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PEN F HALF-FRAME SLR GETS THROUGH-LENS METER



MANUFACTURER'S SPECIFICATIONS: Olympus Pen FT half-frame 35mm eye-level single-lens reflex. **LENS:** 38mm f/1.8 40mm f/1.4 or 42mm f/1.2 Zuiko Auto-S with stops to f/16, focus to 15 in. **SHUTTER:** Metal rotary focal-plane with speeds from 1 to 1/500 sec. plus B, MX sync (at all speeds). **VIEWING:** Noninterchangeable eye-level prism with full focusing screen fine-focusing collar and microprism center. **OTHER FEATURES:** CdS cell circuit reads exposure measurement through the lens at full aperture, instant-return diaphragm, rapid-return mirror, depth-of-field preview button, self-timer. **PRICE:** \$169.95 with f/1.8 lens, \$189.95 with f/1.4 lens and \$229.95 with f/1.2 lens—all with cases. (Also available as Olympus FV without meter for \$20 less.)

Again Olympus has done right by half-frame enthusiasts. First, the answer to a half-framer's dream—a no-feature-left-off SLR with full lens interchangeability, focal-plane shutter and X sync at all speeds. Now a model of the 5-in.-long 2 $\frac{5}{8}$ -in.-high gem has a behind-the-lens meter with no increase in size and virtually no increase in weight. Moreover, you can make your exposure reading at full aperture and, compatibility be praised, every lens already made for the Olympus Pen F will work as well with the Olympus Pen FT metering system.

Let's get to that metering system first. The Pen engineers have incorporated a large-area CdS printed circuit meter behind one of the reflecting surfaces in the finder which integrates all the light from the entire finder area. The Olympus meter pointer number scale is visible through the finder at the left of the picture area.

Here's how you use it:

First you set the ASA of the film (25 to 400) in a small window on the side of the shutter speed dial. Now set your shutter speed. Look through the finder to make your meter reading. The meter scale reads in Olympus meter numbers from 0 to 7. Note the number on which the pointer rests (or the point between numbers) and set this number on the aperture ring.

These numbers on the top of the aperture ring are not f/stops. If you wish to find out what f/stop the number represents, you can turn the camera upside down and look at the diaphragm ring markings on the bottom of the aperture ring.

You can, of course, work the other way around: select your f/stop first by setting the aperture ring and then line up the pointer in the finder to the meter number on top of the aperture ring by adjusting the shutter speed. If you'd rather make a meter reading at shooting aperture, you can do it. Just press the preview button on the lens mount and turn the diaphragm ring until the pointer inside the finder lines up with the lowest number on the lens you're using. Now you're ready to shoot.

Be not in anguish if you have any older Olympus Pen F lenses without meter numerals. You will be able to purchase adhesive numeral strips to cover your diaphragm ring. However, the hitch with older Olympus lenses is that the new meter number strip will hide the real aperture scale from view completely.

So far so good. You go by the meter numbers. But what happens when you fit the Pen FT with non-Olympus lenses such as a preset T-mount, use it with bellows, with extension tubes or on a microscope? The directions don't tell you, but while in Japan we took this up with the designer of the camera, who gave us the following instructions which he said would be included in forthcoming instruction books:

When using the FT on a microscope adjust the exposure until the needle in the finder points to 0.

With bellows units or other extensions, use the meter number on the Olympus lens.

With non-Olympus lenses up to 50mm, you consider the full aperture as the meter number 0 and advance one meter number for each f/stop. (In other words, if you mounted a 50mm f/2 non-Olympus lens you would consider f/2 as meter number 0, f/2.8 as

number 1, f/4 as number 2, etc. If the meter needle pointed to meter number 2 you would stop the lens down to f/4.)

With non-Olympus lenses from 50 to 100mm, you consider the largest aperture as 0.5 and advance one meter number for each f/stop.

With non-Olympus lenses longer than 100mm, consider the largest aperture as 1 and advance one meter number for each aperture.

While we found that these instructions by the camera's own designer did usually work properly, the variation in lens designs and construction make it advisable for anyone using lenses other than Olympus to check exposure performance against Olympus lenses with a constant light source to make certain that the exposures are the same. Then a small chart showing actual lens aperture and the equivalent TTL number can be made up and carried with each lens.

Obviously, the Olympus Pen exposure meter system is designed primarily for Olympus lenses. It can be used with other lenses but is understandably somewhat inconvenient.

A test with our Aerotronic P-803 meter tester indicated that the FT meter read within $\frac{1}{2}$ f/stop of a known light source over its entire range. The meter can read down to f/2 at 1/15 sec. with a film having an ASA index of 400.

The needle generally reacts rather quickly to light changes, but when going from one extreme to another—light to very dark for instance—the needle does move rather slowly and you must wait until it ceases movement for an accurate reading.

Since light must be filtered off from the viewfinder to activate the metering system, there is an undeniable loss of viewing illumination in the FT when compared with the older F or the newer FV (which is exactly the same camera as the FT but meterless). We judged the loss to be approximately equivalent to about 2 f/stops, but the designers have aided focusing by including a microprism screen in the center of the plain fine-focusing spot.

They have also managed to eliminate the outer Fresnel rings and substitute a matte focusing surface. The microprism, although small, works well with all lenses up to about 400mm f/5.6. Of course, the outer fine-focusing area ring, or the rest of the slightly less fine viewing area, can be used for focusing whenever you find this more convenient.

