

# PETRI

# FT

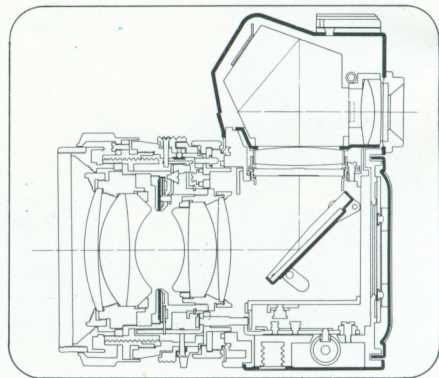


## OWNER'S INFORMATION MANUAL

A new camera is always an exciting experience. Your new Petri FT should be even more so because it is a brilliantly designed and precision built 35mm single lens reflex and one of the easiest-handling, swiftest-operating cameras of its type. It has all the convenient, fast-operating features inherent in the design of the 35mm SLR with through-the-lens CdS meter exposure control, plus refinements and innovations that speed shooting immeasurably.

The exclusive Petri "Control Cluster" on the right side of the camera permits fingertip operation of the exposure meter and shutter release with split-second convenience. The remarkably bright viewfinder with its micromatic prism grid containing more than 800 Micro Prisms in the center zone permits quick and easy focusing.

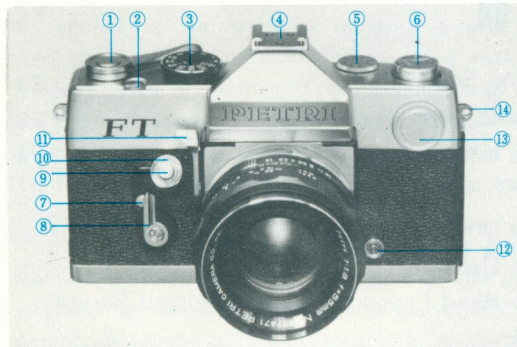
Rapid film loading, single-stroke-lever film advance, instant return mirror, a focal plane shutter with speeds from 1 to 1/1000 second and bulb and rapid lens interchangeability are some of the other features that make the Petri FT fast and easy to operate. This manual is intended to provide you with all the technical and other information you need to get the best results from your camera. Study it carefully. The more you know about your Petri FT and what it can do, the better pictures you will get.



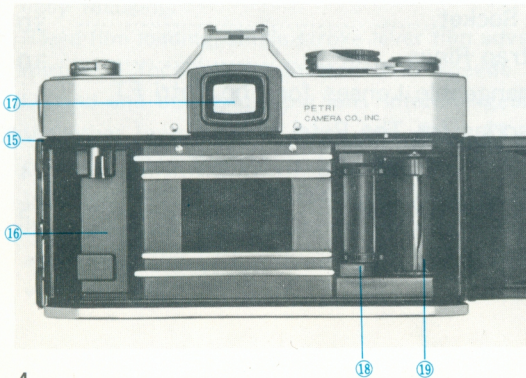
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# DESCRIPTION

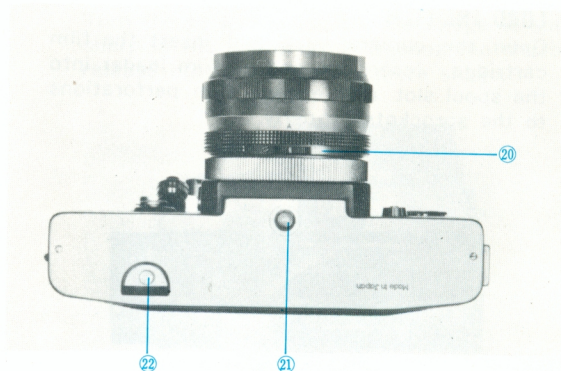


- ① Film Transport Lever
- ② Film Counter
- ③ Shutter Speed Dial
- ④ Accessory Shoe
- ⑤ Film Speed Dial
- ⑥ Film Rewind Crank
- ⑦ Self-timer Release Button
- ⑧ Self-timer Lever
- ⑨ Shutter Release Button
- ⑩ Screw Thread for Cable Release
- ⑪ Lightmeter Lever
- ⑫ Flash Socket
- ⑬ Battery Compartment
- ⑭ Neck Strap Ring



# OF PARTS

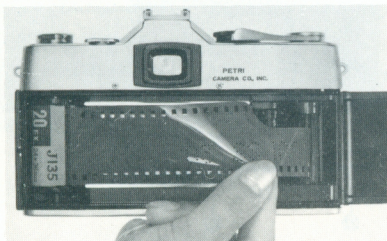
- ⑮ Lock for Opening Camera Back
- ⑯ Film Cassette Chamber
- ⑰ Viewfinder
- ⑱ Sprocket
- ⑲ Take-up Spool
- ⑳ Auto and Manual Diaphragm Switch
- ㉑ Tripod Socket
- ㉒ Film Rewind Button
- ㉓ Distance Scale
- ㉔ Depth of Field Indicator
- ㉕ Diaphragm Scale
- ㉖ Diaphragm Pin



# PICTURE-TAKING

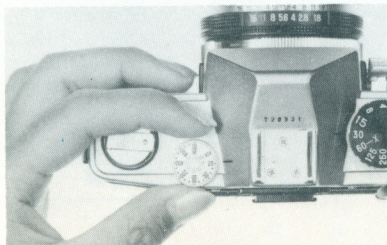
## 1. LOAD THE FILM

Open the camera back and insert the film cartridge. Insert the end of film leader into the spool slot and engage film perforations to the sprockets properly.



## 2. SET THE FILM SPEED

Turn the film speed dial so the number that corresponds to the ASA (or DIN) rating of the film you are using is opposite the black line on the side of the viewfinder.

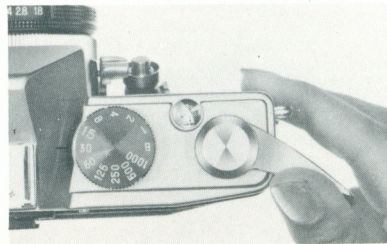


The Petri FT has been especially designed so that picture taking is always a simple, uncomplicated procedure. Even and inexperienced photographer will find it easy to use because there are so few steps—only six, in fact.

Actually, once the film has been loaded and the film and shutter speed set, there are

## 3. ADVANCE THE FILM

Swing the rapid-wind lever 180° and release the shutter twice. Then repeat the operation once more and the shutter is cocked for the first exposure.



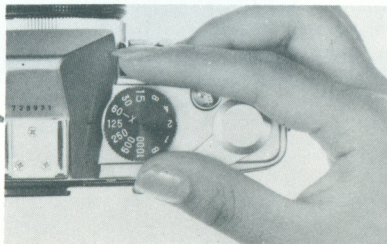
## GUIDE

only three steps to follow in most cases until you reach the end of the film cartridge. Your camera will accept standard 20 or 36-exposure cartridges (or the special 12-exposure ones occasionally available).

The information on these pages is intended only for a quick guide. More details will be found in the appropriate pages of this manual.

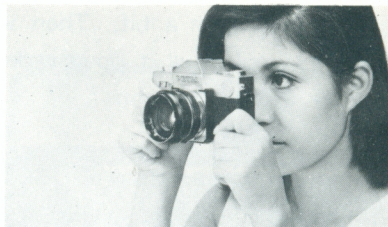
### 4. SET THE SHUTTER SPEED

Turn the shutter speed dial clockwise or counterclockwise so the speed you want to use is opposite the black line engraved on the side of the viewfinder.



### 6. FOCUS AND SHOOT

Turn the focusing ring till the image is seen sharp in the center grid. Squeeze the shutter release button to avoid camera shake.



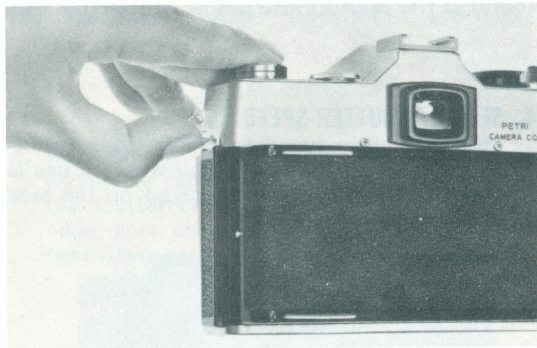
### 5. EXPOSURE SETTING

Sight through the viewfinder. Depress the "Control Cluster" and turn the diaphragm ring till the light meter needle is centered in the circle.



## HOW TO OPEN THE CAMERA BACK

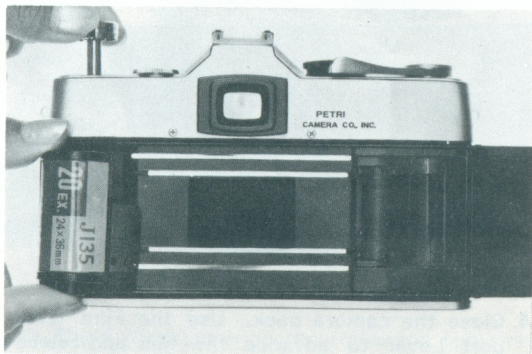
The camera back latch is located on the lefthand side of the camera. With the fingernail of your thumb, pull up on the silver-covered edge of the catch and the back will automatically spring open a bit. Then with your right hand simply pull it open wide so you can load or unload the film.



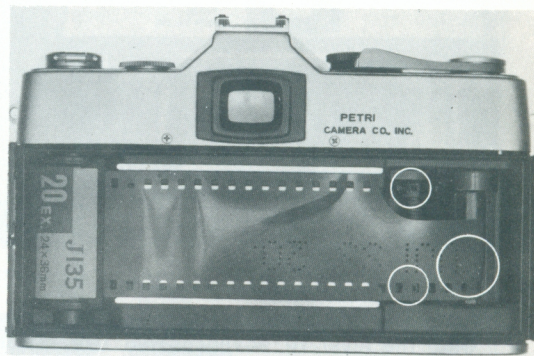


## HOW TO LOAD THE CAMERA

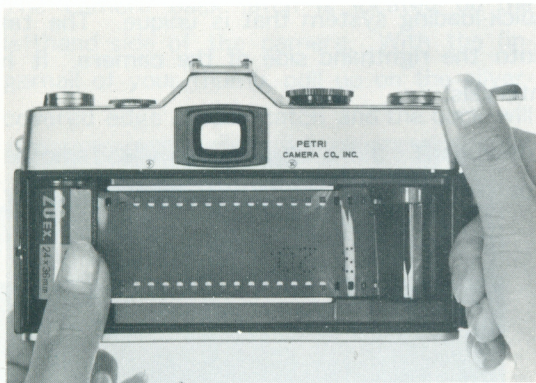
Your Petri FT has a built-in, quick-loading system that is unique. The take-up spool is permanently built into the righthand side of the camera. It has four slots spaced at regular intervals.



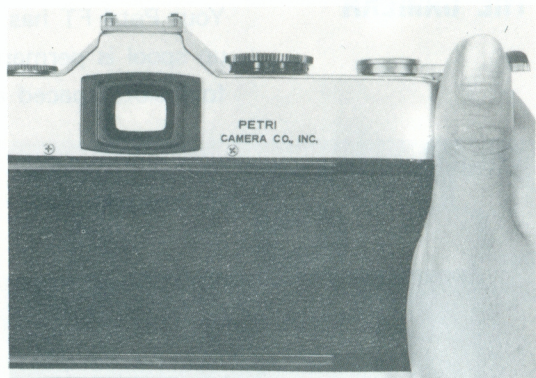
1. The Film Rewind Crank must be lifted up as far as it will go to permit you to insert the film cartridge in the film supply chamber. Make certain the emulsion (dull) side of the film is toward the lens.



2. Pull the film leader along the film channel until the perforations engage in the sprockets of the sprocket wheel. Then insert the film leader into any one of the slots in the take-up spool. Slide the film down toward the bottom of the camera to line it up properly. If one of the slots does not happen to be up, use the film transport lever to turn the take-up spool so a slot comes into position.

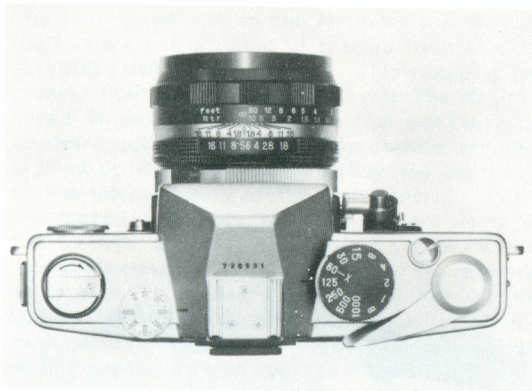


3. After the end of film leader has been inserted, wind the lever to advance film (for at least 1/2 revolution of take-up spool) to secure proper catch and transport of film by take-up spool.



4. Close the camera back. Use the Film Transport Lever to advance the film and release the shutter (repeat this twice) till first number is shown in the exposure counter. You can make certain the film is advancing properly by watching the Rewind Lever Knob. If it turns as you use the lever, the film is advancing.

