PETRI V6

INSTRUCTION BOOK

MAJOR SPECIFICATIONS OF PETRI FLEX V6

| Туре: | Single Lens Reflex 35mm camera with fully automatic dia- phragm and quick return mirror. | | | | | |
|-----------------------|--|--|--|--|--|--|
| Film size : | 35 mm film (20 or 36 exposures) | | | | | |
| Picture size : | 24 mm×36 mm | | | | | |
| Standard Lens: | "PETRI" 55 mm/f 1.8, (or f 2) colour corrected lens. | | | | | |
| | Speeds : B, 1/2, 1/4, 1/8, 1/15, 1/30, X, 1/60, 1/125 and 1/500 second. Single pivot non-rotating shutter dial | | | | | |
| Viewfinder : | Penta Prism viewfinder with built-in "Micromic-Lens Focusing". | | | | | |
| Film transport : | Rapid, single stroke (180°) lever transport which advances the film and cocks the shutter simultaneously. | | | | | |
| Synchronization: | FP, M and X automatic setting | | | | | |
| Interchangeable Lens: | Bayonet-type Interchangeable Lenses can be attached to the | | | | | |
| - | camera | | | | | |
| Others : | film rewind system and built-in selftimer | | | | | |



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DESCRIPTION OF PARTS

- ① Film Advance Lever
- ② Shutter Speed Dial
- ③ Bayonet Release Ring for Removing Lens
- ④ Film Counter
- 5 Film Rewind Crank
- 6 Shoe Pins for CdS Meter
- ⑦ Selftimer Release Button
- 8 Selftimer Lever
- (9) Shutter Release Button
- 10 Screw Mount for Cable Release
- (1) Flash Socket
- 12 Neck Strap Loop
- 13 Viewfinder
- (14) Sprocket
- 15 Take-up Spool
- 16 Lock for Opening Camera Back



- 17 Film Cassette Chamber
- (18) Tripod Bush
- (19) Film Rewind Button
- 20 Distance Scale
- 21 Depth of Field Indicator
- 22 Diaphragm Scale
- 23 AUTO & MANUAL Diaphragm Switch
- 24 Diaphragm Pin





Opening the Camera Back

Pull down the lever with your thumbnail to open the Camera Back. At the same time, the Film Number Indicator automatically returns to zero.

Pulling out the Knob

Pull out the FILM REWIND KNOB on the top of camera. This is to allow the film cassette to be put into the cassette chamber.

Film Loading

Slip the film end into any slit on the Take-up Spool and slide it down toward the bottom of the camera body, and check that the film perforation is properly engaged with the tooth of camera sprocket.

FILM LOADING



Advance the Film Advance Lever

Advance the Film Advance Lever a little to see if the film is fastened round the Take up Spool, before closing camera back.

Closing the Camera Back

The Camera Back will automatically be closed by light pressure. Release Shutter Release Button and advance the Film Advance Lever.

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

VIEWFINDER AND FOCUSING



The perfect combination of Fresnel Screen and Condensor Lens used in the viewing system of every Petri Flex V6 is the result of Petri's highly advanced technical and engineering ability. The precision focusing elements in the viewing system consist of a group of micro-lenses as shown in the centre of the picture. As you look through the micro-lens area (A) in the viewfinder, you can see the subject clearly, ONLY when it is correctly focused. Rotating the focusing ring you will notice the appearance of something like a mesh of a net in the centre of the viewfinder. This reticulation is caused by the flickering of reflected light entering the camera lens. When the subject is correctly focused the flickering grid fades away from the micro-lens area. In the second inner circle (B) the subject is always seen sharp and clear, even when the lens is out of focus. When the lens is correctly focused the image in the micro-lens area will be as sharp and clear as that seen in the surrounding circle (C).

USING THE FULLY AUTOMATIC & MANUAL DIAPHRAGM OF THE LENS





- * Look at the AUTO & MANUAL Diaphragm Ring. Adjust the ring until the AUTO mark is on top of the lens barrel—the diaphragm is now set for FULLY AUTOMATIC operation. This is the normal position for most circumstances. When you want to release the Automatic Diaphragm, slide the AUTO & MANUAL Switch in the direction indicated by the arrow on the ring.
- * When the DIAPHRAGM is set on the AUTO position, it will only stop down to the set aperture, when the shutter has been released. The AUTO position enables rapid accurate focusing as the subject in the viewfinder is very bright and the DEPTH OF FIELD is extremely small. The MANUAL position has the advantage that you can pre-view the DEPTH OF FIELD and see in the viewfinder the lens zone of sharpness with any aperture.

USING THE SELFTIMER



Adjust the Selftimer Lever in the direction indicated by the arrow in the illustration (180°)Press the "Selftimer Release Button" and the frame will be exposed after a

delay of approximately 11 seconds.

- Note that the Selftimer can be set at in between position so as to shorten the release time.
- The Selftimer can be set either or after advancing the film.
- * All shutter speeds with the exception of the B setting can be used with Selftimer.
- * The main use of the Selftimer is when the photographer wishes to join a group, which he is photographing. It can also be useful for Microscopic photography or when using a long focus length. In all cases the use of tripod is recommended.

FLASH PHOTOGRAPHY

The shutter of the camera is synchronized for use with flash bulbs, which enables you to take photographs even when the light is extremely poor. With reference to the picture (see next page) connect the synchronizing cable of the flash gun to the flash socket on the camera. The flash gun can be attached to the PETRI FLEX V6 by way of the camera accessory shoe. When using F class, M class and FP class flash bulbs, or Electronic flash shutter speeds must be selected according to the table shown below. (Speeds within the coloured area are available).





HOW TO HOLD YOUR PETRI FLEX V6 CAMERA

Hold the camera body firmly with your right hand and lightly touch the SHUTTER RELEASE BUTTON with your right index finger. Support the base of the lens with your left hand and arrange your fingers on the DISTANCE SCALE so that you can quickly focus.





FILM UNLOADING

Rewinding the Film

Pull out the FILM REWIND CRANK. Press the film REWIND BUTTON located at the bottom of the camera body and turn the REWIND CRANK in the direction indicated by the arrow. Make sure that the film is completely rewound into the cassette before opening the camera back. This can be checked by advancing the Film Advance Lever and observing that the Film Rewind Crank does not move in the reverse direction to that indicated by the arrow.

Removing the Film Pull out the FILM REWIND KNOB and remove the Film Cassette.

INTERCHANGING THE LENS

Adjust the Lens Mount Ring in an anti clockwise direction until the red mark appears on top of the lens barrel. The Lens can then be removed from the camera. When inserting the lens, line up the red dot on the camera body with the red dot on the lens mount ring and when the lens is in position firmly, turn the LENS MOUNT RING in a clockwise direction. Before inserting the lens make sure that the AUTO & MANUAL control of the lens is on the "MANUAL" position. A complete range of interchangeable lenses from 35mm wide angle to 400mm Telephoto is available for your new Petri Flex V6 camera. A special adapter ring is available for using screw thread interchangeable lenses.



Adapter Ring

PETRI LENS

The standard lens equipped with PETRI FLEX V6 camera is a high speed PETRI 55 mm four group - six element using Lanthanum flint high refractive index glass. This PETRI LENS has a high resolving power even at full aperture. It is equally suitable for black-and-white and colour photography.

HOW TO USE THE PETRI CdS EXPOSURE METER Film Speed Indicator Shutter Speed Dial ASA Exposure Multiples 6, 10, 25, . (64), 100, 200, 400, 800, 1600, 3200 DIN Exposure Multiples 9, 11, 15, (16), 18, (19), 21, Guide Line 24, 27, 30, 33, 36 Set the Film Speed Dial Slide the Exposure Meter (ASA or DIN) to the corinto position between the responding number of the two-pin holders located on film in use. the right hand side of the Diaphragm camera body while pressing Exposure Numbers the Meter Lock by thumb. Meter The metal hooks of the Needle meter engage with the pins. Exposure Meter Lock Photo Cell H-O-L Switch

Replacing the Mercury Battery

Unscrew the metal cap, which is located at the bottom of the Meter by turning in an anti-clockwise direction. Replace with a new Mercury Battery and ensure that the positive (+) is facing the outside of the battery compartment. Mercury Battery suitable for use with this meter is: Mallory PX-13 Mallory RM625 Eveready E625 National M-1D Toshiba TH-MC G.E. 625



Rotate the Shutter Speed Dial on the CdS Exposure Meter to the right or left until a slight click is heard, which indicates that it has engaged with the Shutter Speed Dial of the camera.

Point the camera at the subject. Turn the "H-O-L" Switch to the "H" position when using under normal daylight conditions. The "L" position is set when the lighting is poor.





Select the shutter speed, which is indicated by the red line on the left hand side of the meter. Read off the aperture indicated by the red indicator needle by following the Guide Lines leading from the indicator needle to the aperture scale. Transfer this aperture to the diaphragm of the camera lens.

In order to remove the meter, it must be remembered to press in the lock at the side of the meter.

In order to conserve the life of the Mercury Battery, turn the "H-O-L" switch to the "O" position when the meter is not in use.

DEPTH OF FIELD

When the lens is correctly focused on a subject, you will notice that objects closer or farther away become less sharp, until they become almost completely blurred. However, you will observe that there is a certain distance between the nearest and the farthest away subjects, which still appear sharp. This zone of sharpness is called the "DEPTH OF FIELD".

