This adjusts the exposure control mechanism for the film being used and is an essential step in getting properly exposed pictures.

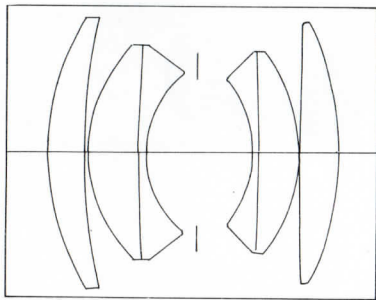
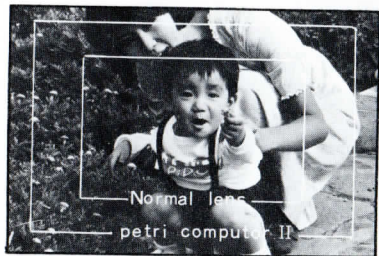
To set the film speed, turn the Film Speed Ring (15) with your finger on the notches of the Ring, and align the white line with the reading equivalent to the speed of the film in use. Do not set it between click-stops.

Numbers on the film speed scale represent ASA values only and range from ASA 25 to 800. (DIN values equivalent to the ASA are as shown on the next page ranging from DIN 15 to 30.)

Read the instructions supplied with the film and set the correct film speed. If the number of the film speed corresponding to that of your film is not available on the film speed scale, use the closest number and never set it between two settings. For convenience, the positions for intermediate film speeds are shown only by dots. See the illustration.

ASA	25	●	●	50	●	●	100	●	●	200	●	●	400	●	●	800
MEMBERS SHOWN BY DOTS		32	40		65	80		125	160		250	320		500	650	
DIN	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30





• THE LENS OF PETRI COMPUTER II

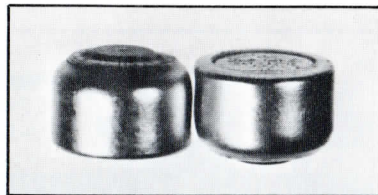
The lens of Petri Computer **II** is a Petri 40mm, F/1.7 semi-wide angle, specially designed for fast shooting, greater-than-normal field coverage.

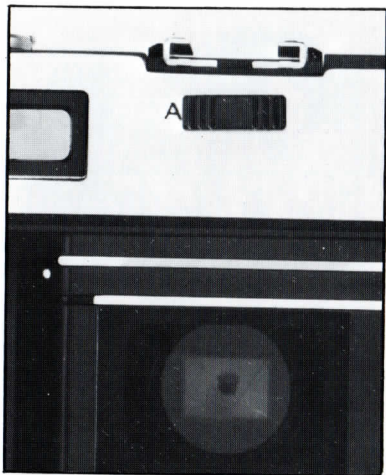
With an angle of view of $57^{\circ}06'$, 27 per cent greater than that of the lens normally used on a 35mm camera, the Petri Computer **II** covers a greater area of the subject. It is extremely useful in photographing large subject areas from close distances — particularly indoors where space is limited.

● HOW TO INSERT THE BATTERIES

Petri Computer **II** uses two HM-N 1.4 volt mercury batteries, equivalent to Eveready E-640, Mallory RM-640, Eveready RM-640-H or Mallory RM-640-H batteries of this type, for the built-in CdS exposure control system. The battery compartment is located in the bottom of the camera.

To insert the batteries, slide the lid with your thumbnail in the direction of the arrow. Place the batteries in the compartment. Be sure that each battery is placed as shown in the battery compartment. The exposure control mechanism will not work if the batteries are placed incorrectly. When you put the batteries in, be sure to set the leader tape under the batteries.





● FULLY AUTOMATIC EXPOSURE CONTROL

Petri Computer II features a built-in electronic shutter. Shooting the subject in extremely weak light is quite possible and the exposure control is simple to operate.

Swing the A/F Switch (21) to the right to set it at the "A" position. This is all you have to do for exposure control. By operating the film transport lever, the exposure control mechanism becomes ready for action. Looking through the viewfinder, depress the shutter button. The light striking the Electric-Eye CdS cell is transmitted to the electronic mechanism and the camera automatically selects the proper diaphragm opening and shutter speed.

If Filters are used, no adjustment in exposure is required. This is taken care of by the Filters themselves fitting over the CdS cell. Simply make sure that the CdS cell is not obstructed, during picture-taking, by your finger or any other objects.

