REPORT ON THE MAMIYA M645 from

# PHOTOOCTOBER 1975 CHAPHA



BHMC

BELL & HOWELL/MAMIYA COMPANY

# FIRST OOK You get 15 shots per 120 roll with this compact

### interchangeable-lens SLR

## **MAMIYA**

Copyright 1975 Ziff-Davis Publishing Company



- Interchangeable-lens SLR
- Accepts 120/220 film for 15 or 30 shots per roll
- Electronically governed focalplane shutter with speeds from 8 to 1/500 sec
- Interchangeable focusing screens
- Interchangeable finders
- Interchangeable roll-film hold-
- Multiple-exposure capability
- Mirror lock-up
- Dual shutter releases

Doggone it, my bank account is again going to feel the pinch of my photographic habit. There will be a new single-lens reflex on the market, and I've got to own it. Why? Just picking it up is enough to convince most people. This is a camera that sits well in the hands . . . it feels right. It has many of the advantages of a mediumformat camera such as a 6x6-cm but not the bulk. In fact, though I must candidly admit that I didn't do a weight comparison, I'd say that this camera doesn't weigh too much more than some of the larger 35mm SLRs with their metering hoods.

What you get as an advantage is a picture whose area is approximately three times that of a standard 35-mm negative and a format that will fill an 8x10 with virtually no cropping of the negative necessary! Some have called this the return of the "ideal format."

What else? Well, there are interchangeable finders including an eve-level viewing one that'll be known as PD (photo diode).

It'll feature through-the-lens metering coupling to the lens via a pin and a meter-coupling prong on the lens and having its own shutter-speed dial, ranging from 8 to 1/500 sec, ASA setting dial, and battery for the meter. The metering system's EV range will span from EV O (f/2.8 at 8 sec) to EV





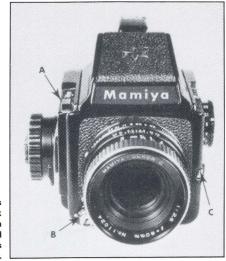
Life-size contacts of 35-mm and 4.5x6-cm show new format offers about 3X area.

18 (f/22 at 1/500) with ASA 100 film. The exposure readout employs seven LEDs (shades of the Fujica ST-801) with plus/ minus exposure indications at the top and bottom. There's also a waist-level finder with interchangeable magnifiers which should, when used, make the camera extremely light. I found a good deal of weight of the camera is in the prism which is present in the eye level hoods only.

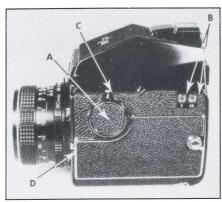
The Mamiya 645 seems to be a camera that has had a lot of thought, time, and effort lavished on its design. Controls on it are humane, easy to operate, and clearly marked. Anything that has to be opened has a dual action with the exception of the battery compartment thus preventing accidental opening at the wrong time. The camera I received was so new that no English instructions existed, but by simply following the arrows on the controls I could figure everything out. The only stumper to some may be the back release which combines a push/slide action. A lever over the memo holder tab is slid to the right while the center of the tab holder is pushed inward. This releases the back, allowing it to swing downward to expose the roll-film holder.

The holder is clearly marked as to the film type it accepts as well as having a release indication on it. It has got to be, in my estimation, the easiest loading roll-film holder I've ever encountered. You can load it on the run, or one-handed, providing it's hanging around your neck or you can rest it on your lap or a table. I did the latter just to prove to myself that it could be done, and the hardest thing I encountered

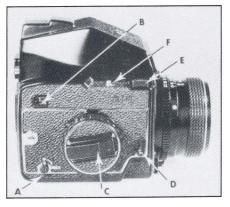
### Mamiya 645 continued



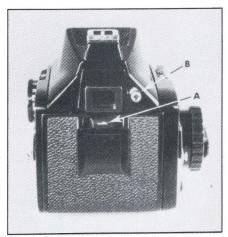
Front view shows dual shutter releases
(A) and (B). Lower release has lock
which acts to prevent both from
being released; also has threaded
receptacle for cable release. Lens
bayonet latch (C) is on the right.



Left side presents user with shutter-speed dial with speeds from 8 to 1/500 sec plus B (A); dual PC outlets; LED lamp above shutter knob, which glows green when battery-check button on opposite side is pressed, (C); bayonet-latch release (D). Shutter speeds are electronically governed.



Right side has control for multiple exposure (A), frame counter (B), film advance knob with crank (C), mirror lock-up (D), top shutter release (E), and button which actuates LED battery check on other side if there is sufficient power in the battery.



Back view presents film box end-tab holder, back release (A), which is actuated by pressing spring-loaded center of the tab holder, and sliding lever. Knurled knob (B) next to eyepiece window is turned, then pushed to release finder. Above eyepiece is the hot shoe.

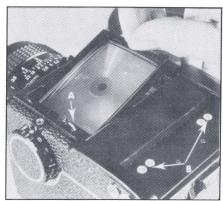
was tearing the foil off the roll of film which needed a toothy assist. To facilitate quick loading, the end arms holding the reel are hinged so that they can be swung out of the way when inserting the reel, then sprung back into place. Here again, we also find markings, this time showing the direction of travel of the film. Since the pressure plate is an integral part of the roll film holder some care should be exercised in its handling to avoid dirt and grit building up on the plate or perhaps worse, bending or denting it.

The 645 does not have interchangeable backs, so pros may complain. That's a minor point when one considers the cost of film and blowing a few frames, over the other advantages of the camera.

Sighting into the standard finder one can easily see the entire field by scanning with the eye; with plastic framed spectacles it's possible to see it all with just the slightest motion of the head. The area presented is, of course, rectangular with the longest axis being horizontal. The PD finder will present the metering information on the right hand side of the vertical axis and as mentioned before it'll consist of seven LEDs with the central LED being the aim point for correct exposures. This method is preferred by some who feel that the movingneedle system is too fragile and too prone to the ravages of dirt, grit, and foreign matter which can create havoc with the delicate meter-movement.

The standard focusing screen consists of a central-microprism spot with a groundglass collar, then a fresnel field. As with film changing, screen changing can be a one-hand operation. First remove the hood, then grasp one of the nicely protruding screws (which serves to hold two small retaining arms that in turn hold the focusing screen in its frame) and pull up. Though you might start to install the screen in the opposite way around, you can't complete the action since two arms extend from the frame holding it preventing this from happening. They are not delicate but will serve as a visual and tactile indication for proper insertion. Look for the following screens for the 645: an all groundglass central-spot version, a split wedge, groundglass collar, fresnel-field version, and a cross-hatched one. Focusing with the standard screen was no problem and the image presented by the standard 80-mm f/2.8 lens was bright and crisp. Dim light situations presented a challenge, but I can't think of too many cameras, with the exception of rangefinders where this isn't a problem.

Mamiya has chosen to go to a slightly longer-than-normal lens for their camera and it does well for itself. It's an 80-mm, whereas a 75-mm would be the "ideal" for the format. I tried it in a backlighted situation that would have made most lenses look sick, and it came through splendidly. Yes, there was some loss in contrast—the lens isn't perfect—but surprisingly little considering the circumstances. From my

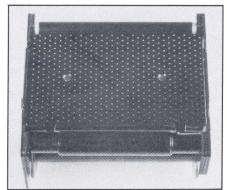


Interchangeable screens are easily removed by grasping either one or both protruding screws (A), that are on either side of the screen. Four dots in back (B) are couplings for electronic flash and PD metering finder.

picture-taking tests, it appeared to be sharp, and because of its low evidence of veiling glare, contrasty. The 80-mm Mamiya-Sekor C will be joined by the following focal lengths: 45-mm f/2.8, 55-mm f/2.8, 110-mm f/2.8, 150-mm f/4, 210-mm f/4, and 500-mm f/5.6. Also look for a multipurpose rubber lens shade covering the focal lengths from 55-100. It resembles a bathroom plunger—but it's effective. The 80-mm, by the way, focuses to 2.25 ft. which is just dandy for a close head-and-shoulders shot and, to give you a comparison, is about what you get when you close-focus with a 50-mm lens at 18 in.

