

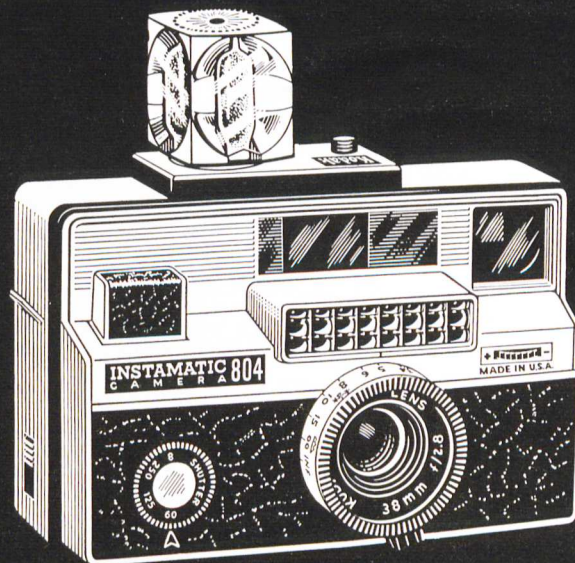
Laboratory Research

Read
what
Art Kramer
reports
in...

CAMERA 35

**ABOUT THE KODAK INSTAMATIC® 804 CAMERA
ADVERTISED AS**

**“The \$125 camera outselling every fine
35mm camera in its price range and above . . .
and also outselling every 35mm camera
from \$125 down to \$15.”**



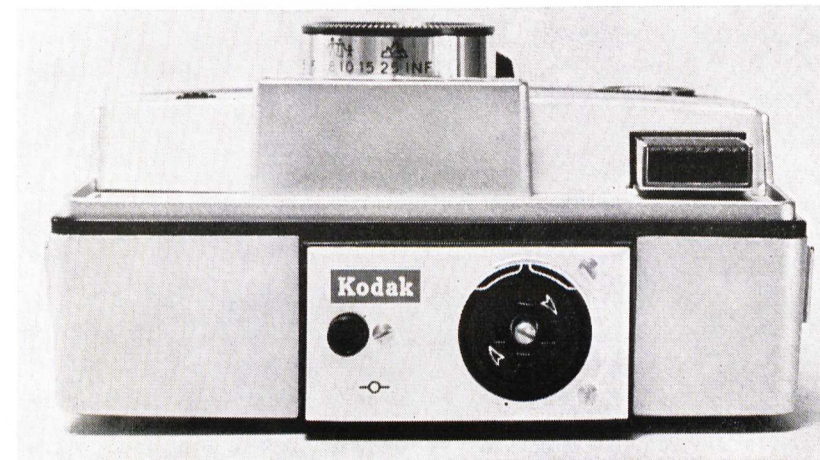
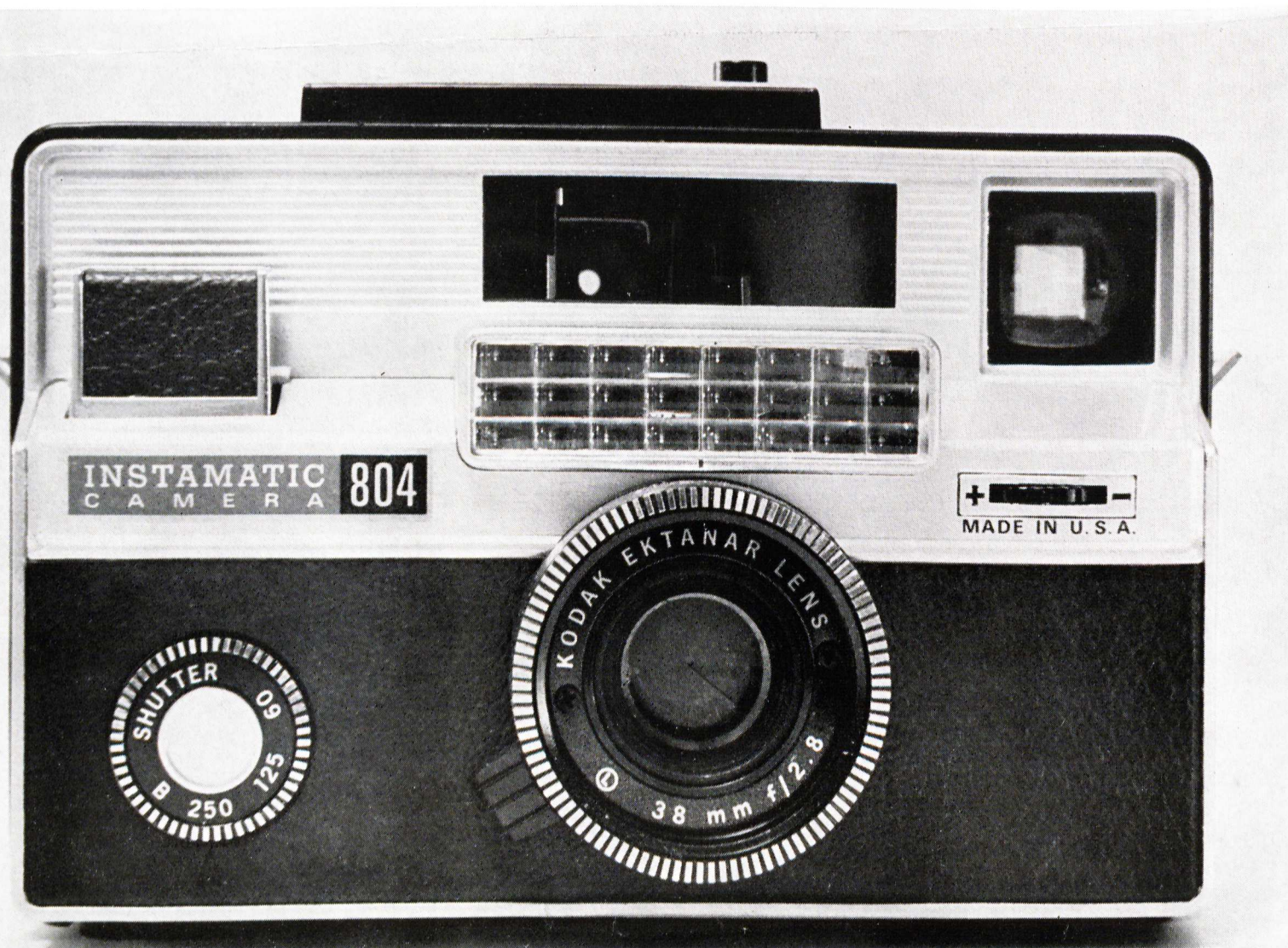
"THE VALUE 35'S"