Other changes or improvements on the new FT and meterless FV are small but significant—a single-stroke, long-armed wind lever replaces the two-stroke short-armed lever. A self-timer has been added. The take-up spool is now a quick-loading multiple slot and tooth type. The frame counter has slightly larger numbers, although the counter still has numerals only for every four shots. X sync only has been replaced with both X and M.

The rest of the Pen FT and FV features are the same as the older Pen F
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as tested in MODERN in June 1964. You can expect superb performance, precision workmanship, pinpoint focus, very convenient operation, X sync at all speeds—all adding up to a most engaging, different-from-any-other SLR or half-framer, a camera which will satisfy the most critical of users.

Our test of the new Pen FT enabled us to sample a goodly number of Pen lenses. Since we already tested the 38mm f/1.8 Zuiko Auto-S, 40mm f/1.4 Zuiko Auto-S, 100mm f/3.5 Zuiko Auto-T and 50-90mm f/3.5 Zuiko Auto-Zoom, we are also rerunning these reports. The new lenses are precisely the same, except that the aperture rings are now engraved with the Pen F metering numbers on top and f/stop aperture scale underneath.

The 25mm f/4 Auto-W lens (\$79.95) has stops to f/16 and focuses to 9 in.

The 38mm f/1.8 Auto-S (\$39.95) has stops to f/16 and focuses to 15 in.

The 40mm f/1.4 Auto-S (\$69.95) has stops to f/16 and focuses to 18 in.

The 60mm f/1.5 Auto-T (\$99.95) has stops to f/16 and focuses to 30 in. (This lens has the meter numbers on the bottom of the aperture ring and the f/stops on the top.)

The 70mm f/2 Auto-T (\$89.95) has stops to f/22 and focuses to 30 in.

The 100mm f/3.5 Auto-T (\$99.95) has stops to f/22 and focuses to 5 ft.

The 150mm f/4 Auto-T (\$119.95) has stops to f/22 and focuses to 6 ft.

The 50-90mm f/3.5 Auto-Zoom (\$159.95) has stops to f/16 and focuses to 5 ft.

All lenses are very nicely finished in a gleaming black with chrome aperture rings. All have preview buttons and smooth focusing mounts. The 150mm f/4 has a built-in sunshade.

While the 100mm f/3.5 remains one of our favorite long lenses for the Pen, we were very much taken with the 70mm f/2 we used almost as a normal lens (since we like a 100-105mm on a regular 35mm anyway). It gave us a really snappy focusing image. The zoom was judged very convenient and, of course, the Pen F can be fitted to any number of preset or manual lenses with suitable adapters. To hold and use it is to love it.

38mm f/1.8 Zuiko Auto-S		
Aperture	Center Sharpness	Edge Sharpness
1.8	Good	Very Good
2	Good	Very Good
2.8	Very Good	Very Good
4	Very Good	Excellent
5.6	Very Good	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Good	Excellent

40mm f/1.4 Zuiko No. 100482		
Aperture	Center Sharpness	Edge Sharpness
1.4	Good	Excellent
2	Good	Very Good
2.8	Acceptable	Excellent
4	Acceptable	Good
5.6	Good	Very Good
8	Good	Excellent
11	Good	Excellent
16	Good	Very Good

25mm f/4 E. Zuiko Auto-W No. 113465		
Aperture	Center Sharpness	Edge Sharpness
4	Very Good	Acceptable
5.6	Very Good	Acceptable
8	Very Good	Acceptable
11	Very Good	Good
16	Good	Good

60mm f/1.5 G. Zuiko Auto-T No. 102912		
Aperture	Center Sharpness	Edge Sharpness
1.5	Acceptable	Acceptable
2	Acceptable	Acceptable
2.8	Good	Acceptable
4	Good	Good
5.6	Very Good	Very Good
8	Very Good	Very Good
11	Very Good	Excellent
15	Good	Very Good

70mm f/2 F. Zuiko Auto-T No. 100085		
Aperture	Center Sharpness	Edge Sharpness
2	Good	Acceptable
2.8	Good	Acceptable
4	Good	Acceptable
5.6	Very Good	Good
8	Very Good	Very Good
11	Very Good	Very Good
16	Good	Very Good
22	Good	Very Good

100mm f/3.5 Zuiko Auto-T		
Aperture	Center Sharpness	Edge Sharpness
3.5	Very Good	Excellent
4	Excellent	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent

150mm f/4 E. Zuiko Auto-T No. 106479		
Aperture	Center Sharpness	Edge Sharpness
4	Acceptable	Acceptable
5.6	Acceptable	Good
8	Good	Very Good
11	Good	Very Good
16	Good	Very Good
22	Acceptable	Very Good

50-90mm f/3.5 Zuiko Auto-Zoom 50mm		
Aperture	Center Sharpness	Edge Sharpness
3.5	Excellent	Excellent
4	Excellent	Excellent
5.6	Very Good	Excellent
8	Very Good	Excellent
11	Excellent	Excellent
16	Very Good	Very Good

70mm		
Aperture	Center Sharpness	Edge Sharpness
3.5	Acceptable	Good
4	Very Good	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Very Good	Excellent

90mm		
Aperture	Center Sharpness	Edge Sharpness
3.5	Acceptable	Acceptable
4	Very Good	Good
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent