Tomioka, Yashica, Spiratone (and Mirotar, Sigma, etc.) 500mm f8 lens timeline/history

Over time, Tomioka (like many other photographic equipment companies) existed under several different, but very similar, names. It was founded in 1924 to make optical equipment. It never made cameras but made optics and equipment for the military, industry, and camera companies. Over the years it made lenses for Yashica, Polaroid, Chinon, Ricoh, Cosina, Contax and many other photographic companies.

It has been suggested that Tomioka became the exclusive lens manufacturer for Yashica in 1949. This is doubtful since Yashica was not formed until 1949 and they were not making cameras at that time. Yashica's first camera was not developed until 1953. But whatever the specific date of the arrangement, all of Yashica's lenses, from the very beginning, have been made by Tomioka. But as mentioned above, Tomioka also made lenses for many other photographic companies – both before and after they began a close collaboration with Yashica.

In 1959, Yashica produced its first SLR camera with, of course, Tomioka-made lenses. These cameras and lenses had a proprietary bayonet lens mount, so the Yashica cameras could only be used with Tomioka lenses and Tomioka lenses could only be used on Yashica cameras. The partnership was successful enough so that nine years later, in 1968, Tomioka and Yashica merged -- but Tomioka continued to make lenses for other camera companies, such as Polaroid which was very popular at that time. Also in 1968, Tomioka and Yashica decided to change their lens mount to the less convenient, but more popular, Universal/Praktica/Pentax/42mm screw mount thread. This would allow the new Tomioka lenses (many named "Yashinon DX") to be used on numerous non-Yashica cameras -- which would help to increase lens sales – but it would also allow the new Yashica cameras (many named "Electro TL") to be used with numerous non-Tomioka lenses -- which would help to increase camera sales.

Tomioka's lenses of the time produced amazing results and are well-respected by those in the know. Here are some test results and discussion about Yashica's DX lenses from Modern Photography in 1972. Of the 50 test points only five (10%) were rated lower

than “Very Good”, and only one (2%) was rated below “Good”. In fact, 39 of the 50 test points (78%) were rated as “Excellent”. It’s difficult to do any better than that!

sturdy tripod with the camera in place, and the Topcon shutter produces almost no detectable vibration in the image. The diaphragm actuating pin seemed a little stiff but worked quite nicely with our Topcon Super D. The lens weight of 5.3 lb. and length of 15 in., coupled with the maximum idameter of some 4.4 in. makes this a reasonably sized lens for the speed and focal length specified.

500mm f/5.6 RE Auto Topcor No. 1110127

Aperture	Center Sharpness	Edge Sharpness
5.6	Very Good	Very Good
8	Very Good	Very Good
11	Excellent	Very Good
16	Very Good	Good
22	Very Good	Good

FOUR AUTOMATICS FROM YASHICA

MANUFACTURER'S SPECIFICATIONS: 28mm f/2.8 Auto Yashinon-DX for Yashica and similar screw thread mount SLR cameras. FEATURES: Apertures to f/16, focus 15 in., accepts 62mm accessories. PRICE: $129.95.
135mm f/2.8 Auto Yashinon-DX for cameras as above. FEATURES: Apertures to f/16, focus to 15 in., accepts 52mm accessories. PRICE: $119.95.
135mm f/2.8 Auto Yashinon-DX for cameras as above. FEATURES: Apertures to f/22, focus to 5 ft., accepts 55mm accessories. PRICE: $139.95.
200mm f/4 Auto Yashinon-DX for cameras as above. FEATURES: Apertures to f/22, focus to 8 ft., accepts 55mm accessories. PRICE: $189.95.

The latest beneficiary of our catching-up policy is Yashica—a charter member of the Pentax-Praktica type screw thread lens mount club. As you may know, it's a very big club, but we've had out hands full lately and haven't been able to give Yashica its due. So, herewith, we make up for lost time.

The four lenses bear a strong family resemblance. In fact, just about the only distinguishing physical characteristic is their dimensions which, naturally, follow the focal lengths—28, 35, 135, 200mm. All are smartly finished in black, with similar markings and controls placed in the same order.