NOTE: Make sure that the film speed index specified for the film in use is set properly.

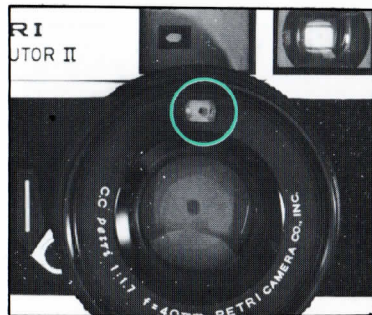
(See FILM SPEED SETTING at page 11.)

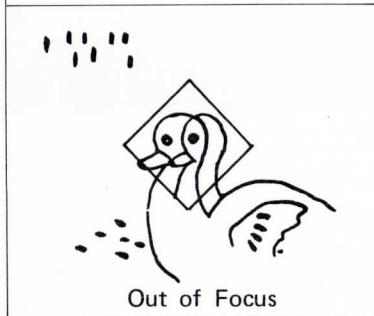
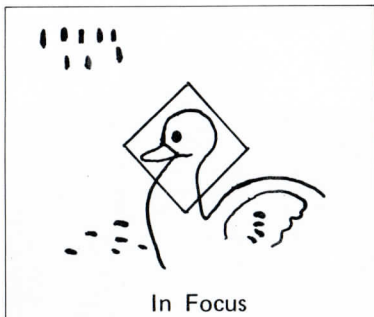
While the shutter button is being depressed, you will notice lamps lighting in the viewfinder and also on top of the camera body. This shows that the battery condition is proper.

When shooting subjects in a normal lighting condition, (more than EV 6.5), the lamp goes out. This shows that the shutter speed is fast and that you can enjoy shooting without fear of camera shake, the cause of blurring.

(For good results see HOW TO HOLD PETRI COMPUTOR II on page 19)

When the lamp keeps lighting, it shows that the shutter speed will be slower than 1/30th of a second. The shutter speed of Petri Computor II ranges down to 2 seconds. It is imperative to use a tripod in order to avoid camera shake during exposure. Use of Petri Cable Release (see page 28) is also recommended.



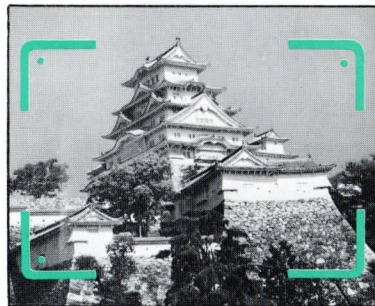


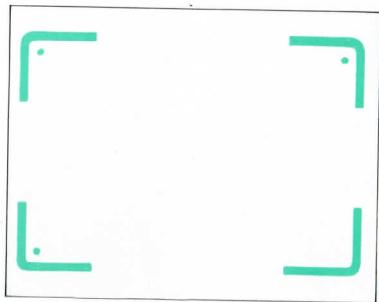
• HOW TO FOCUS

After loading the film, it is necessary to adjust the focusing. As you look through the viewfinder, a yellow lozenge-shaped spot will be seen in the center. In this lozenge, out-of-focus pictures will appear as two images. Adjust the focusing ring (13) until one clear image is shown. See the illustration.

- **HOW TO COMPOSE THE PICTURE**

When you look through the viewfinder you will notice a bright yellow frame. The frame contains the actual image or area of the subject that will get in your picture under ordinary circumstances. Therefore, compose the subject within this frame.





● PARALLAX CORRECTION MARKS

Looking through the viewfinder you will be aware of the three yellow dots, two in the upper part of the frame on both sides and one on the left-hand side of the lower part. They are the parallax correction marks. When taking portraits or close-ups (within 10 feet), use the marks as the border of the picture. See the illustration. This correction is required, because the lens of Petri Computer II as that of most cameras, is located at a lower right side of the viewfinder. Therefore, the viewfinder cannot show exactly the same scene that the lens is taking. This is called "Parallax". With most scenes, particularly those in which the subject is more than 10 feet (3 meters) away, the parallax is of little importance. It is a consideration when you are taking portraits, for instance, and you must compensate to avoid "head chopping".

