

# WILSONWERKS ARCHIVES

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

This cover page is copyrighted material. This document may not be sold or distributed without the express consent of the publisher.

©2008-2012 wilsonwerks Llc

**PETRI**

**FLEX**

**V**



**INSTRUCTION BOOK**



**Type :** Fully-Automatic Diaphragm Penta Prism Single Lens Reflex Camera with Quick-Return Mirror.

**Film Size :** 35mm film (20 or 36 exposures) 24mm × 36mm.

**Lens :** PETRI 55mm F2, Color-corrected Lens.

**Shutter :** Focal Plane Shutter.

B, 1/2, 1/4, 1/8, 1/15, 1/30, X, 1/60, 1/125, 1/250, 1/500 sec. Single-Pivot Non-Rotation Dial.

**Viewfinder :** Penta Prism Viewfinder with Built-in Micro-image Focusing.

**Film Transport :** Single-stroke (180°) rapid transport lever which automatically transports film and cocks the shutter simultaneously.

**Others :** FP & X Synchronization (JIS Type-B)

Automatic-Resetting Film Counter, Crank-type Film Rewinding, Built-in Selftimer etc.



# CONTENTS



SUPERLATIVE FEATURES OF PETRI FLEX V .....	2
DESCRIPTION OF PARTS .....	4
ORDER OF PHOTOGRAPHY .....	6
FILM LOADING .....	6
HOW TO USE FILM EXPOSURE COUNTER .....	9
HOW TO LOOK THROUGH VIEWFINDER AND FOCUS .....	10
HOW TO USE SELFTIMER .....	12
SYNCHRO-FLASH PHOTOGRAPHY .....	13
HOW TO HOLD PETRI FLEX V .....	14
PETRI LENS .....	15
FILM UNLOADING .....	16
DEPTH OF FIELD GUIDE .....	17
THE EFFECTS OF INTERCHANGEABLE LENSES .....	18
VARIOUS ACCESSORIES FOR PETRI FLEX V .....	23

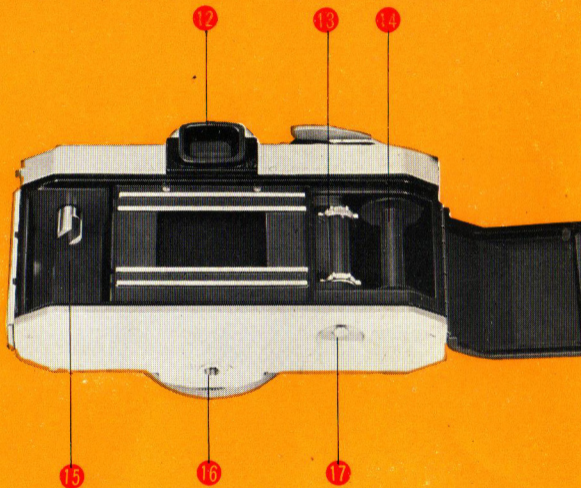
## DESCRIPTION OF PARTS



1. FILM WINDING LEVER
2. SHUTTER DIAL
3. FULLY-AUTOMATIC RELEASE RING
4. SYNCHRO-SWITCH (FP & X)
5. AUTOMATIC EXPOSURE COUNTER
6. FILM REWIND CRANK
7. NECK STRAP LOOP
8. SELF-TIMER LEVER
9. SHUTTER BUTTON
10. PETRI F2 55mm LENS
11. SYNCHRO TERMINAL
12. EYE-PIECE
13. SPROCKET
14. TAKE-UP SPOOL
15. PATRONE BOX
16. TRIPOD HOLE
17. RETURN BUTTON
18. FOCUS ADJUSTING LEVER



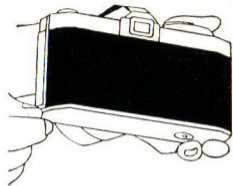
- 19. DISTANCE SCALE
- 20. DEPTH OF FIELD SCALE
- 21. DIAPHRAGM SCALE
- 22. MANUAL AND AUTOMATIC DIAPHRAGM SWITCH RING
- 23. BAYONET MOUNT



# ORDER OF PHOTOGRAPHY

The following preparations are needed before your picture-taking . . .