These controls, starting outward from the mount, include: a good-sized, semicircular, knurled auto-manual switch doubling as a depth-of-field preview; a thin, alternately knurled aperture setting ring; a small cutout through which you can see the aperture scale—clear white numbers on a black background; depth-of-field scale; a large cutout area containing the clearly visible footage scales (feet in yellow, meters in white); and a finely knurled focusing band. The last band, naturally, gets progressively wider with each lens, reaching 1⅛ in. on the 200. It gives a sure grip and swift, smooth turning action.

As for differences, the 28mm f/2.8 wide angle has a slightly flared front to accommodate its extra-large front element, and its setting ring is clickstopped at full f/numbers with half-stop settings up to f/11. The same clickstop pattern is followed on the 35mm f/2.8. Moving along to the telephoto pair, their setting and focusing rings are, naturally, larger. Half clickstops are used on the 135mm f/2.8 to f/16, with none between f/16 and f/22. This same pattern is followed on the 200mm f/4. The two tele lenses each have a built-on sun shade that you slide forward when in use. The plastic lens caps for these two, by the way, are made to fit over the shade, rather than in between shade and lens proper, as was the case on some earlier Yashinon lenses that had screw-on front caps. We think the new method is better.

28mm f/2.8 Auto Yashinon-DX No. 2885182

Aperture	Center Sharpness	Edge Sharpness
2.8	Excellent	Acceptable
4	Excellent	Good
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent

35mm f/2.8 Auto Yashinon-DX No. 388962

Aperture	Center Sharpness	Edge Sharpness
2.8	Very Good	Excellent
4	Excellent	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Very Good	Excellent

135mm f/2.8 Auto Yashinon-DX No. 13812631

Aperture	Center Sharpness	Edge Sharpness
2.8	Very Good	Excellent
4	Very Good	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Good	Excellent

200mm f/4 Auto Yashinon-DX No. 2046630

Aperture	Center Sharpness	Edge Sharpness
4	Very Good	Excellent
5.6	Very Good	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Good	Good

On camera all lenses worked smoothly and efficiently, with the clickstopped aperture ring tailor-made for Yashica's TL Electro X stop-down meter reading camera. At 4 in. in length the 135 lens presented no handling problems, as it's not much longer than a normal lens. In fact, the longest member of the group is the very compact 6-in.-long 200mm with a 62mm outside diameter, making it one of the easier handling 200's we've seen in a while. Controls are placed so that they are within easy reach of the right fingers and can be easily manipulated by the left hand.

As you can see from the results of our high-contrast resolution tests, these four Auto Yashinons are a superior group.—THE END

Just six years later, in 1974, Tomioka/Yashica collaborated with Zeiss/Contax to develop two new series of cameras with a new, common lens mount, the Contax/Yashica mount – for cameras such as the Contax RTS from Contax and Yashica's new FX cameras. Simultaneously, there would be new, cross-compatible series of lenses – for example, Carl Zeiss from Zeiss and Yashica ML from Tomioka. All of the Yashica lenses were designed and manufactured by Tomioka, and in many cases, they were the exact same lenses that Yashica already was selling, just with the new C/Y lens mount. The Carl Zeiss lenses were designed by Zeiss but many of them were manufactured by Tomioka, supposedly under German supervision -- but over time Zeiss allowed Tomioka to take over more and more of the responsibility for their manufacture. You can tell if a Zeiss lens was manufactured by Tomioka because it will probably be marked "Lens made in Japan" -- like this Zeiss Mirotar 500mm f8.

Around this same time, one of the many non-Yashica, non-Zeiss, photographic firms that Tomioka collaborated with was Spiratone. A photographic marketing firm -- similar in many regards to Vivitar, Bell & Howell, and Soligor -- Spiratone sold a wide variety of lenses at a significant discount. And just like Vivitar, Bell & Howell, and Soligor, Spiratone's lenses came from a variety of lens manufacturers.

But let's back up for a minute. Spiratone's first 500mm f8 CAT that was manufactured in the USSR. Here are two of their early ads and a review by Keppler:

KEPPLER ON THE SLR

Are mirror lenses an impractical mystery? No more so than your shaving mirror.

SLR owners today are a fairly worldly lot. Ownership of 85 to 135mm teles (once the province of only the well-heeled photographer) is today completely taken for granted. The "in" group is far more liable to parade the latest in 400mm telephoto lenses with a lens converter.