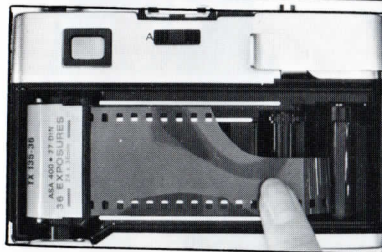
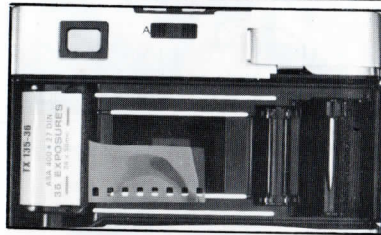
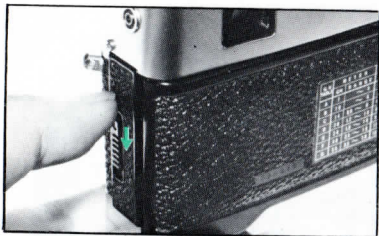
● HOW TO HOLD PETRI COMPUTER II

The format of your picture is determined by the position in which you hold the camera. Holding the camera in a horizontal position will result in a horizontal format. Holding in a vertical position will result in a vertical format. Blurring in a picture is often caused by camera shake at the moment of exposure. Practice holding the camera and releasing the shutter so you can take pictures without jarring or shaking it.

Use the following three simple rules for taking a picture to avoid camera shake;

1. Before releasing the shutter, take a deep breath and hold it until the picture has been taken.
2. While taking the picture, hold the camera firmly with both hands and press the back against your face and forehead as firmly as possible.
3. Squeeze the shutter release button, do not prod or tap it. Practice squeezing until you can release the shutter without the slightest quiver.





● FILM LOADING

Petri Computer II accepts the standard 35mm cartridges containing 12, 20 or 36 exposure lengths of film. Avoid direct sunlight falling on the film cartridge. Load the film in the shade, use your body with the sun on your back as protection if you have no other method.

1. TO OPEN THE CAMERA BACK

Slide down the back cover lock with your finger nail and the camera back will open with a snap. At the same time, the exposure counter automatically returns to "S" (which means "Start") position.

2. TO PLACE THE FILM CASSETTE

Turn the film rewind knob a little so that the film cassette will be properly placed in the chamber.

3. FILM LOADING

Slip the film end into any slit on the take-up spool and slide it down and check that the film perforation will be automatically engaged with the edge of the camera sprocket.

4. TO ADVANCE THE FILM

Advance the film transport lever a little to see that the film is fastened round the take-up spool, before closing the camera back.

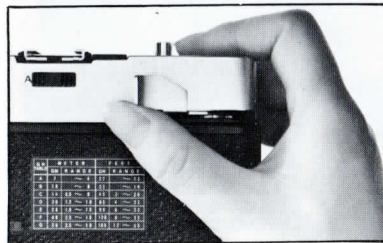
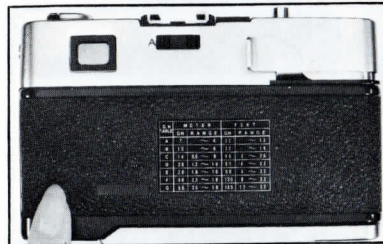
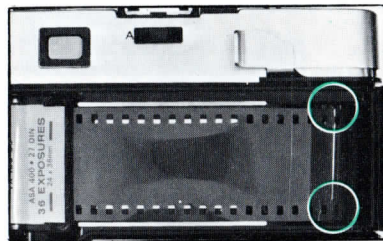
5. TO CLOSE THE CAMERA BACK

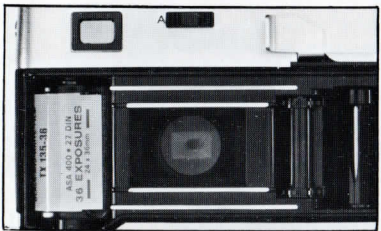
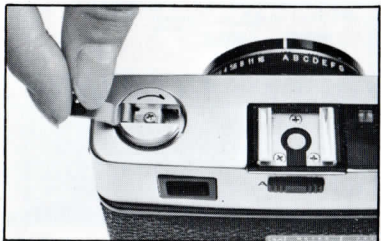
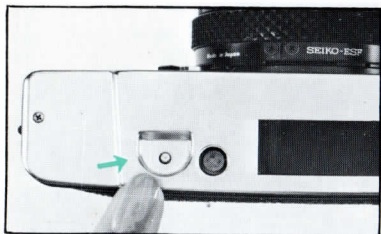
The camera back will be locked with a snap by slight pressure.