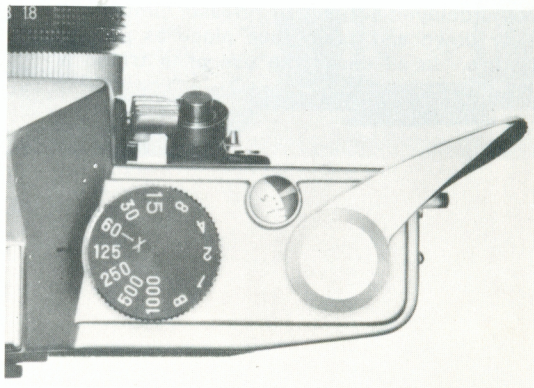
## THE RAPID-WIND LEVER



The Rapid-Wind Lever on the righthand top side of your camera is designed to make film advance quick and easy for rapid shooting. It also automatically cocks the shutter. A full 180° swing counterclockwise is required. If you stop winding on the way to the 180° swing, you will find that the film has not advanced far enough and the shutter has not been cocked. You will, therefore, be unable to release it. If you happen to release the lever before it has reached the end of the 180° swing, simply repeat the swing. You will hear a click when the lever has reached the end

(and you will also find that it has locked). Once you have released the shutter, the lever unlocks, of course.

The lever will automatically spring back into starting position from any point of the swing if it is released. In this position, it juts out at a slight angle from the camera body. Once you have finished shooting, you should push it back against the camera body by pressing on it with your thumb.

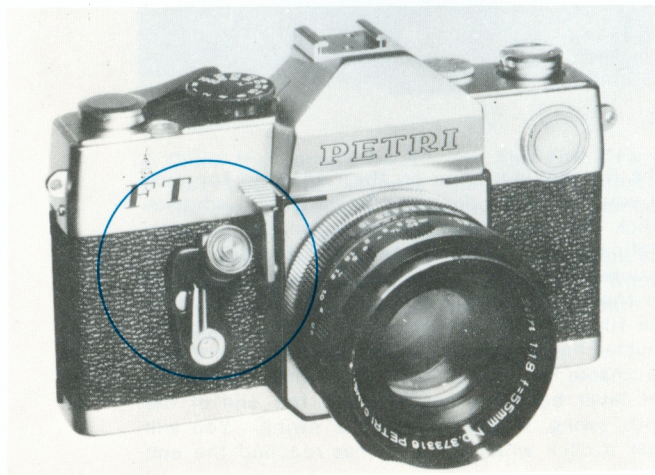


## PETRI FT "CONTROL CLUSTER"

The ingenious and unique Petri FT Control Cluster places three different operating controls at your right index fingertip for instant shooting ease. There is no need to unlock and lock buttons or turn switches on or off. You barely move your finger and it is in complete control.

A touch of the spring-action lever on the right side beside the viewfinder activates the through-the-lens exposure meter system. Simultaneously, you can check depth-of-field range, picture composition and focus.

Then, slide your finger over the convenient angled shutter release to take your picture. If you prefer to use the delayed-action self-release, simply pull the lever down and take your place as part of the picture. In all cases the use of a tripod is recommended.



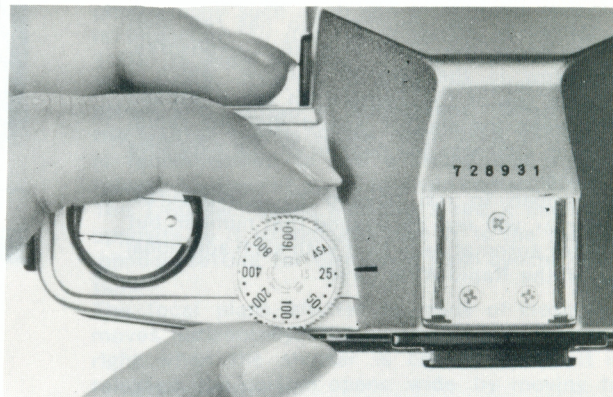
# HOW TO SET FILM SPEED AND EXPOSURE COUNTER

## ASA/DIN SCALES

The film speed dial on the lefthand top side of the camera has a range of ratings from ASA 25 to 1600 (also 15 to 33 DIN). This range is far greater than you are likely to need. The desired speed is set by rotating the dial clockwise or counter-clockwise until the appropriate number is lined up with the black vertical line engraved on the lefthand side of the viewfinder.

The speed rating of the film you are using in the camera should be set when you want the through-the-lens exposure control to operate automatically. Pressure of your finger on the Lightmeter Lever will provide you with an immediate indication in the Viewfinder (by means of the needle) so you can see if your aperture and shutter settings are correct for the light available for the picture.

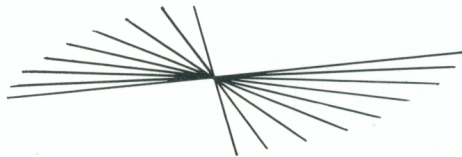
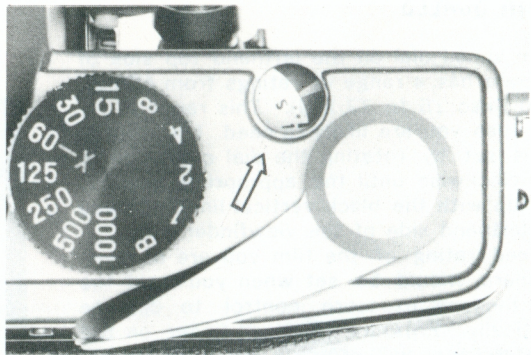
The film speed can be set either before or after the film is loaded.



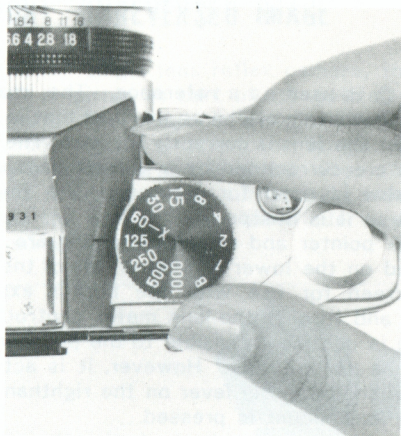
## AUTOMATIC EXPOSURE COUNTER

The exposure counter of the camera is automatic and resets to "S" as soon as the camera back is opened. It is designed to allow two preliminary releases of the shutter before registering the first exposure. The counter also has red indicators to show the 20th and 36th exposures. A red arrow in the counter window, which is located on top of the camera on the righthand side between the shutter speed dial and rapid-wind lever, indicates the number of the exposure being taken.

If you happen to run beyond 36 in exposures, the counter will not go beyond that number, but will return automatically to it with each additional swing of the Rapid-Wind Lever.



## HOW TO SET THE SHUTTER SPEEDS



### SHUTTER SPEED DIAL

The shutter speed dial on the righthand top side of the camera has 12 speed settings engraved on it. The Petri FT has a focal plane shutter, the most accurate speeds available, with settings of 1/1000, 1/500, 1/250, 1/125, 1/60, 1/30, 1/15, 1/8, 1/4, 1/2 and 1 sec. and bulb. The desired speed is set by turning the dial clockwise or counterclockwise and lining up the appropriate number with the black vertical line engraved on the righthand side of the viewfinder.

For indoor photography, it is recommended to set the shutter at 1/30 or 1/60; for outdoor photography, at 1/125 or 1/250; and for action photography such as in sports or snap shots it is important to use faster speeds of 1/250 or 1/500 to avoid blurring.

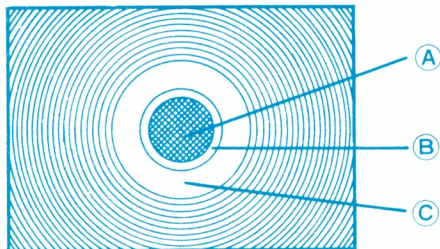
The number "15" for 1/15 second is larger than others and painted in fluorescent. When using the shutter speeds slower than 1/15 second, it is recommended to use a tripod and a cable release equipment so as to avoid camera shake. The 1/60 sec. speed also has a red X engraved opposite to it to indicate that it is the recommended setting for electronic flash synchronization.

The focal plane shutter is made of cloth and moves horizontally. The curtain is pulled to the right when the shutter is cocked. When it is released, the curtain opens wide by moving to the left; then a second curtain closes the shutter by moving to the left.

# THE PETRI FT VIEWFINDER SYSTEM

## PENTAPRISM / MICROMATIC GRID

The eye-level pentaprism finder of your camera is designed to provide the greatest focusing and composing ease. It is remarkably bright and provides a complete image of your picture through the oversize eyepiece. The magnification ratio is 1:1 with the standard lens focused at infinity. A Fresnel screen and condenser lens are combined with the viewing screen for greatest efficiency. The viewing screen has three concentric circles in the center. Circle (A) is the Petri Micromatic focusing prism grid, containing more than 800 micro prisms. Circle (B) always keeps the image in sharp focus even when the lens is out of focus.



Circle (C) is used as a reference. The image in Circle (A) will always be as sharp as that in Circle (C) when the lens is correctly focused. The three circles are surrounded by a ground glass screen that also is used for focusing. The finder is sealed so it is dustproof.

A black pointer and reference circle are incorporated on the lower righthand side of the viewing screen for use with the built-in exposure meter and through-the-lens meter control. This needle is continually visible to the photographer while he is shooting. However, it is activated only when the meter lever on the righthand side of the lens mount is pressed.

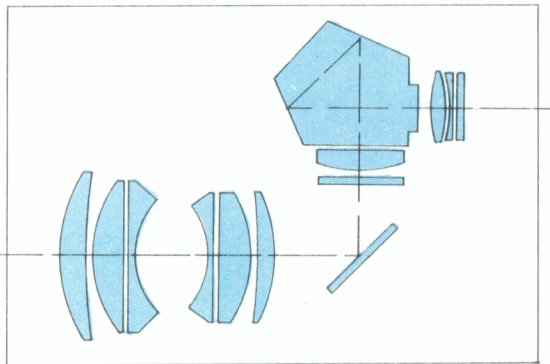
The needle is used to check whether the camera's shutter speed and lens aperture setting are correct for the proper exposure.



## COMPOSING THE PICTURE/FOCUSING

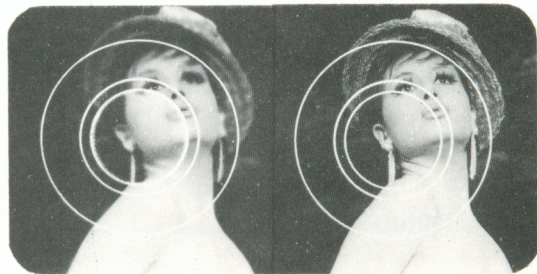
### UPRIGHT, UNREVERSED IMAGE

As a 35mm single lens reflex camera, the Petri FT uses a mirror as part of its optical system to transfer the image entering the lens to the viewfinder. In the process, the image which is originally reversed and inverted when it enters the lens is reversed and turned right side up so you see the picture in the Viewfinder exactly as your naked eye would.



### QUICK, EASY FOCUSING

The Petri FT actually assures precision focusing because the Micromatic grid (Circle A) permits you to see the image clearly only when it is correctly focused. When the lens is focused, you will notice that the grid in the center of the viewing screen looks like a mesh. This reticulation is caused by the flickering of reflected light entering the lens. When the image is in focus, the flickering grid disappears. A comparison of the micro-grid area with that of Circle C also provides a second assurance of correct focus. The surrounding ground glass area provides a third. The brilliant image provided by the grid and the Fresnel and condenser lenses permits you to focus accurately over the entire surface of the screen.

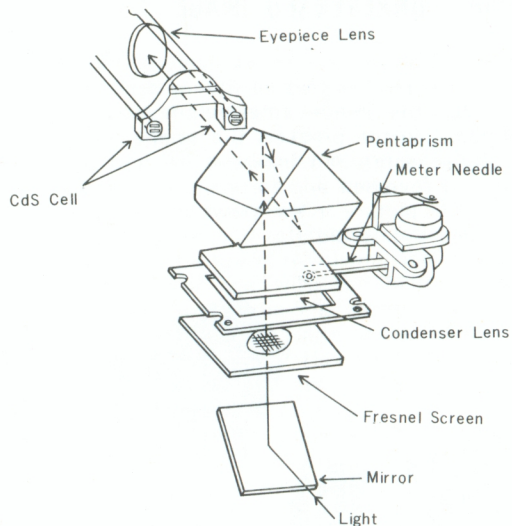


## THROUGH-THE-LENS EXPOSURE CONTROL

Your Petri FT camera has a built-in, through-the-lens exposure control system utilizing the most sensitive measuring devices available in ordinary photography.

Two cadmium sulfide (CdS) cells, located on each side of the pentaprism base, measure the average brightness of the image entering the lens and reflected to the viewfinder. This through-the-lens measurement is translated into an accurate exposure indication registered by the needle in the Viewfinder. The readings are accurate not only with standard lenses, but also with accessory lenses including long ones, with filters, close-up equipment and accessories for photomicrography. Since they actually measure the available light of the image that has entered the camera, calculations for exposure adjustments are unnecessary.

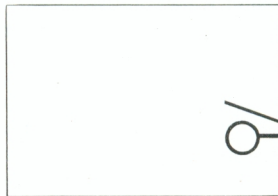
The system operates automatically with the lens aperture, shutter speed and film settings.



## COUPLED CdS METER

The CdS meter of your Petri FT camera is coupled to the lens aperture, shutter speed and film speed setting scales. A change in the setting of any one or more will, therefore, alter the meter reading. It is preferable, of course, to change either the aperture or shutter speed if an adjustment is required. The film speed setting should always be the one for the film you are using.

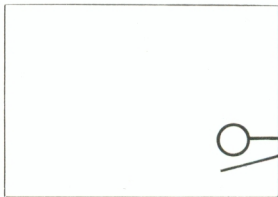
If the lens aperture is too large or the shutter speed too slow for the available light, the needle in the finder will be above the circle and indicate that the picture if taken, will be overexposed. If the lens aperture is too small or the shutter speed too fast for the available light, the needle in the finder will be below the circle to indicate that the picture will be underexposed. If the meter needle is centered, the setting is correct.