Now that we've all grown accustomed to living in the long lens era, we're about to be taken on another merry ride—into the land of mirrors.

Don't panic at the term "mirror optics." It's no more mysterious or complicated than your enlarging shaving mirror. Suppose while shaving you were to fasten a smaller secondary mirror to the tip of your nose so that it reflected the main mirror's reflection of your face back to the main mirror. Then suppose you drilled a small hole in the shaving mirror so the reflection from the small mirror on your nose could get back to a camera body. You would then have a classic mirror lens design.

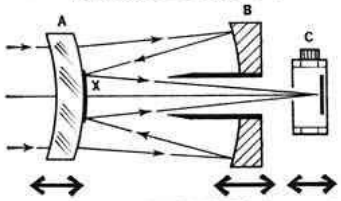
Today's mirror teles aren't really too different from the shaving mirror concept. The main mirror, akin to your shaving mirror, gathers the light and concentrates it on the secondary mirror so that the entire picture is reflected back through the small hole (see illustration). All mirror surfaces must be absolutely perfect and centered exactly.

Modern mirror lenses haven't given up on glass altogether. There is a front glass lens element called a corrector plate which corrects various optical aberrations. Usually the small secondary mirror is cemented to the back of the corrector plate. Sometimes a glass element or two is used at the rear of the lens to aid convergence of the light beams onto the film plane. These combination glass and mirror lenses, known as catadioptrics, are apochromatic—that is, completely corrected for all three major colors. A well-made catadioptric lens is usually superior optically to a well-made standard lens. It is also physically much shorter. The light path inside the lens is folded three times so the "cat" lens is usually only ⅓ or less the length of a standard all-glass lens (see illustration).

This isn't new ground. Leaving out the big American companies designing and making unbelievably expensive mirror lenses for government projects, we find that Carl Zeiss and Nikon have been building catadioptric 500mm and 1000mm lenses for some time. They've concentrated on large apertures of f/4.5 and f/5 on the 500mm size and f/5.6 and f/6.3 on the 1000mm size. These are impressive optical babies. With the possible exception of the Nikon 500mm lens, such giants are not anything you would think of slipping into your gadget bag. These lenses have one primary use—photography over extreme long distances mounted on a good tripod.

When it comes to focusing, all "cat" lens designers have found themselves boxed into a corner. The longer the focal length of a lens, the greater must be the travel of the focusing mount. By the time you work your way upward to 500mm or so you need a plumber to make the necessary long pipe extension

(Continued on page 54)



3 FOCUSING POSSIBILITIES: In a mirror lens, light enters glass corrector plate (A), is reflected from mirror surface (B) to secondary mirror (X) which shoots light to camera (C). Lens can be focused by moving (A), (B), or (C). Most mirror lenses focus by moving camera body (C) except below.

QUESTAR FOCUSES MAIN MIRROR: With incredibly accurate machining, Questar moves main mirror, thus changing focal length and focus. Arrow points to rear focusing screw.

RUSSIAN MTO FOCUSES CORRECTOR PLATE: Turning front lens cell (arrow) moves corrector plate, thus changing focal length and focus.

The “Russian” 500mm f8 is often referred to as an MTO, but it might have actually appeared in different configurations. Some say it is a good performer.

At some point, Spiratone stopped selling the MTO and starting selling an ULTRATEL 500mm f8. At about the same time, Sigma was selling its XQ 500mm f8 ULTRATEL. They look so much alike and have the same SIGMA trademark, so that, no doubt, they are the same lens. Maybe Spiratone was just selling Sigma's "left-over" ULTRATELs when they switched to a much more sensible, smaller, shorter and lighter 500mm f8 CAT.

On the nest page is the Spiratone ULTRATEL.

The Spiratone ULTRATEL was short-lived and they eventually cut a deal with Tomioka. Athough none of Spiratone's 500mm lenses are marked "Tomioka" and Spiratone never mentioned it in their ads, we know that they are the same. First of all, physically comparing the lenses tells you that they are the same -- just as Modern Photography did. Here is their report comparing the Tomioka 500mm f8 Yashinon-DX to the Spiratone 500mm f8 Minitel:

Can A Yashica Tomioka Be A Spiratone 500?