6. TO RELEASE THE SHUTTER AND ADVANCE THE FILM

Repeat this action twice, and you are ready to take your first picture.

NOTE: In case the film rewind knob does not turn counterclockwise when advancing the film transport lever, the film is not properly transported. Open the camera back and check the take-up spool.





● FILM UNLOADING

After the entire length of film in the cartridge has been exposed, it must be rewound into the film cartridge so it can be removed from the camera.

1. TO REWIND THE FILM

Raise the film rewind crank and turn it in the direction indicated by the arrow while depressing the film rewind button (28). You will feel a little tension on the crank while the film is being rewound. When the tension stops, you know that the rewinding is completed.

2. TO REMOVE THE CARTRIDGE

Avoid direct sunlight when removing the film cartridge from the camera. Also, the camera lens should face downward while the cartridge is being removed so as to prevent it from dropping out.

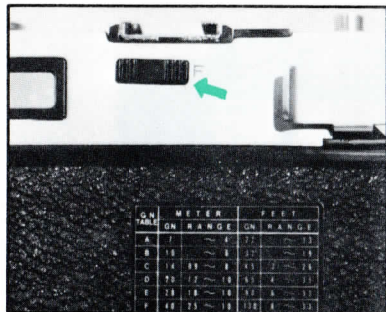
● FLASH PHOTOGRAPHY

Petri Computer II has an electronic shutter, and its automatic exposure control system assures you of properly exposed pictures even with extremely poor light. However, when you snap a MOVING subject in poor light, it is necessary to use flash equipment; because the subject in dim light has to be exposed for a long time and a moving subject easily results in a blurred picture.

For flash photography at A position: this is applied to situations only when it is less than EV 6.5, whether bright or dark, the camera will automatically sense the light and fire the flash. For flash photography at F position: disregarding brightness of the subject, your flash will always fire.

The use of flash equipment is quite simple because the camera is designed for the automatic flash system. Merely take the following steps:





A/F Switch



Guide Number Ring

1. Swing the A/F Switch (21) to the left and the camera is set for flash.
2. Insert the foot of your flash equipment into the Accessory Shoe (9). (Unless this step No. 2 is taken, the camera remains set for EE photography and is not for flash photography.)
3. Set the Guide Number Ring (14) at the given mark from "A" to "G" corresponding to the Guide Number Table (19). The guide numbers are usually indicated on the packages of your flashbulbs or in the instruction manual of your strobo.
4. When you use the automatic strobo, follow the instruction book of your strobo to adjust the aperture.

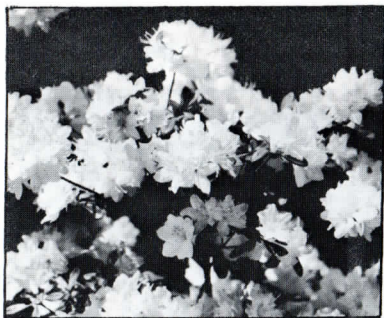
Petri Computer II is equipped with both a "hot shoe" contact for cordless units and a standard PC socket for one that has a cord. If you use a cordless unit, merely slip the foot of the unit into the shoe on top of the camera body and it will automatically make contact with the shutter mechanism. If the unit has a cord, simply plug the cord into the flash socket (18).

• HOW TO USE SELF-TIMER

Swing the self-timer lever in the direction indicated by the arrow as illustrated. Release the shutter button, and the frame will be exposed after a delay of approximately 9 seconds. The self-timer can be set either before or after advancing the film. The self-timer is usually used when the photographer wants to join a group which he is photographing. Also the use of a tripod is recommended.

The use of self-timer is not recommendable under the condition of poor light (less than EV 2.5).





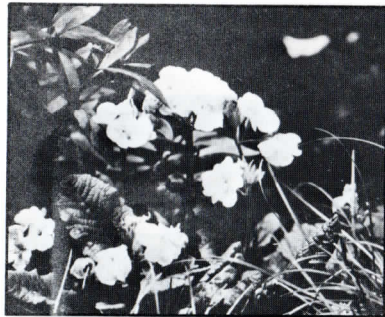
● MAINTENANCE AND CARE OF PETRI COMPUTOR II

A few simple precautions, careful handling and immediate attention in case of trouble will prolong the life of your camera and keep it operating well indefinitely.

