

TTL NUMBER METERING SYSTEM

Olympus

Camera
Pen FT

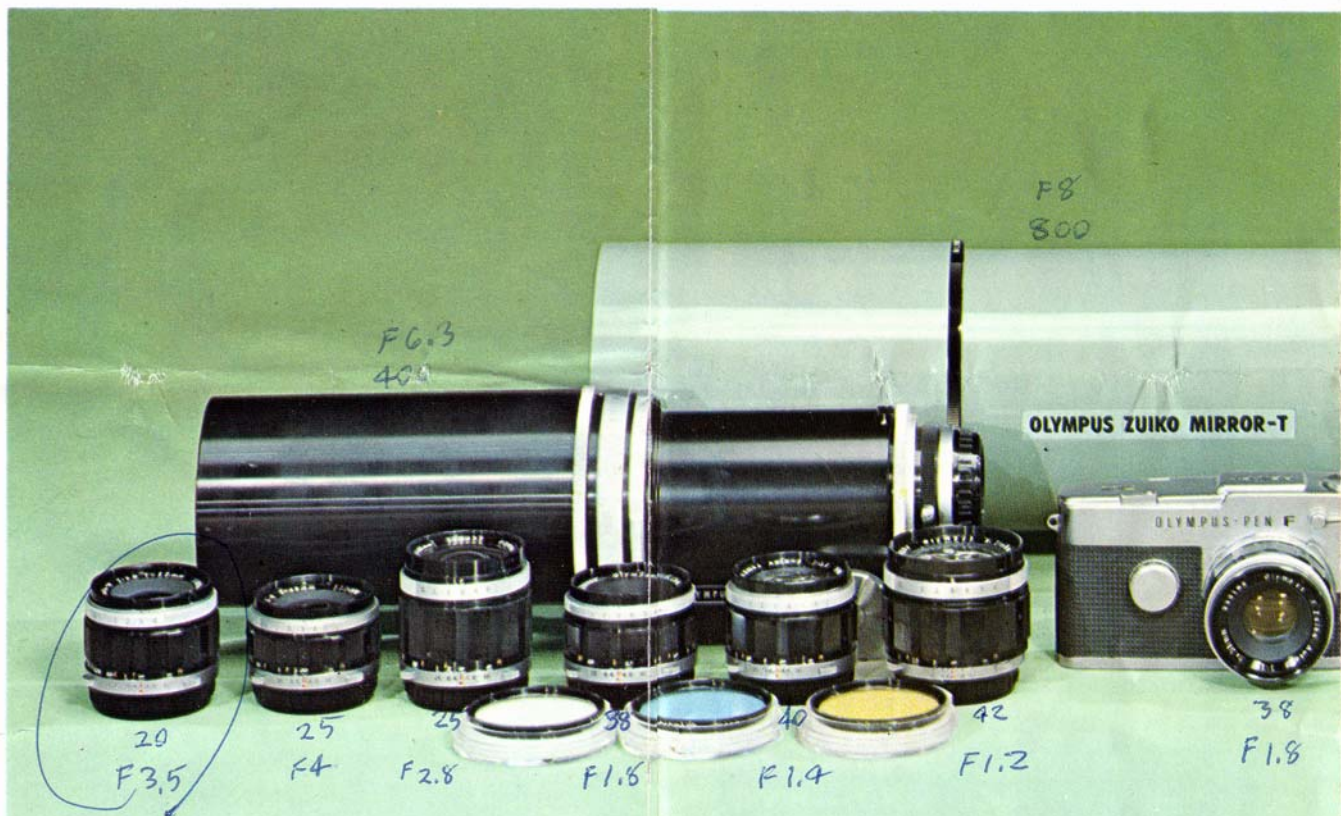
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN



New photographic worlds.....for you!!

Highly developed and original design, many unique systems, compact and smart style, reliability of performance. These qualities will answer all your photographic needs promptly and precisely. Why not try for yourself what the Olympus Pen FT, a high-class universal single lens reflex camera, can do.