Two years ago we were crowing about the highly compact, high-quality combination of a 500mm f/8 Yashinon DX mirror lens (focusing to 13 ft.!) and an Olympus OM-2, together being only 3 lb. 2 oz., and 7 in. long. For $85, you could adapt the lens, with its Yashica thread mount, to the Olympus body. The run was on, but alas, the lens was discontinued in thread mount, and it is really not suitable for alteration in its Contax RTS mount. Contax owners had all the luck while we were frozen out.

We were more than surprised and delighted when we examined the new Spiratone 500mm f/8 Minitel to find, under a slight change in cosmetics, an old familiar mirror face. Sure enough, 'twas our old friend, the Yashinon DX mirror, which Spiratone had evidently obtained from Yashica's source, the subsidiary Tomioka optical factory. While the lens did lose a few frills—rear filter slots and filters plus a sliding lens hood—it gained multicoating and an easy-to-interchange T-mount adapter system, making it child's play to attach it to nearly any SLR. Plus it lost more weight.

The new lens weighs some 4¼ oz. less than the old, thanks to the absence of the filter slot, lens hood and custom Olympus mount. However, the front of the Minitel is threaded to accept standard 77mm filters and a lens hood. Additionally, filters can be fitted between the rear of the lens and the camera adapter. Three such filters are furnished: skylight, 4X neutral density and yellow. This lens must certainly be the lightest, most compact, bargain quality super telephoto optic available. Price of the 500mm f/8 Minitel is $300 with camera adapter.

Optical birds of a Tomioka feather: Yashica on the left, Spiratone on right.

At that time, Tomioka was producing a Yashica Reflex 500mm f8 which was the exact same lens as the earlier Reflex Yashinon DX 500mm f8 – only that it had the new C/Y mount and a slightly different name. There were actually at least two versions of this lens although Tomioka labeled them exactly the same. The main differences were possible changes to the tripod socket, lens hood, and lens coating. Specifically, the original version had a rotating tripod socket, sliding lens hood, and a single lens coating. The final version lacked a tripod socket, lacked a sliding lens hood, but had multi-coating. But these changes may not have happened all at once!

Similarly, the Spiratone Minitel appeared circa 1976 and evolved over time. Depending on how you look at it there were either two, three or four versions – similar in many ways to how the Tomioka/Yashica 500mm f8 lens changed.

The original Spiratone Minitel was NOT multi-coated (left, below), as stated in the Popular Photograghy review, but they eventually were. It also lacked the rotating tripod socket and sliding lens shade of the Yashica, but it did have a fixed tripod socket and a 77mm thread on the front for a lens shade. In addition, it lacked the slide-in filters of the Yashica and instead had a 30.5mm thread on the rear. But the mount for the lens was now a T-mount, so it could fit on just about any SLR of the time.

On the original Minitel model, the rear filters (it was supplied with three – 1A, Yellow and ND2X) had two small holes in the rim for removal. At some point this was changed to two slots. Also at some later point, multi-coating was added (right, below).

And there was a later version of the Minitel that was slightly shorter, slightly narrower and lighter. All other features remained the same except that the focusing scale is now underneath instead of on the top, so that the actual, set distance appears in a "window" – see the middle lens (below, middle):

We can tell that the Minitels were all made by the same manufacturer (Tomioka), not just because all of their features are nearly identical, but their serial numbers all start with 532XXXX:

Spiratone, eventually switched to a different manufacturer and produced the Minitel-M. This was substantially smaller and lighter than the Minitel, but was not made by Tomioka. Who made it? Some have suggested Tokina while other suggested that it was made in Korea because it looks so much like other small 500mm f8 CATS from there:

Like the original Minitel, there were different versions of the Minitel-M. The first version had a non-rotating tripod socket which was later removed.

Tomioka would eventually come out with a total of four lines of SLR lenses for the Yashica and Contax cameras with the C/Y mount, labeled Zeiss, ML, DSB and MC starting in 1976. The ML line was nothing short of the top of the line.