For bayoneting the lens onto the camera it's raised red-dot-to-red-dot so even in the dark you can be assured of proper insertion. Even if you do it incorrectly you can't turn the lens thus bending or jamming any delicate couplings, so there's no worry there. Focusing? Fast, with it requiring just a tiny fraction more than one-half a turn for the lens to go from 2.25 ft. to infinity. The action is smooth and there's no drag or binding unless you clamp down hard on the helicoid at which point it will get difficult to turn. I'd caution care to be taken that the lenses not be bumped so that there's deformation of the focusing helicoid—otherwise, expect trouble.

The aperture-control ring is the one closest to the body and it turns nicely with very definite clicks at each aperture. There aren't half stops with clicks, something I prefer, but you can set them. The lens can



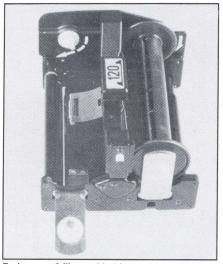
Pressure plate is integral part of film holder. Care should be exercised in handling to prevent dirt accumulation in depressions.

be used with an automatic diaphragm or set on manual, depending again on your preference. The manual mode is used also for depth-of-field previewing.

Moving with the aperture-control ring is a prong arrangement which couples directly to the metering hood, thus transferring aperture information to the finder. This will be on all lenses thus far announced.

Since a lot of pictures are taken vertically, I was more than a bit curious as to how the camera was going to handle in this orientation. To my delight and surprise, I can say very well. The thumb and part of the heel of the hand rest aside the pentaprism while the rewind crank nests in the palm. In this case, I used my thumb on the upper of the two shutter releases. This is a personal preference, since you can, with almost equal ease use your index finger. This leaves the left hand then free for focusing and changing aperture and f-stops. Neat. A nice touch by Mamiya was done here. The lock on the lower shutter will serve to lock both the lower and upper one.

Film advancing does require that you re-

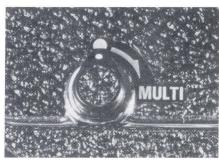


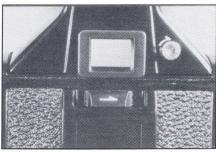
End arms of film-reel holders fold out for ease in loading. Holders are clearly marked as to their film type and film's direction of travel.

move your eye from the finder. Though Mamiya has supplied a fold-in crank on the film-advance knob, I found that the one full turn required to cock the shutter and advance the film was more quickly done by just turning the knob. Many may choose to nestle the crank between their index and ring finger and use them to propel the crank around without removing it from their eye. I really didn't find the action too much slower than that I've encountered on some single-lens reflexes.

The same finger that's used to trip the shutter release can also be used to lock up the mirror. A quick flip and it's up. Also located on the right side of the camera is a frame counter and the multiple-exposure switch. You can take as many exposures on one frame as you wish by a quick turn of this lever.

There's a tripod socket on the bottom and for U.S. users there's a bushing in place to accommodate our quarter-twenty





All controls are clearly marked as to their direction of travel when used. This should cut down on problems with those who casually pick up cameras and try to operate them without prior instruction.

threaded tripods. Take it out and you're ready for European-threaded items. You'll need that tripod for the slower shutter speeds offered by the 645. Since the cloth focal-plane shutter is electronically governed you have the luxury of speeds as long as eight full seconds. For the fastest it's 1/500 sec. One-one thousandth would be nice but I don't consider this too much of a drawback. However, sports photographers who rely heavily on that speed may. Without a battery, you're out of luckthere didn't appear to be any manual speeds. Removing the battery and pressing the shutter release allows the mirror to go up, but the mirror doesn't return, the filmadvance crank locks and the shutter will not complete its cycle. Only after the battery is replaced will the shutter again work.

Other things worth mentioning: There's a battery check with an LED lamp for an okay indication; if you wear glasses and need an eyepiece correction lens—fear not. The eyepiece window is designed to accept them and they will be available from Mamiya. Next, a 220 roll-film holder will be around so you can take 30 shots on one roll of film; and ah, yes, there's an intelligently designed strap, pad, and fastener which allow the camera to hang lens down from the shoulder or neck in a way that doesn't make it seem as if General Sherman has just parked one of his tanks there. One thing further, stock up on six-volt silver-oxide batteries since you'll need them to power the shutter.

Now a word to Eastman Kodak and any others whose 120-roll-film boxes now read "8, 12, or 16 exp." Ahem! Would you also include 15? If my reaction and those of others that have seen this camera is typical, you'd better hurry and change your box if you want to be accurate.