Follow these simple rules:

1. When cleaning the outside of the camera, first use a soft brush and then a soft cloth.
2. Remove dust and sand that entered the camera while it was opened, using a lens brush or a hand-blower.
3. Dust, fingerprints, water drops, etc., on the lens not only affect picture contrast but, if left for a long time, they will attack the surface.
4. Should your camera fall into water, immediate attention is imperative. Bring it to a repair shop at once. If it fell into salt water, rinse it thoroughly in fresh water and then deliver it to the repairman.
5. Your camera, when not in use, should be protected from damp, and dust; preferably in its case and, as an additional precaution, inserted into a polythene bag.

6. Be sure that your camera is not kept in abnormally high or low temperatures — normal room temperature is the best.
7. Before storage, release the shutter to relieve tension of every apparatus. When you store your camera for a prolonged period, remove the batteries to avoid a risk of deterioration and corrosion.
8. Do not leave your camera without use for a long period. Your camera, as any other mechanical instrument, needs to be exercised regularly to keep it in good condition. Set the shutter and click. Repeat this action several times. Check film transport and the exposure counter. Also, operate the self-timer. These actions will keep the mechanism in good order, retaining the natural qualities of the lubricant — thus ensuring your camera is ready for an instant use when required.





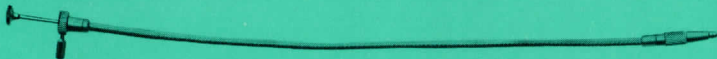
- **ACCESSORIES FOR PETRI COMPUTOR II**

PETRI LENS HOOD

It is recommended for general outdoor photography to prevent extraneous light from entering the lens. $\phi 54\text{mm}$ slip-on type.

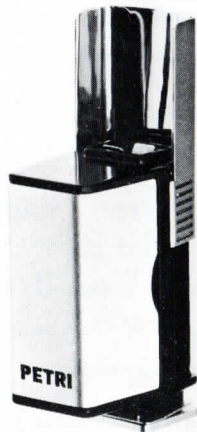
PETRI CABLE RELEASE

High quality metal covered cable releases in 12 inch length (30cm).



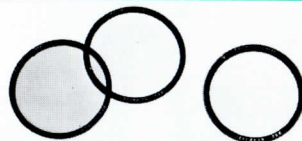
PETRI FLASHGUN

Solidly constructed, compact, battery-powered flashgun with a slide-up reflector and a bulb ejector. Recommended to use with Petri Computor II camera. Powered by one W10 15-volt battery through a cordless shoe contact, and takes AG-type flashbulbs.



• PETRI FILTERS

Essential for first class photographs. Select the proper filters for your needs. $\phi 52\text{mm}$. screw-in type.



FOR COLOR FILM:

FILTER TYPE	FILTER FACTOR	COLOR	PURPOSE
UV	no increase	Clear	Absorbs excessive UV. Also suitable for black-and-white.
1A	no increase	Light Pink	To eliminate haze and for use at altitudes over 3,000 ft.
W4	1.5X	Medium Amber	Reduces excessive blueness of sky on a cloudy day.
C4	1.5X	Medium Blue	For early morning or evening shots.
C8	2 X	Dark Blue	Conversion filter for use when using 'Daylight Type' color reversal film with white flash bulbs.
C12	2.5X	Dark Blue	Conversion filter for use when using 'Daylight Type' color film with photoflood lamps.
85C	no increase	Dark Amber	Conversion filter for use when using 'Artificial Light' film in daylight.
NDX4	4 X	Neutral Density	Neutral Density for sunny subjects. Can also be used for black-and-white.

FOR BLACK & WHITE FILM:

FILTER TYPE	FILTER FACTOR	COLOR	PURPOSE
Y1	1.5X	Light Yellow	Landscapes, snow, clouds. Renders yellow and green lighter.
Y2	2 X	Medium Yellow	Gives stronger effect than Y1.
YA3	4 X	Orange	Haze distant views. Renders yellow and red lighter, blue darker, distant objects clearer.
R1	8 X	Red	Hazy distant views. Renders red lighter, blue and green darker. Gives stronger effect than orange filter.
PO0	2.5X	Green	Landscapes, snow, clouds. Renders green lighter. Red (complexion) and blue darker. Recommendable for portraiture.
PO1	4 X	Medium Green	Gives stronger effect than PO0.

PETRI

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