OVER



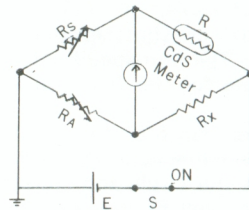
RIGHT



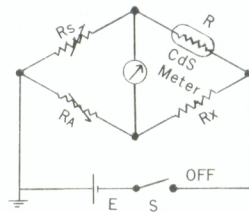
UNDER

## UNIQUE LIGHTMETER LEVER

Your Petri FT camera has a unique Lightmeter Lever that is spring operated and serves not only as a meter switch but also to activate the automatic lens diaphragm (see page 12). The Lever is located to the left of the angled shutter release and is part of the camera's "Control Cluster" (see page 12) for convenient, one-finger shooting. The Lever functions as a "meter miser" by preventing any drain of the battery except when the meter is being used. When the Lever is pressed, it turns the meter on and simultaneously operates the automatic diaphragm, stopping it down to the required aperture. When the Lever is released, the spring cuts off the meter and the diaphragm reopens to full aperture.



WHEN METER LEVER IS PRESSED



WHEN METER LEVER IS RELEASED

## HOW TO REPLACE THE METER BATTERY



The meter is operated by a 1.3 V mercury battery of the Mallory PX-13 or equivalent type. This battery has a long life.

If the meter needle in the viewfinder does not respond to a change of light conditions or any of the coupled settings while the lever is being pressed, the battery is exhausted and must be replaced. This can be done easily.

The battery is concealed in the compartment located at the top of the camera on the lefthand front side. Unscrew the compartment cover counterclockwise and remove the old battery. Insert a fresh one, making certain that the plus sign (+) on the battery faces you and the wider diameter of the battery is inward. Then screw the compartment cover on clockwise and test the meter lever to make certain that the battery is operating.

# THE LENS SCALES

## DISTANCE SCALE

Each lens for your camera has a scale indicating the normal focusing range of the lens, in both feet and meters. The focusing range can be increased (the lens can be focused on a subject closer than normal, in other words) by the addition of supplementary equipment such as extension tubes or bellows or close-up lenses.

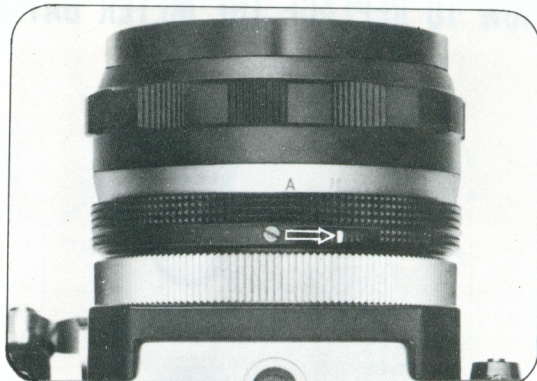
## APERTURE SCALE

Each lens has a scale indicating the apertures at which it can be set and the range. (See page 31 for technical data on maximum and minimum aperture for all available interchangeable lenses for the Petri FT.)

Settings between the f/stops are also possible.

## DEPTH-OF-FIELD SCALE

The range of apparent sharpness is shown on



each lens by the depth-of-field scale engraved on the mount. For more information about this subject, see page 25 .

## INFRARED RESET INDICATOR

When taking infrared photographs, the focusing distance must be adjusted to compensate. Reset the focusing distance to the red line indicated by the aperture f/4 (or f/1.8) on the Depth-of-Field Scale.

## AUTOMATIC/MANUAL SETTING

When the lens is set at the green A (on the underside of the standard lens), the diaphragm is set for automatic operation. It will stop down only to a preselected aperture when the lens is released. When manual operation is desired, set the lens on red M.

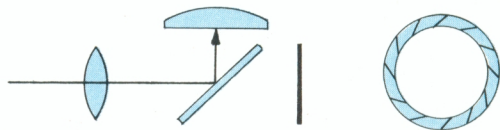
Most of the lenses available for your camera have a fully automatic diaphragm, giving you the option of manual or automatic operation. The automatic diaphragm closes to a preselected opening before the shutter is released, then opens automatically to full opening afterwards. This not only speeds shooting but makes focusing easy and more accurate.

The lens is set for automatic or manual operation by using the green A or red M on the underside (as explained on page 22). Manual diaphragm operation also can be obtained by pressing the Lightmeter Lever. The advantage of the latter is that depth-of-field range can be viewed in the Viewfinder.

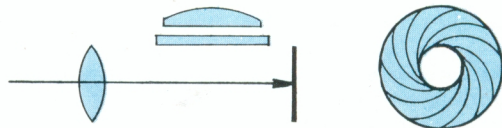
### INSTANT RETURN MIRROR

Just before the shutter is opened, the mirror moves out of the way for a split-second and then returns immediately to its original position. The image blackout is of no practical importance since it is of such extremely short duration.

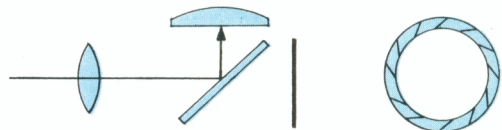
The operation of the automatic diaphragm mechanism:



- (1) When you are focusing, the diaphragm stays open and the mirror remains in position



- (2) Just before the shutter opens, the lens stops down to the preselected aperture. The mirror moves out of the way.



- (3) After the exposure, the lens reopens to full aperture and the mirror returns to its original position.

## HOW TO INTERCHANGE THE LENS

The Petri FT lens mount provides for the extremely rapid, easy interchange of the lens with any of an unusually broad range of accessory lenses from wide-angles to very long telephotos (see table on page 31).

To interchange lenses, turn the collar of the lens mount next to the camera body a quarter-turn counterclockwise until the red dot on the outer edge is on top of the lens. You will note that the lens is then free and can be removed with a simple pull outward.

Replace the lens by matching the red dot on the bayonet rim at the rear of the replacement lens with the red dot on the collar and push the lens in as far as it will go. Then turn the collar a quarter-turn clockwise until it stops.

Before interchanging lenses, be sure to set the lens on manual operation (red M on the scale on the underside of the lens).





# DEPTH OF FIELD

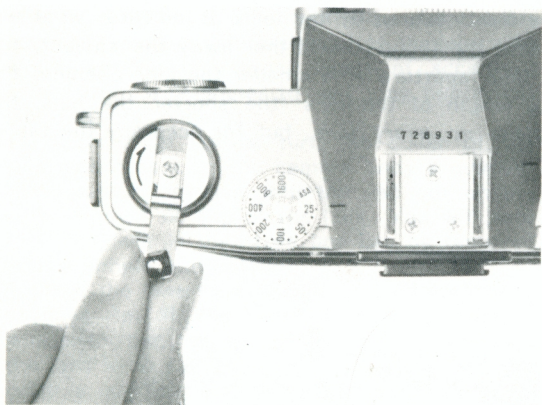
Depth of field is the range of apparent sharpness in the field covered by the lens. It indicates what will appear sharp in the photograph. Depth of field varies with the focus (the farther away the subject, the greater the range of apparent sharpness); with the lens aperture (the smaller the lens opening, the greater the range of apparent sharpness); and the focal length of the lens (the shorter the lens, the greater the range). There is a handy depth-of-field guide on every lens, but for accuracy the tables should be consulted.