- (1) Load the film in your camera.
- (2) Advance the film and release the shutter button.  
Repeat this action. (2 exposures)
- (3) Acknowledge if Fully-Automatic Diaphragm Ring fits on the mark AUTO. Now you are ready to face some subject.
- (4) Be sure if the lens cap is uncovered.
- (5) Adjust the exposure by setting both Diaphragm and Shutter Speed Scale.
- (6) Cock the film advance lever.
- (7) Decide the picture-composition by focusing it through the viewfinder.
- (8) Release the shutter button.
- (9) Repeat the same action (from 6 to 8) at every picture-taking.
- (10) Unload the film when the roll of film is all exposed.

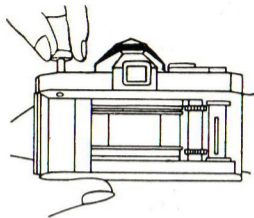


## Opening the back cover

Pull down the lever with your thumbnail to open the back cover. At the same time, the film resetting counter automatically returns to the starting-point (0).

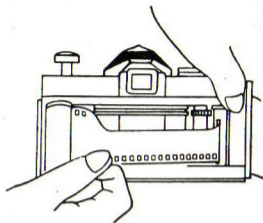
## FILM LOADING





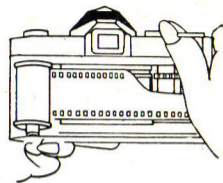
**Pull out the rewind crank**

Pull out the film rewind knob on the top of camera. This is for the cartridge to be put into the cartridge-box.



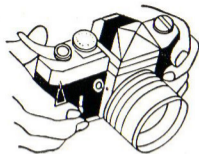
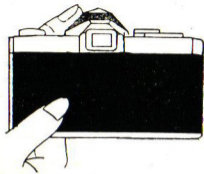
**Put the end of film into the slot of the take-up spool.**

Slip the 1st perforation of film from the end into the slot on the take-up spool so that the end is fastened by fitting the perforation to the tooth of the take-up spool.



**Wind the film a bit.**

Advance the film advance lever a little to see if the spool catches the film.



A



B

### Close the back cover

Back cover will automatically be closed by pushing it.

### For your 1st picture

Cock the camera by turning the film winding lever and press the shutter release button. Repeat this operation, then turn film winding lever and you are ready to snap your 1st picture. This should be done just before the picture-taking.

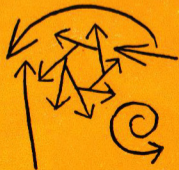
- A. As you open the back-cover, the counter automatically returns to "0" point.
- B. When you release the shutter for the 1st picture, the counter shows "S" mark.

## CARE IN FILM-LOADING

- Use the cartridge 35mm film for PETRI PENTA V camera.
- Avoid the direct sun-light and select the shadow place for your film-loading.
- When slip the end of film into the slot of the take-up spool, turn the spool so that it can catch the film perforation easily.
- As you advance the film winding lever, the film rewinding crank turns to the opposite direction of the arrow-mark if the film is properly loaded. When the film in the cartridge is loosen, it does not turn.
- So turn the rewind crank to the arrow direction to tighten the film.
- The second advance of the film should be done just before your picture-taking.

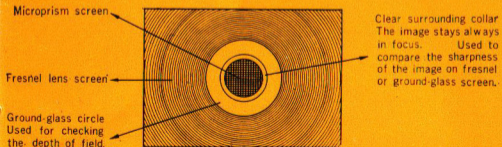
## HOW TO USE FILM EXPOSURE COUNTER

FILM EXPOSURE COUNTER is the device to show the number of films exposed. A number will be advanced automatically whenever you release the shutter release button after cocking the film advance lever. Thus it always tells you accurately how much pictures you have taken. As the counter automatically reset to Zero point, you do not have to worry about setting the counter by yourself at every picture taking.



## HOW TO LOOK THROUGH VIEWFINDER AND FOCUS

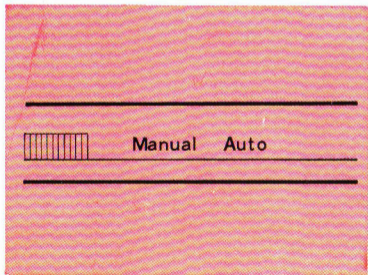
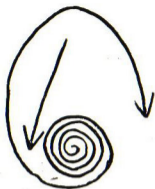
The perfect combination of Fresnel Lens and Condenser in viewing system equipped with PETRI FLEX V is the creation of PETRI's unique engineering know-how. As precision Focusing Members in viewing system is so precisely embodied, you can look through viewfinder very easily. This precision focusing system consists of a group of multi-micro-lenses as shown in the center of picture. As you look through micro lenses in the finder, you can see subject clearly ONLY



when it is correctly focused as you turn helicoid ring and you can notice out-of-focus image as you move helicoid ring while looking through viewfinder. In order to know whether focus is correct or not, move camera slightly right and left and yet image in micro-lenses can be seen clearly, then it is properly focused. Strong point of Single Lens Reflex camera is that you can see the depth of field of lens in use as you photograph. Compare image within micro-lenses with the one within the outer frame zone where you can see standard image to get proper focusing. The circle zone around micro-lenses is the area where you can even see the field depth of interchangeable lenses beside standard lens. Also you can focus image through this zone.