Olympus Pen FT is a great deal more than just a modification of the Olympus Pen F (the world's first half-frame SLR) to include through-the-lens light metering but is in many ways an entirely new camera that incorporates several important innovations.



Main features:

Picture size: 24x18 mm

Lens: (with F1.2 standard lens) H Zuiko Auto S, F1.2, f=42mm,
(with F1.4 standard lens) G Zuiko Auto S, F1.4, f=40mm,
(with F1.8 standard lens) F Zuiko Auto S, F1.8, f=38mm,
All lenses have fully automatic diaphragm and are marked with Through-The-Lens numbers and F-numbers.

Lens replacement: Bayonet system ("Pen" mount)

Shutter: Olympus rotary metal focal-plane shutter; B. 1-1/500 sec. (equally calibrated) one-pivot non rotating shutter speed dial

Synchronizing: All shutter speeds synchronization with M & X contacts point switch

Viewfinder: Porroprism finder, magnification 0.8X (standard lens), with microprism and special Fresnel lens

Mirror: Horizontally opening, shockless quick return mirror

Loading: EL (easy loading) system

Film Advancing: 1-stroke lever type with an advancing stroke angle of 150 degrees, self-cooking to prevent double advances and double exposures

Film counter: Exposed counting, self-resetting type

Unique Characteristics of Olympus Pen FT

- *The world's only Half frame, Single lens reflex
- *The most accurate and easiest to use TTL number exposure metering system
- *The smallest, lightest and streamlined design with no pentaprism projection
- *New type rotary metal focal plane shutter with a ultra-high speed of 88 feet (27 meters) per second suitable for shots of high speed moving objects
- *Full synchronization at all shutter speeds up to 1/500 sec. with electronic flash light and flash bulbs (1/60 sec. is the limit for other ordinary focal plane shutters)
- *Porroprism finder system
- *Conventional Pen F interchangeable lenses also usable by sticking a TTL number seal to F/stop ring (Both TTL numbers and F stop numbers are inscribed in

- the current interchangeable lenses.)
- *Bright view-finder with microprism and special Fresnel lens.
- *Quick single stroke film winding
- *Built-in self-timer with 11-second delay
- *Extreme close-up photography possible without additional accessories...up to 35cm (about 14") with Zuiko Auto S standard lens (45cm is the limit for current other SLR cameras)
- *Light shutter release button and shockless quick return mirror
- *New standard lens with super large aperture of F/1.2
- *No mirror image cut-off even with a Zuiko Mirror-T, F/8, 800mm super telephoto lens
- *An amazing range of accessories



- Film rewinding:** Crank type rewind button setting system
- Focus adjustment:** Direct advancing helicoid system, minimum close-up distance 35cm
- Exposure adjustment:** Through-The-Lens number system,
- Light measuring range:** EV3~EV17 (ASA 100) with F1.4 standard lens
- Light acceptor:** Extra-large CdS meter, average light measurement method
- Power source:** Mercury battery (1.3 volts)
- Film Speed rating scale:** ASA 25-400

- Self-timer:** Lever system (90 degrees) actuated in about 11 seconds
- Rear cover operation:** "Magic" locking hinge system
- Size & weight:**
 - (with F1.2 standard lens) 127(W)×69.5(H)×77.5(D)mm, 720 gr.
 - (with F1.4 standard lens) 127(W)×69.5(H)×68.5(D)mm, 630 gr.
 - (with F1.8 standard lens) 127(W)×69.5(H)×62.5(D)mm, 600 gr.



The Olympus Pen FT system has several advantages over the existing system

A unique aperture numbering system replaces the conventional and often inaccurate F/stop system.

It is characteristic of through-the-lens metering systems that exposure calculations are influenced by the position of the meter, the speed of the lens and the focal length of the lens. Especially when the film is exposed at the maximum aperture, the F/stops very often do not accurately reflect the proper exposure.

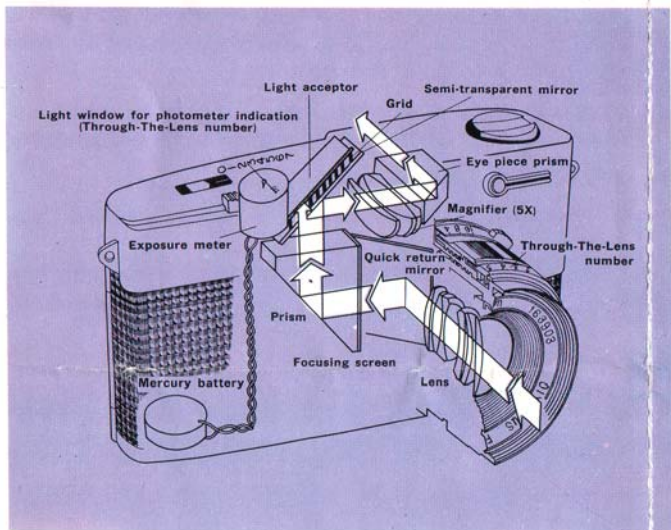
To eliminate this error, found in all other metering systems, Olympus has designed a numbering system, beginning with "0" and ending with "7" to replace the conventional F/stop method. This is equivalent to the "F" stop calibration favored by the most exacting professional photographers.

The TTL numbers are relative aperture values based on the fully open aperture taking account of the average brightness of the whole area of a picture, while the conventional F/stops are absolute aperture values only on a part of the center of a lens, which are lowered gradually as they go to the circumference of a lens, and do not show the loss of light caused while passing through a lens. This TTL number system is so simple yet totally eliminates all the errors and defects of the usual measuring methods just by matching the aperture ring to a number pointed by a needle in the finder with any kind of lens.

Light measurement at full aperture

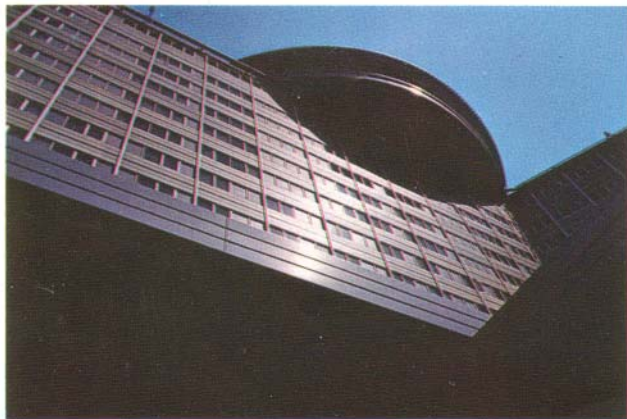
In case of ordinary "Stopped down aperture measuring system" camera other than the FT, there is no doubt a drawback that its viewfinder becomes dark while measuring exposure, making it difficult to obtain correct focusing and compose a subject in the viewfinder.

However, the FT based on the "Fully open aperture measuring system" always enjoys the bright viewfinder with any type of FT interchangeable lens attached. This fact ensures easy operation of accurate exposure measurement, correct focusing and composition of a subject at any time.