**DEPTH OF FIELD CHART**  
(PETRI 55mm f:1.4, f 1.8 & f 2)

F.No. feet.	1.4	1.8	2	2.8	4	5.6	8	11	16
2	1.98 2.02	1.98 2.02	1.98 2.03	1.97 2.04	1.95 2.05	1.93 2.07	1.91 2.10	1.87 2.15	1.82 2.22
2.5	2.47 2.53	2.46 2.54	2.46 2.54	2.45 2.56	2.42 2.58	2.39 2.62	2.36 2.67	2.30 2.74	2.22 2.86
3	2.96 3.04	2.95 3.05	2.94 3.06	2.92 3.08	2.89 3.12	2.85 3.17	2.79 3.25	2.71 3.36	2.60 3.55
4	3.93 4.07	3.90 4.10	3.90 4.11	3.86 4.15	3.80 4.22	3.73 4.32	3.62 4.47	3.50 4.67	3.31 5.06
5	4.89 5.12	4.85 5.16	4.84 5.17	4.78 5.24	4.69 5.35	4.58 5.51	4.42 5.76	4.23 6.11	3.96 6.79
6	5.84 6.17	5.78 6.23	5.77 6.25	5.68 6.35	5.56 6.52	5.40 6.75	5.18 7.14	4.92 7.68	4.55 8.80
8	7.71 8.31	7.61 8.43	7.59 8.45	7.44 8.65	7.23 8.96	6.96 9.41	6.59 10.18	6.18 11.33	5.60 13.98
12	11.36 12.72	11.15 13.00	11.10 13.06	10.78 13.53	10.33 14.31	9.79 15.51	9.07 17.73	8.31 21.61	7.29 33.97
30	26.25 35.00	25.12 37.19	24.92 37.69	23.34 41.99	21.31 50.68	19.09 69.97	16.52 163.08	14.14 ∞	11.40 ∞
∞	208.78 ∞	154.9 ∞	146.14 ∞	104.39 ∞	73.07 ∞	52.19 ∞	36.54 ∞	26.57 ∞	18.27 ∞

F.NO Meter	1.4	1.8	2.0	2.8	4	5.6	8	11	16
∞	(m) 63.63 ∞	(m) 48.32 ∞	(m) 44.54 ∞	(m) 31.82 ∞	(m) 22.27 ∞	(m) 15.91 ∞	(m) 11.14 ∞	(m) 8.10 ∞	(m) 5.57 ∞
10	8.65 11.85	8.29 12.59	8.18 12.87	7.62 14.55	6.91 18.07	6.15 26.67	5.28 93.40	4.49 ∞	3.59 ∞
5	4.64 5.42	4.54 5.57	4.50 5.62	4.33 5.92	4.09 6.43	3.81 7.25	3.46 8.99	3.10 11.83	2.65 44.59
3	2.87 3.15	2.83 3.19	2.81 3.21	2.75 3.31	2.65 3.46	2.53 3.68	2.37 4.08	2.20 4.71	1.96 6.36
2	1.94 2.06	1.92 2.08	1.92 2.09	1.88 2.13	1.84 2.19	1.78 2.28	1.70 2.42	1.61 2.63	1.48 3.07
1.5	1.47 1.53	1.46 1.55	1.45 1.55	1.43 1.57	1.41 1.60	1.38 1.65	1.33 1.72	1.27 1.83	1.19 2.02
1.2	1.18 1.22	1.17 1.23	1.17 1.23	1.16 1.24	1.14 1.26	1.12 1.29	1.09 1.34	1.05 1.40	1.00 1.51
1.0	0.99 1.02	0.98 1.02	0.98 1.02	0.97 1.03	0.96 1.04	0.94 1.06	0.92 1.09	0.90 1.13	0.86 1.20
0.8	0.79 0.81	0.79 0.81	0.79 0.81	0.78 0.82	0.77 0.83	0.76 0.84	0.75 0.86	0.73 0.88	0.71 0.92
0.7	0.69 0.71	0.69 0.71	0.69 0.71	0.69 0.71	0.68 0.72	0.67 0.73	0.66 0.74	0.65 0.76	0.63 0.79
0.6	0.59 0.61	0.59 0.61	0.59 0.61	0.59 0.61	0.59 0.62	0.58 0.62	0.57 0.63	0.56 0.64	0.55 0.66

## HOW TO UNLOAD THE FILM

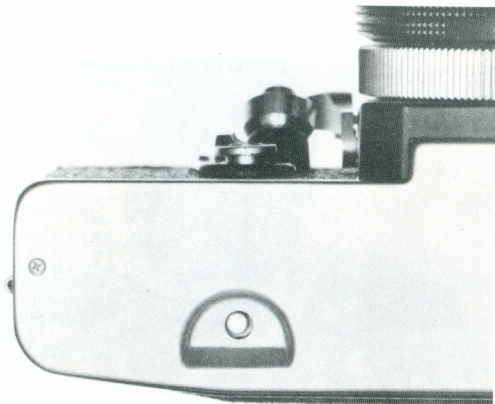


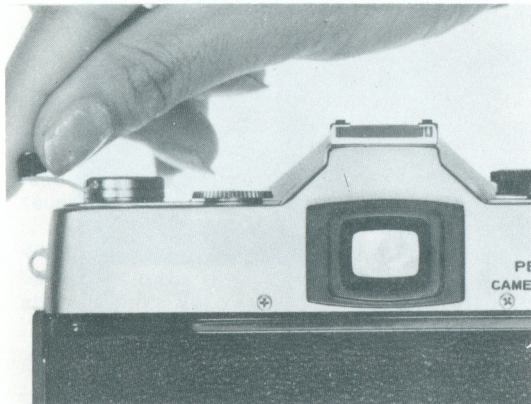
### 1. UNFOLD REWIND CRANK

The Film Rewind Crank normally is folded into the Rewind Knob, which is located on the lefthand top side of the camera. Unfold the Crank by pulling up the open end with a finger nail.

### 2. PRESS REWIND BUTTON

The Rewind Button is located on the bottom camera plate on the righthand side. Press the Button in and hold it while you wind the Crank in the direction indicated by the arrow engraved on the Rewind Knob (clockwise).



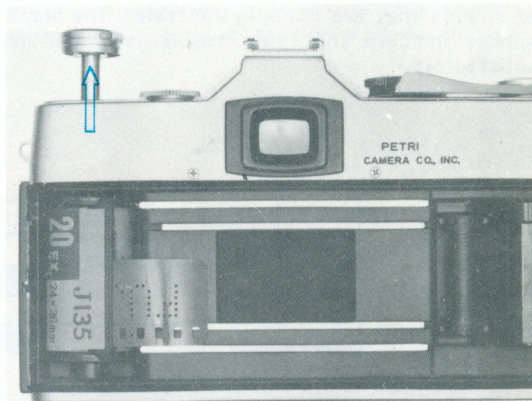


### 3. REWIND ENTIRE LENGTH

Rewind the entire length of the film before opening the camera back. As the end of the film strip comes near, you will feel some tension and then an easier flow of the film. This indicates the film has pulled loose from the take-up spool. To check this, release the Button and turn the Rapid-Wind Lever. If the Crank does not move in the reverse direction to the arrow (counterclockwise) the film is completely rewound.

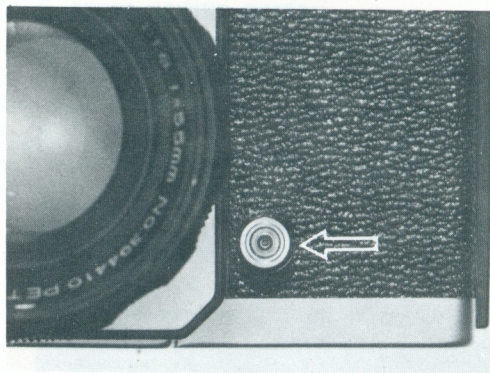
### 4. REMOVE CARTRIDGE

Pull out the Film Rewind Knob, open the camera back and remove the film cartridge in the shade. Avoid direct sunlight because it can fog your pictures. Both loading and unloading, in fact, should be done in the shade. Put the film cartridge in the metal can supplied with it immediately and get it processed as soon as possible.



## HOW TO USE FLASH

The shutter of your Petri FT is synchronized for use with Class FP, F and M bulbs and electronic flash. Connect the flashgun cord to the standard PC socket located on the bottom lefthand side of the camera, next to the lens mount. If the gun has an accessory foot. attach it to the accessory shoe on top of the Viewfinder of the camera. Use the table below (showing the speeds at which to synchronize each type of flash) for the specific type of flash you are using. Do not attempt to synchronize the unit at speeds that are blank in the table. The blank spaces indicate that your results will not be satisfactory.



1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1
FP Class Bulb					FP Class Bulb					
				F Class Bulb						
				M Class Bulb						
				Speed Light						

## HOW TO READ EXPOSURE METER COUPLED RANGE CHART

The word "EV" stands for "Exposure Value", which represents the brightness on the subject you frame in the viewfinder. The EV is represented by numbers, and the exposure meter of the PETRI FT can measure the brightness on the subject ranging from EV 3 to EV 18 when you use the film speeded at ASA 100 (DIN 21).

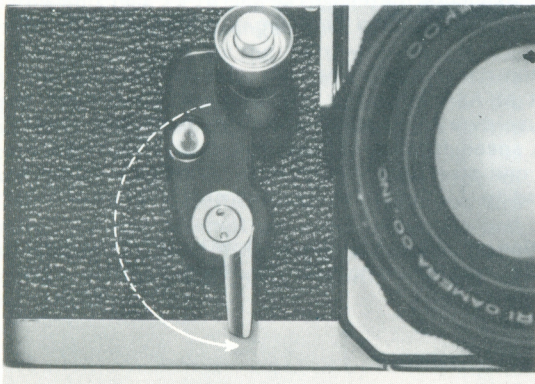
For example, if the exposure meter needle is centered when you select aperture opening of f/5.6 with shutter speed of 1/125 second (the film speed dial is set at ASA 100), the brightness on the subject is supposed EV 12. If the brightness is at EV 12, you can use every one of seven different shutter speeds and get properly exposed pictures. If you change shutter speed from 1/125 second to 1/250, one stop faster, the diaphragm has to be altered from f/5.6 to f/4, one stop smaller aperture. Thus, you can use seven different shutter speeds ranging from 1/1000 second to 1/15 second (see the chart) when the EV is at 12.

What shutter speed you should use depends on the condition of subject. (Refer to How to Set The Shutter Speeds at page 15.) The diaphragm opening should be also decided according to the purpose of your photography. (Refer to Depth of Field Chart at page 25.)

Exposure Meter Coupled Range Chart EV3~EV18 ASA100

f \ EV	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.4	4	8	15	30	60	125	250	500	1000							
2(1.8)	2	4	8	15	30	60	125	250	500	1000						
2.8	1	2	4	8	15	30	60	125	250	500	1000					
4		1	2	4	8	15	30	60	125	250	500	1000				
5.6			1	2	4	8	15	30	60	125	250	500	1000			
8				1	2	4	8	15	30	60	125	250	500	1000		
11					1	2	4	8	15	30	60	125	250	500	1000	
16						1	2	4	8	15	30	60	125	250	500	1000

## THE SELF-TIMER

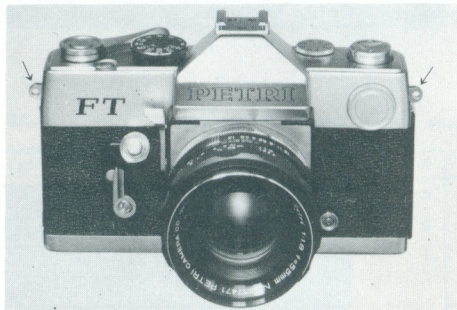
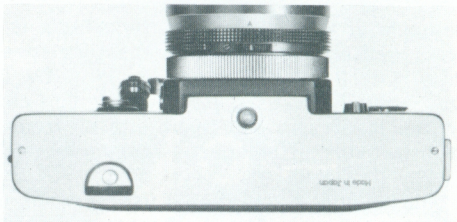


Swing the self-timer lever in the direction indicated by the arrow in the illustration thoroughly the frame will be exposed after a delay of approximately 11 seconds. Note that the Self-timer can be set at in between position so as to shorten the release time and that it can be also set either before or after advancing the film. All shutter speeds with the exception of the B setting can be used with the self-timer.

The main use of the self-timer is when the photographer wishes to join a group, which he is photographing. It can be useful for Microscopic photography or when using a long focal length. In all cases the use of a tripod is recommended.

## TRIPOD SOCKET

A standard tripod socket is located in the camera plate base in the center.

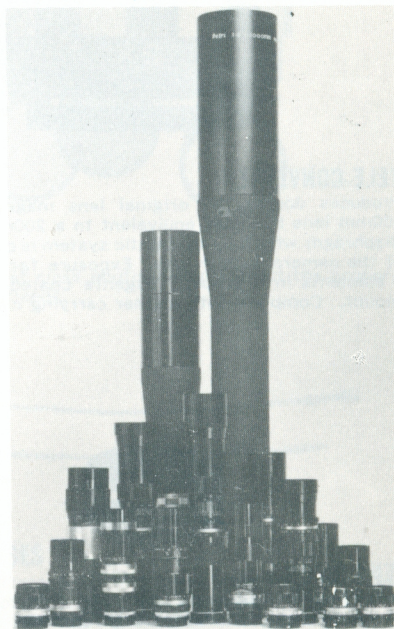


## NECKSTRAP RINGS

A neckstrap ring is located on each side of the camera so it can be carried around the neck or on the shoulder.