As described previously the whole area of viewfinder is made of fresnel lens and condenser. It is to concentrate any dim light coming from lens to your eye and with viewfinder you can always take bright picture in every corner even with small aperture of lens.



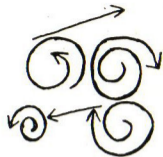


## Care to Handle FULLY-AUTOMATIC & MANUAL DIAPHRAGM

- Look at the Fully-Automatic Diaphragm Ring. Turn the ring until the mark "AUTO" comes to the top of lens ring and the camera is in "Fully-Automatic Diaphragm" Operation. Usually this position should be kept. When releasing the operation, turn the ring until the mark, "MANUAL" comes to the top of lens ring.
- In "Fully-Automatic Diaphragm" Operation, the lens is fully-opened at all times and only when you release the shutter button the F value of aperture can be obtained. The steady opening of lens makes you to focus a subject very easily, but when you want to look through the subject in the desired aperture, release Fully-Automatic Diaphragm and look through the outside of double-circle in the center of viewfinder, after giving the desired aperture by manual. You can take a picture with the release of Automatic Operation.

## HOW TO USE SELFTIMER

- Pull down the selftimer lever to the end (180°) as shown in the picture on the right and release the button as shown in the picture on the left, then about 11 seconds after your releasing the button the film will be exposed.
- You can set the selftimer in between to shorten the release time, and just release the shutter button.
- The selftimer setting can be made either before or after your advancing the film winding lever.
- Selftimer can be used in all shutter speeds except B setting.
- Selftimer is useful for the group picture to which you join after releasing the button. It is also useful for Close-up and Micro-photography. In this case, the use of tripod is recommendable.



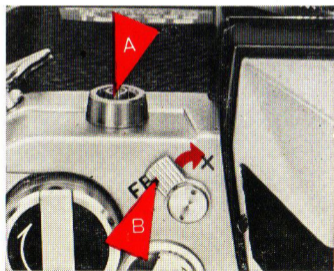
# FLASH PHOTOGRAPHY

The subject in the dark place can be photographed by using flashbulbs synchronizing the shutter. As the picture A shows, in order to take Synchro-Flash Photography, first of all, connect the cord of flash-gun to Synchro-terminal. The flash-gun can easily be attached to FLEX V if you use the PETRI Exclusive Accessory Shoe which is also on sale.

When you use F-class, M-class Flash-bulb or Strobe,

set Synchro-switch lever to X-mark (See picture B) and when using FP-class flashbulb, you have to switch the lever to FP mark.

Referring to the table, set the shutter speed and decide F Value of Diaphragm according to what type of flashbulb you use and the distance to the subject. Now you are ready to release the shutter button. This is the way to get Synchro-Flash Photography.

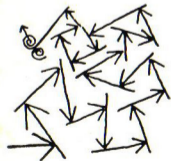


**TABLE**

	1/500	1/250	1/125	1/60	X	1/30	1/15	1/8	1/4	1/2	B
FP	FP class (Screw mount)										
	FP class (Bayonett)										
X						F class bulb					
						M class bulb					
						Speed Light					

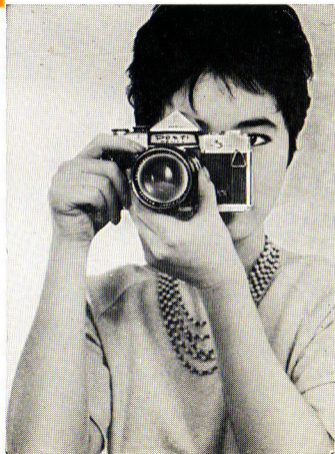
## HOW TO HOLD THE PETRI FLEX V

Hold your camera body with your right hand very tightly and touch the shutter release button slightly with your right index finger so that you can release the button smoothly. Support the helicoid lens ring from the bottom with your left hand so that you can make the focal adjustment smoothly.



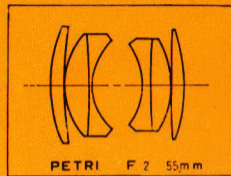
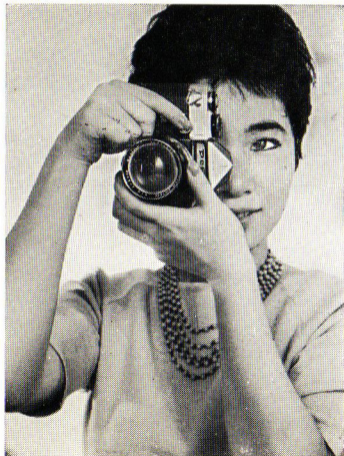
The point is for you to hold your camera steadily to avoid the blurring of your camera in your releasing the button. (Refer to the picture)

### Horizontal Position



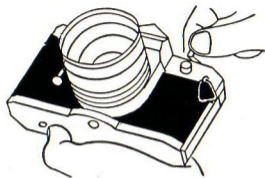


## Vertical Position



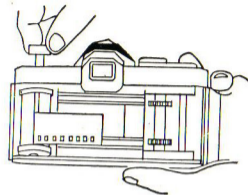
The standard lens equipped with PETRI FLEX V camera is of High-quality, Super-fast PETRI 55mm 4 group 6 element lens using flint-glass with High-Refraction Ratio. This PETRI LENS has High Resolving Power even in its full-opening condition. It is very useful for color as well as black-&-white photography, since the lens is processed with Excellent Combination-Coating Method.

**Rewind the film when you  
finished picture-taking.**



### **REWINDING FILM**

Pull out the rewinding crank and turn it to the arrow direction while pressing the return button located at the bottom of camera body. Be sure that the film is completely rewinded into the cartridge.



### **REMOVING FILM**

Pull out the rewind knob to remove the cartridge.

## **FILM UNLOADING**

## DEPTH OF FIELD TABLE (Petri F2 55mm Lens)

F NO. meter	2	2.8	4	5.6	8	11	16
0.6	0.592 0.607	0.589 0.611	0.585 0.615	0.579 0.622	0.572 0.630	0.561 0.644	0.544 0.668
0.7	0.689 0.710	0.685 0.715	0.679 0.722	0.671 0.731	0.659 0.745	0.647 0.762	0.623 0.797
0.8	0.786 0.814	0.780 0.820	0.772 0.829	0.762 0.841	0.747 0.860	0.730 0.883	0.701 0.931
1.0	0.978 1.022	0.969 1.032	0.957 1.046	0.941 1.066	0.917 1.098	0.892 1.136	0.848 1.248
1.2	1.168 1.233	1.156 1.247	1.138 1.268	1.115 1.298	1.082 1.346	1.047 1.404	0.986 1.532
1.5	1.450 1.553	1.431 1.575	1.403 1.610	1.368 1.658	1.319 1.737	1.267 1.836	1.177 2.065
2.0	1.911 2.096	1.878 2.137	1.831 2.203	1.771 2.296	1.688 2.451	1.603 2.655	1.461 3.167
3.0	2.804 3.225	2.733 3.325	2.632 3.486	2.600 3.728	2.345 4.611	2.183 4.792	1.925 6.790
5.0	4.475 5.663	4.295 5.980	4.050 6.529	3.765 7.440	3.404 9.408	3.071 13.437	2.581 79.491
100	8.093 13.082	7.519 14.920	6.797 18.910	6.025 29.377	5.148 17.361	4.419 ∞	3.466 ∞
∞	42.444 ∞	30.321 ∞	21.222 ∞	15.160 ∞	10.611 ∞	7.918 ∞	5.305 ∞

F NO. feet	2	2.8	4	5.6	8	11	16
2	1.97 2.02	1.96 2.03	1.94 2.05	1.92 2.07	1.90 2.11	1.86 2.15	1.81 2.23
2.5	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	2.94 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	3.89 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	4.83 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	5.75 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	7.57 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	11.05 13.11	10.71 13.62	10.25 14.47	9.68 15.76	8.94 18.21	8.23 22.11	7.13 37.82
30	24.67 38.21	23.04 42.92	20.49 55.90	18.71 75.47	16.11 215.70	13.92 ∞	11.01 ∞
∞	139.31 ∞	99.54 ∞	64.69 ∞	49.76 ∞	34.83 ∞	25.99 ∞	17.41 ∞



## PETRI Exchangeable lenses

### **PETRI F3.5 135mm Telephoto Lens**

■ Just PRESS the shutter release button, and the camera does the rest...