EDITOR'S NOTE: Fortunately for the 35mm enthusiast, there is a profusion of cameras available in the \$100 to \$250 range on today's market. Unfortunately, this profusion sometimes complicates decision-making. To help sort out the factors, we present our continuing reports on selected cameras in this price range. Models previously covered: Edixa-Mat Reflex, Auto-Lux 35, Pentax H3v, Canon FP, Voigtlander Bessamatic Deluxe and Yashica J-7.

TO THE GENERAL picture-taking public, the Instamatic idea literally changed the nature of photography. Casual snapshooters who were using about two rolls of film a year were soon using four or five or six. For the first time in snapshot annals, simple cameras with motor drives were highly popular. At one stroke, photography tripled its general popularity. One might say that all this has no bearing whatever on the serious photographer. And that might be the truth. But let's examine some of the features

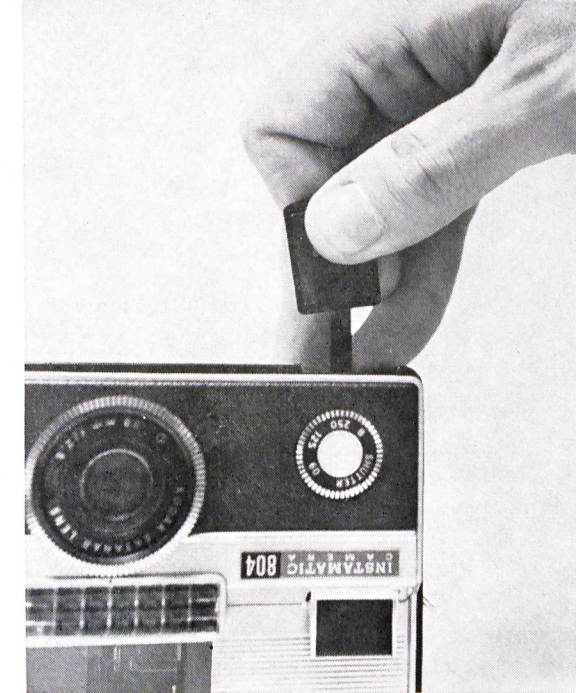
INSTAMATIC 804

Can a serious photographer find happiness with a camera that out-thinks him at every turn? The unequivocal answer—maybe.