## INTERCHANGEABLE LENSES FOR THE PETRI FT

Lens	Diaphragm Operation	Minimum Aperture	Viewing Field	Minimum Focus	No. of Elements	Filter Size
28mm f3.5	Automatic	f16	75°23'	2 ft.	7	52mm
35mm f2.8	Automatic	f22	63°26'	2 ft.	6	52mm
100mm f2.8	Automatic	f16	24°25'	4 ft.	5	52mm
135mm f3.5	Automatic	f22	18°12'	4.5 ft.	4	52mm
135mm f3.8	Automatic	f16	18°12'	8 ft.	3	52mm
200mm f4	Automatic	f22	12°21'	10 ft.	5	55mm
300mm f5.0	Automatic	f22	8°15'	18 ft.	5	67mm
300mm f5.5	Preset	f32	8°15'	25 ft.	4	62mm
400mm f6.3	Preset	f32	6°	30 ft.	3	72mm
500mm f5.6	Preset	f32	4°57'	25 ft.	3	44mm
1000mm f8	Manual	f32	2°28'	100 ft.	3	44mm
80-200mm f4.5 Zoom	Automatic	f16	30°16' to 12°20'	8 ft.	11	67mm
85-210mm f4.8 Zoom	Automatic	f22	28°34' to 11°46'	9 ft.	13	58mm



## ACCESSORIES FOR THE PETRI FT



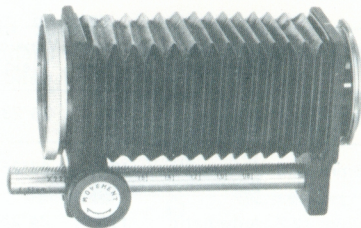
### TELE-CONVERTER

Produces double the original lens magnification (i.e., 100mm lens becomes equivalent to a 200mm lens, etc.). Diaphragm with fully automatic system is coupled to that of the camera lens in use. Exposure factor is 2 stops. 3 elements in 3 groups, magenta coated, bayonet-type mount. Complete with leather carrying case.



### LENS HOOD

Recommended for indoor and outdoor photography under all conditions to eliminate stray light that degrades the image. Particularly important for outdoor shots at the beach and other high-reflecting areas and for flash.



### EXTENSION BELLOWS

When using the 55mm standard lens it enables reproductions of the subject from 0.4×0.6 inches (11×16mm) to one of 1.4×2.1 inches (35×53mm), the magnification ratios ranging from 2.2X to 0.68X; With the 135mm telephoto lens subjects sized from 0.9×1.4 inches (24×36 mm) to 3.4×5.1 ins (86×129mm), the magnification ratios ranging from 1X (life size) to 0.28X.



### EXTENSION TUBE SET

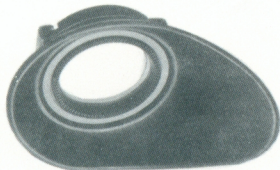
A set of extension tubes consisting of 3 tubes, a mount ring and an adapter ring. With the 55mm standard lens it is possible to photograph a subject of 0.9×1.3 ins (23×35mm) to that of 6.1×9.2 ins (155×233mm), the magnification ratios ranging from 1.02X (approximately life size) to 0.15X.





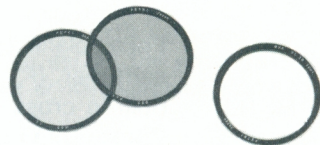
### ANGLE FINDER

A right-angle viewfinder specially designed to be used with the Extension Bellows or Tubes for convenient and easy photography.



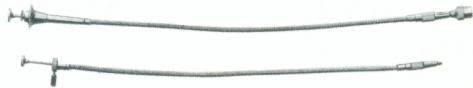
### EYE CUP

Attaches to the eyepiece and permits the spectacle user to get close to the viewfinder without difficulty. Also recommended for unhindered viewing and focusing without spectacles and for elimination of stray light.



### FILTERS

Essential for first class photographs. Select the proper filters for your needs.



### CABLE RELEASES

Metal-covered accessories that permit the shutter to be released without camera shake. Two types are available, both 12" long. One has the automatic stopper for time exposure, the other comes with a manual release stopper.

## PETRI FT TECHNICAL DATA

TYPE:	Pentaprism SLR camera with built-in cross coupled CdS exposure meter in Thru-The-Lens system.
FILM:	35mm. film (20 or 36 exposures)
FILM SIZE:	24×36mm.
STANDARD LENS:	“PETRI” 55mm. f1.4, 7 elements in 5 groups (and f1.8 or f2,6 elements in 4 groups) with fully automatic diaphragm.
SHUTTER:	Focal plane type with speeds, 1 second to 1/1000 second and B. Built-in selftimer. (FT f/2, with speeds 1 to 1/500 sec. available.)
EXPOSURE METER:	Built-in cross coupled CdS Exposure Meter in Thru-The-Lens system. ASA: 25 to 1600 (DIN: 15 to 33).
VIEWFINDER:	Pentaprism viewfinder with “Micromatic Lens Focusing” device.
FILM TRANSPORT:	Single stroke rapid film winding and shutter cocking.
SYNCHRONIZATION:	FP and X automatic setting.
LENS MOUNT:	Petri bayonet lens mount.
FILTER SIZE:	55mm. screw-in type (52mm. for f1.8 or f2 lens)
LENS HOOD SIZE:	57mm. push-on type (54mm. for f1.8 or f2 lens)

## CARE OF YOUR CAMERA

1. Your Petri FT is a fine optical instrument. Treat it the way you would such an instrument or a fine watch, and it will last for many years.
2. Sand, dust, salt water and dirt are natural enemies of your camera. Protect it from them at all times—at the beach and anywhere. Keep your camera in a gadget or plain plastic bag except when it is being used.
3. The lens of your camera picks up oil, dust and dirt from the atmosphere just like the windows of your house or your car. The lens, however, is much more delicate, particularly the coating. Therefore, first dust the lens with a fine camel-hair brush or blower to get all the gritty particles off that might scratch it. Then wipe it carefully with a very soft rag or handkerchief, preferably one that is free of lint.
4. Never keep your camera in the glove compartment of your car or a similar place where it can get extremely hot. Not only is this bad for any film in the camera but it won't do the lens any good either.
5. Don't try to be a camera repairman. If you have trouble with your camera, don't try to fix it. Take it to a good repairman. He's been trained to find out what's a wrong and fix it.
6. If you drop your camera in water or mud, immediately rinse it off and take it to a camera repairman. Don't wait any longer than necessary because some of the parts may begin to rust.

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