As you release the shutter button, the camera

- sets the aperture as you have previously decided..
- lifts up the mirror to the top..
- advances the shutter screen for film-exposure..
- returns the mirror to the original position..
- sets the mirror back to fully opened position...

all AUTOMATICALLY and INSTANTLY.

■ You can photograph distant-view very easily.

Petri F 3.5 135 mm Lens is versatile. When you want to photograph distant view, Petri F 3.5 135 mm Lens is indispensable. You can shoot it as if you are taking close landscape. Add your portrait-photography more powerful appeal by taking the advantage of Petri F 3.5 135 mm Lens. As it has a very moderate exaggeration of perspective and a very slight distortion of image, when using it in close-up picture-taking, you can photograph the object in natural tone.



### **Specification**

**Lens Make-up:** 3-group 4-element

**Aperture System:** Fully-automatic Diaphragm

**Minimum Aperture:** F22

**Distance Scale:** (in meter) 2, 2.5, 3, 4, 5, 10, 15, 30 & ∞  
(in feet) 5, 6, 7, 8, 10, 15, 25, 50, 100 & ∞

**Photographing Angle:** 18 degree



### **F3.5 35 mm Wide Angle Lens**

This lens is useful for photographing Architectural or Group Pictures. This lens also is to shoot the grand view in a single frame. Take complete scene with this lens.



---

### **F 4 200 mm Telephoto Lens**

This lens gets you the best results in photographing the nature-life of birds and animals. Horse Race photographers used to take many dramatically detailed pictures with it.



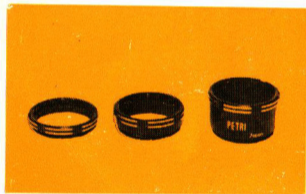
---

### **F 8 500 mm Telephoto Lens**

A close-up of the ball carriers in a football game can be obtained by this lens very accurately. This is definitely a special lens for the advanced photographers.



**You can enjoy the variety in your picture-taking when you use  
PETRI Interchangeable Lenses.**



Extension Tube and Copy  
Stand are available for  
PETRI FLEX V.

The following Interchangeable Lenses are available for PETRI FLEX V camera. PETRI F2.8 135mm Fully-Automatic Diaphragm Telephoto Lens, Manual Preset Diaphragm F3.5 35mm Wide Angle Lens, F3.5 105mm Telephoto Lens, F3.5 135mm Telephoto Lens, F3.5 180mm Telephoto Lens and F8 500mm Telephoto Lens are available. Manual Preset Diaphragm Interchangeable Lens can be attached to PETRI FLEX V camera with the specially-designed Adapter Ring. PETRI Exclusive Adapter Ring is also on sale.



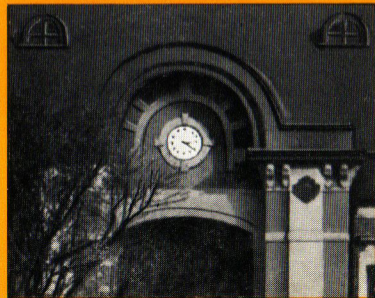
35 mm



200 mm



135 mm



500 mm

## ACCESSORY SHOE



Sturdy and versatile screw-in type Accessory Shoe attachment for flash-gun, exposure meter and others is another PETRI FLEX V exclusive. It can be attached to the camera body very easily by just screwing it into Accessory Shoe Hole.

## LENS HOOD



PETRI FLEX V LENS HOOD has been carefully designed to prevent stray light from entering the lens of camera. It is constructed of light alloy metal and smartly styled of round shape to enhance the beauty of your PETRI FLEX V. Complete with ever-ready carrying leather case.

## FILTERS



To insure perfect picture in all kinds of light condition, use PETRI FILTERS; Y1, Y2 for outdoor human and landscape, YA3, R1 for Distant View and Sky, PO1 for human portrait UV for absorbing Ultraviolet Rays. For color-photography, W4, C4, C8, C12 are available.



**PETRI CAMERA COMPANY, INC.**

12-25 7-Chome, Umeda, Adachi-ku, Tokyo, Japan.

Service Stations: New York, Washington, Cleveland, Miami,  
London, The Hague, Osnabruck, Sydney,  
Montreal, Okinawa, Hong Kong, Singapore,  
Taipei, Auckland, Johannesburg.