➤ **OVERSIZE** shutter release makes it easy to locate. Long throw supplies mechanical power to computer system.

➤ **PULLTAB MOTOR** wind provides enough power for automatic setting of first shot, wind through after twelfth.



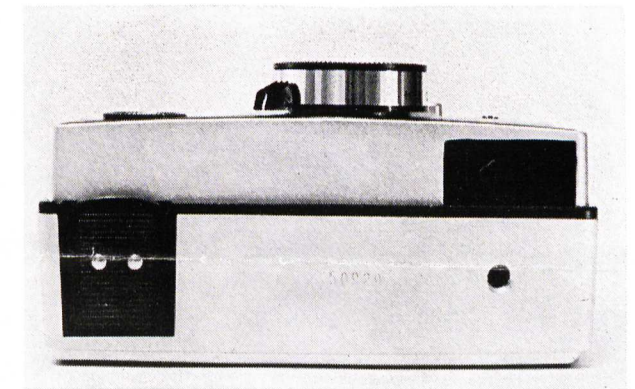
responsible for all this in light of more sophisticated needs.

Just to turn over some well-trodden ground quickly, the Instamatic idea is simple. Film is pre-loaded in a cartridge. Drop the cartridge into the camera and you are ready to shoot. No threading. No fumbling, and most important, the system is as completely error proof as any system I know of has ever been. You can't put the cartridge in wrong—the back won't close.

From a professional point of view, the idea of fail-safe isn't a new one. The pro is so concerned about safeguarding the assignment that he often (sorry, invariably is a better word) carries many cameras, many lenses, many meters. And it is somewhat significant that various rapid loading devices (quick-load, etc.) were designed soon after Instamatic systems were introduced. And in highly sophisticated cameras, too. So it is quite clear that even the most rationalizing equipment snob must concede that instant loading a la the Instamatic idea is highly desirable as a feature, in any camera, anytime.

The question now remains, how desirable is total automation? I don't mean automation with an override or switchout. I mean total. The camera thinks for itself, you (Mr. Eastman, forgive me) just push the button, and they do the rest. Well, it's an idea that I never cared for very much. What's the point of 20 years of diligent training if all that is now going to be rendered unnecessary? But with continued use of the Instamatic 804, I must confess some changes in attitude slowly, inexorably took place. But more about this later.

Let's look at the camera now. And let's do it backwards. Before talking about the external features, let's discuss the design philosophy. This is a camera destined to accomplish two important jobs: provide absolutely fool-proof certainty of results and combine this with "better" optical and mechanical performance



CLEAN APPEARANCE is characteristic of Kodak Instamatic 804 design. Tripod socket located under battery compartment.

than you would get out of a simple camera.

This is a camera designed for the man who knows nothing, but wants everything. It has an f/2.8 lens (three element) capable of quite good performance. Coupled rangefinder, motor drive . . . really a broad range of desirable features. It would be ideal for, let's say, a traveler who wants a fine camera, but doesn't want to fuss with exposure problems and all that entails.

To solve all this the Kodak Instamatic 804 was designed around a device called a mechanical nomograph. It handles four pieces of information. Give it three pieces and it will solve the problem of the fourth. For example: Insert a cartridge and the film speed is automatically set into the system. Point the camera and the light intensity is set into the system. Since a shutter speed has already been set (the Kodak Instamatic 804 has speeds from 1/60, 1/125, 1/250 and B) the nomograph will automatically produce the correct diaphragm setting. If you have chosen a shutter speed too fast for the existing light, the speed will automatically be kicked down. If the light is inadequate for the f/2.8 @ 1/60 setting, the finder will

light up with a neon sign that reads, "use flash".

Should you use flash, the nomograph still doesn't give up. Let's review the chain of information in light of a flash situation. Cartridge still sets the film speed into the system. Inserting a flashcube automatically kicks the shutter down to 1/30. Focus, and as the distance is set, the nomograph automatically changes the f/stop as it divides the guide number into the distance. Again, failure-proof operation.

Need a variation from the norm? You can have it. One-half stop's worth in either direction. A spring-loaded center-seeking dial allows you to increase or decrease exposure by one-half stop in either direction. You must hold the dial toward the plus or minus correction. Let go and it springs back to neutral. This prevents setting it and forgetting, resulting in inadvertent constant under or over exposure. Even this corrective device is failure-proof and automatically self-correcting.

Now let's go over the camera externally. On the top is a standard flashcube retainer. Pop in a flashcube and it is automatically rotated after each shot. You can take four pictures without changing bulbs. I don't use flash too much. But if my just-under-\$500-precision miniature had this feature . . . who knows?

The power to rotate these bulbs comes from a spring motor that also powers everything else in this camera. Let's turn the camera upside down and take a look. A long tape winds the motor. You just grab the tape tab and pull. This winds the motor with the following consequences. When the camera is loaded it automatically winds itself to the first exposure. It winds itself after each subsequent exposure. After the roll is finished it winds the trailer into the cartridge. And after all this, there is usu-

ally enough power left to wind the next cartridge to its first exposure after reloading.

Easy focus

Let's take a look through the rangefinder-viewfinder. The field is quite bright with its limits indicated by a bright line border. In the center is the rangefinder field. It is of the superimposed type, that is, you see two images and you focus until they merge into one image. This is, as tests proved, a good optical system. I was able to focus easily in light so bad, that I received the "use flash" signal when I tried to shoot. By the way, the Instamatic 804 signals you but does not prevent you from ignoring its signal should you choose to. When the "use flash" signal appears, the shutter doesn't lock. You can shoot anyway if you want to. An advantage over systems that do not offer that option.

Focusing is from three feet to infinity. The lens mount is marked in feet and symbols for portraits, groups and landscapes are also indicated just in case the user doesn't want to go to the trouble of focusing. How practical is this zone system? Well, this camera has a 38mm lens. In bright sunlight with Kodacolor-X the exposure would be about 1/60 at f/16. The depth would be from four feet to infinity when the camera is set for eight feet.

Of course, depth is a function of how large a print you plan on making. Tests made on Verichrome Pan uncovered some interesting facts. The lens on this camera is a triplet using rare earth glass as well as other materials. It performs as well as many Tessar types I have used. 8x10 prints of high quality were easily produced. And consistently, too. If you are making smaller prints, let's say 5x7, then it's hard to tell the difference

between the Instamatic 804 and a camera used for comparison costing about three times as much. I am not withholding the name of the comparison camera just to be cute. It has other features such as interchangeable lenses and focal plane shutter which make the cost worthwhile, but optically the 804 gave it a good run for its money. In really large prints, of course, let's say 16x20, the results became quite divergent.

But I think that most important is the feelings that this camera arouses when you are using it. The ability to whirl and shoot at any target of opportunity and *know* that exposure will be perfect, gives one a great sense of freedom technically and even more importantly, creatively. I could not help but wonder that if I had the option of this kind of automation on my Leicas, it might well open up some interesting new possibilities, especially if I could override them at will. As it stands now, however, the Kodak Instamatic 804 is a fine camera for the man who is looking for a moderate degree of sophistication in a camera, yet total simplicity and dependability. Perfect for the traveler who will have just one chance at his subject and whose technique is chancy at best. To the man who asks me, "I want a good camera, but can't use a meter and don't want to learn", I unhesitatingly recommend the Instamatic 804. I think it is also important to remember that, although this carries the Kodak Instamatic name, it is not a blood relative of the much simpler Instamatic cameras such as the 104. The quality of this camera is quite high. Finish is good. The camera is solid and has quite a heft to it. It is the camera I give to my wife to use when we go on trips. And it is also the camera I find myself using when I want a no-fuss shot . . . fast.—
Arthur Kramer

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