● COMPLETE SYSTEM OF ZUIKO INTERCHANGEABLE LENSES

| INTERCHANGEABLE LENSES | | Lens Component (element-group) | Angle of View | Focal Length Equivalent to 35mm Camera | Through-The-Lens Number | F Number | Minimum Distance | Diameter of Filter | Hood | Weight | |
|------------------------|-----------------|--------------------------------|---------------|----------------------------------------|-------------------------|----------|------------------|--------------------|------|----------|-------|
| STANDARD LENS | H Zuiko Auto S | F1.2, f=42mm | 8-6 | 39° | 60mm | 0-6 | 1.2-16 | 35cm | 49mm | n/incl'd | 255gr |
| | G Zuiko Auto S | F1.4, f=40mm | 7-6 | 41 | 58 | 0-6 | 1.4-16 | 35cm | 43 | n/incl'd | 165 |
| | F Zuiko Auto S | F1.8, f=38 | 6-5 | 43 | 55 | 0-6 | 1.8-16 | 35cm | 43 | n/incl'd | 135 |
| WIDE ANGLE LENS | G Zuiko Auto W | F3.5, f=20 | 7-6 | 73 | 18 | 0-4 | 3.5-16 | 20cm | 43 | n/incl'd | 145 |
| | E Zuiko Auto W | F4, f=25 | 5-5 | 62 | 35 | 0-4 | 4 ~16 | 25cm | 43 | n/incl'd | 120 |
| | G Zuiko Auto W | F2.8, f=25 | 7-5 | 62 | 35 | 0-5 | 2.8-16 | 25cm | 43 | n/incl'd | 160 |
| TELEPHOTO LENS | GZuiko Auto T | F1.5, f=60 | 7-5 | 28 | 85 | 0-6 | 1.5-16 | 0.8m | 49 | incl'd | 270 |
| | F Zuiko Auto T | F2, f=70 | 6-5 | 24 | 100 | 0.5-7 | 2 ~22 | 0.8m | 43 | incl'd | 230 |
| | E Zuiko Auto T | F3.5, f=100 | 5-4 | 17 | 143 | 1-6 | 3.5-22 | 1.5m | 43 | incl'd | 250 |
| | E Zuiko Auto T | F4, f=150 | 5-4 | 12 | 210 | 1-5 | 4 ~22 | 1.7m | 49 | built-in | 380 |
| SUPER-TELEPHOTO LENS | E Zuiko T | F5, f=250 | 5-3 | 7 | 360 | 1-6 | 5 ~32 | 3.5m | 58 | built-in | 800 |
| | E Zuiko T | F6.3, f=400 | 5-4 | 4 | 560 | 1-5 | 6.3-32 | 5m | 72 | built-in | 1,750 |
| ZOOM LENS | Zuiko Mirror T | F8, f=800 | 5-4 | 2 | 1,150 | (0) | 8 | 16m | 25.5 | incl'd | 2,400 |
| | Zuiko Auto Zoom | F3.5, f=90-90 | 10-8 | 34-19 | 70-130 | 0.5-4 | 3.5-16 | 1.5m | 49 | incl'd | 420 |
| | Zuiko Zoom | F5, f=100-200 | 12-9 | 17-9 | 143-286 | 1-6 | 5 ~32 | 1.7m | 49 | built-in | 700 |



● Wide Angle Lens F3.5 f=20mm



● Zoom Lens F3.5 f=50~90mm

Large variety of accessories . . . to fully meet the requirements of the users and wide the versatility of the Pen FT.



Filters

Indispensable to improve your picture quality. UV, Y2, 1A, 81C, 82C, Conversion A (43mm or 49mm in diameter).



Lens Hood

Recommended for use whenever possible to guard against off-angle light which will cause flare in your pictures.



Accessory Shoe

This can be attached to the frame of the view-finder, it is used for attaching the flash gun and other purposes.



Outfit Case

Very convenient outfit case for a Pen FT fitted with a long focal length lens. In addition, standard or wideangle lens and some small accessories can also be put in.



Pen Flash

As the name implies, this flash is light in weight, stylish, compact and handy. Using either US-1 or AG-1 bulbs, the Olympus Pen Flash is perfect for indoor or back lighting photography.



Pen UP 3 Copy Stand

This is a handy photographic device which permits taking close-up pictures of pet animals or still life in addition to making copies of documents, books, photographs and other reference data. No attachment lens is required for use with Pen FT.



Attachment Lens

(Close-up Lens)
This can be used in close-up photography by attaching to those of the Pen FT interchangeable lenses which use 43mm screw-in filters, f=30 cm & f=40cm.



Extension Rings Set

With four kinds of combination, enable you to enjoy close-up photography freely. Can be used for all interchangeable lenses except the Zoom lens.



Extension Tube

Bayonet type close-up equipment.
It may be used singly or in combination as desired. When a tube is used simultaneously with the standard lens, close-ups down to 18cm (7 inches) are possible.

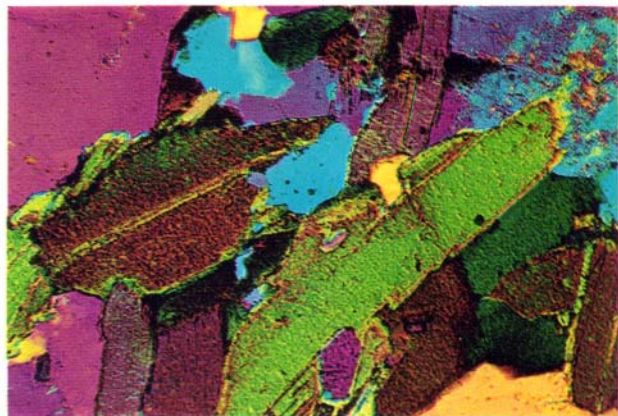


Microscope Adapter

Special attachment made to take microscopic pictures with the Pen FT. The eyepiece of the microscope is removed and replaced by this adapter.



● Extension Rings Set

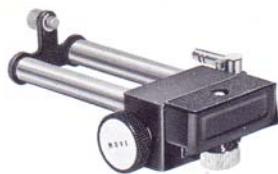


● Microscope Adapter



Bellows

Indispensable accessory for greater adaptability and wider scope in close-up work than the extension tubes allow. The bellows mounted between two arms are extended or retracted with a rack and pinion drive between a minimum extension of 26.6mm and a maximum of 98.8mm. The front of the bellows attachment accepts the camera lens, while its back fits to the camera body.



Camera Slider

This dual track unit provides maximum stability of the camera fitted with Bellows Attachment and Slide Copier. The purpose of the Sliding Rail is to accomplish zone focusing in close up photography instead of moving the tripod. It was designed for use with the Pen FT but can be used for other cameras.



Slide Copier

This is designed for use in conjunction with the Bellows Attachment to make duplicates from full frame or half frame transparencies and other transparent objects in colour or black & white.



Pen Stand

(Pen F Copy Stand) Well designed sturdy and yet light stand is ideal for accurate close-up photography with the Pen FT. Particularly suitable for copying work. Accurate close-up photography can be obtained together with Bellows Attachment, Extension Tube or Attachment Lens. Very convenient for carrying. An illumination device (Light arms or Lamp stand base with Edison or Siemens plug) is available as optional accessory.



Angle Finder

Very convenient attachment for taking pictures at close-to-ground low angles or at breast-high levels or in "candid photographing" of subjects from the side.



Magnifier

This accessory unit attaches to the rear frame of the viewfinder eyepiece on the Pen FT camera. It gives a magnified view and enhances the accuracy of focusing particularly for close-up and copying work.



Angle Magnifier

This is used for obtaining accurate focusing as with the Magnifier and can be easily rotated in any direction as with the Angle Finder.



Eye Correction Lens Adapter/Lens

A clip-on eyepiece for dioptric adjustment lens. Also a convenient eye-cup for everyday photography. Lenses available are +1, -3 & -5D.



Lens Mount Adapter

To convert Praktica, Exakta, Leica (for short distance photography only) and Nikon lenses for use on the Pen FT.

Sister camera of Olympus Pen FT

Difference between the FT and the FV—Unlike the FT, the FV has no exposure meter based on the Through-The-Lens system. The FV is also far less expensive than the FT. The appearance and photographic performance of the FV camera is the same as the FT and all the lenses and accessories used on the FT camera can be used with this camera.

The main reason for presenting this sister camera is to cater for those people who want a Pen-size SLR at the lowest cost.

Olympus Pen FV



Exposure meter

For those who find difficulty in photographing without an exposure meter, a smartly designed CdS meter to be mounted exclusively on this camera is available separately. All you have to do is to clip this CdS meter on to the shutter dial.

Dual-Ranges: At ASA 100:
Low: LV 3 to 10
High: LV 10 to 17

Olympus TOKYO