In order to check the depth of field with the exposure setting in use, observe the figures engraved on the Depth of Field Indicator on the Lens. These figures are aperture values and are indicated by black lines spreading out on either side of the red diamond mark at their centre. The black lines point to the distance scale and indicate the depth of field at different distances according to the aperture used. For example: When f/16 is selected and the focusing distance is 6 feet, the depth of field is approximately 4.6 feet to 10 feet. See the illustration.

DEPTH OF FIELD TABLE (PETRI 55 mm f: 1.8 & f: 2)

| FNO. feet | 1.6 | (2) | 2.8 | 4 | 5.6 | 8 | 11 | 16 |
|--------------|------------------|------------------|---|------------------|---|-------------------|----------------|-----------------|
| 2 | 1.98 2.02 | 1.97 2.02 | 1.96 2.03 | 1.94 2.05 | $ \begin{array}{r} 1.92 \\ 2.07 \end{array} $ | 1.90 2.11 | 1.86 2.15 | 1.81 2.23 |
| 2.5 | 2.46 2.54 | 2.45 2.54 | 2.44 2.56 | 2.41 2.58 | $2.38 \\ 2.62$ | 2.34 2.67 | 2.29 2.74 | 2.20 2.88 |
| 3 | 2.95 3.05 | 2.94 3.06 | $2.91 \\ 3.08$ | 2.88 3.12 | 2.83 3.18 | 2.77 3.26 | 2.70 3.36 | 2.58 3.58 |
| 4 | 3.90 4.10 | 3.89 4.11 | 3.85 4.16 | 3.79 4.23 | 3.71 4.33 | 3.60 4.49 | $3.48 \\ 4.69$ | 3.27 5.13 |
| 5 | 4.85 | 4.83 5.17 | 4.76 5.25 | 4.67 5.37 | 4.55 5.53 | 4.38 5.80 | 4.21 6.14 | 3.91 6.92 |
| 6 | 5.78 6.23 | 5.75 6.26 | 5.66 6.37 | 5.53 6.55 | 5.36 6.79 | 5.13 7.21 | 4.89 7.74 | 4.49 9.02 |
| 8 | 7.61 8.43 | 7.57 8.47 | 7.41 8.68 | 7.18 9.01 | 6.91 9.48 | 6.52 10.33 | 6.14 11.47 | $5.51 \\ 14.58$ |
| 12 | 11.15 13.00 | 11. 05 13. 11 | $ \begin{array}{c} 10.71 \\ 13.62 \end{array} $ | 10. 25 14. 47 | 9.68 15.76 | 8.94 18.21 | 8.23 22.11 | 7.13 37.82 |
| 30 | 25. 12 37. 19 | 24.67 38.21 | 23. 04 42. 92 | 20. 49 55. 90 | 18. 71 75. 47 | 16. 11 215. 70 | 13.92 ∞ | 11. 01 ∞ |
| 00 | 154. 9 co | 139.31 | 99. 54 · · · · · | 64. 69 | 49.76 00 | 34.83 | 25.99 co | 17. 41 ∞ |

INFRA-RED PHOTOGRAPHY



When taking infra-red pictures, reset the focusing distance to the red line indicated by the aperture f 1.8 (or f 2) on the Depth of Field Scale.

PETRI FILTERS FILTER FACTOR

- * Filters reduce the amount of light entering the lens, and when using them it is therefore necessary to increase the exposure. This increase is called the FILTER FACTOR. As shown in the table below, when the Y2 filter is used, it is necessary to adjust the shutter speed from 1/500 second to 1/250 second, or f/8 to f/5.6.
- * The "UV" filter does not have a filter factor and an increase in exposure is not necessary. This filter therefore also serves a useful purpose in protecting the lens from dust and damage. **DIAPHRAGM ADJUSTMENT**

| Black | & White | Colour | | | | |
|-------|----------|-------------------------------------|--|--|--|--|
| Y1 | 1/2 stop | UV (Skylight) none | | | | |
| Y2 | 1 // | W4 ¹ / ₂ stop | | | | |
| YA3 | 2 // | C4 ¹ / ₂ " | | | | |
| R1 | 2 // | C8 1 // | | | | |
| POO | 11/2 // | C12 $1^{1}/_{3}$ " | | | | |
| POI | 2 " | 85C ¹ / ₃ " | | | | |
| PUI | 2 II | NDX4 2 // | | | | |

PETRI INTERCHANGEABLE LENSES



ACCESSORIES



FILTER



EXTENSION TUBE SET



EXTENSION BELLOWS



LENS HOOD



ANGLE FINDER



ACCESSORY SHOE



TELE CONVERTOR (2X and 3X)

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