YASHICA ML LENSES

ML フィッシュアイ
15mm F2.8

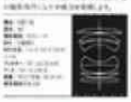
ML
21mm F3.5

ML
24mm F2.8

ML
28mm F2.8

ML
35mm F2.8

ML
50mm F1.4



ML
50mm F1.7

ML
50mm F2

ML
55mm F1.2

ML マクロ
55mm F2.8

ML マクロ
100mm F3.5

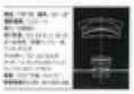
ML ハロー
100mm F4

ML ズーム
28~50mm F3.5

ML ズーム
35~70mm F3.5

New ML ズーム
35~70mm F4

ML ズーム
42~75mm F3.5~4.5



New ML ズーム
35~105mm F3.5~4.5

ML ズーム
80~200mm F4

New ML ズーム
100~300mm F5.6

ML
135mm F2.8 C

ML
200mm F4 C

ML
300mm F5.6 C

レフレックス
500mm F8

Maxicat
100
リング型フラッシュガイドNO.

レフレックス
1000mm F11

But the first TWO Tomioka/Yashica 500mm f8 lenses with a C/Y mount had no such designation. They was simply labeled “Yashica Lens Reflex 500mm 1:8 Yashica”, but apparently they switch from single-coating to multi-coating at some point. They were actually the same lens as the Reflex Yashinon DX 500mm f8. Here are the Yashica 500mm ML (left) and the earlier DX model (right):

Common name	Spiratone Russian Mirror 500mm f8	Sigma Mirror 500mm f8	Spiratone Mirror-Ultratel 500mm f8	Reflex Yashinon-DX 500mm 1:8 Yashica	Yashica Lens Reflex 500mm 1:8 Yashica	Yashica Lens Reflex 500mm 1:8 Yashica	Carl Zeiss Mirotar 8/500 T*	Spiratone 1:8.0 f=500mm Mirror Lens No. 532XXXX 77@ Minitel (model 1)	Spiratone 1:8.0 f=500mm Mirror Lens No. 532XXXX 77@ Minitel (model 2)	Spiratone 1:8.0 f=500mm Mirror Lens No. 532XXXX 77@ Minitel (model 3)	Yashica Lens ML Reflex 500mm 1:8	Spiratone 1:8 f=500mm Mirror Lens Minitel-M Plura-Coat	Spiratone 1:8 f=500mm Mirror Lens Minitel-M Plura-Coat
Incription	varies												
Focal Length	500mm	500mm	500mm	500mm	500mm	500mm	500mm	500mm	500mm	500mm	500mm	500mm	500mm
Maximum aperture	f8	f8	f8	f8	f8	f8	f8	f8	f8	f8	f8	f8	f8
Designer	Maksutov	Sigma	Sigma	Yashica	Yashica	Yashica	Carl Zeiss	Yashica	Yashica	Yashica?	Yashica	Tokina?	Tokina?
Manufacturer	?	Sigma	Sigma	Tomioka	Tomioka	Tomioka	Tomioka	Tomioka	Tomioka	Tomioka	Tomioka	Tokina?	Tokina?
Elements	?	5		6 (4 lenses / 2 mirrors)	6 (4 lenses / 2 mirrors)	?	6 (4 lenses / 2 mirrors)	6 (4 lenses / 2 mirrors)	6 (4 lenses / 2 mirrors)	6 (4 lenses / 2 mirrors)	8 (6 lenses / 2 mirrors)	7 (5 lenses / 2 mirrors)	7 (5 lenses / 2 mirrors)
Groups	?	5		5	5	5	4	5	5	5	6	6	6
Close focusing	3.6m / 12'	4m / 13'	2.75m / 9'	4m / 13"	4m / 13"	4m / 13"	3.5m / 11.5'	4m / 13"	4m / 13"	4m / 13"	2.5m / 8.25'	1.7m / 5.0'	1.7m / 5.0'
Diameter	?	85mm		88mm / 3.5"	88mm / 3.5"	88mm / 3.5"	88mm / 3.5"	88mm / 3.5"	88mm / 3.5"	85mm / 3.3"	78mm / 3.1"	78mm / 3.1"	78mm / 3.1"
Length	178mm / 7"	220mm		120mm / 4.75"	120mm / 4.75"	120mm / 4.75"	113.5mm / 4.5"	120mm / 4.75"	120mm / 4.75"	110mm / 4.35"	87.5mm / 3.5"	85mm / 3.4"	85mm / 3.4"
Weight	1,162gr / 2.5lbs	1,100gr / 2.4lbs		865gr / 1.9lbs	865gr / 1.9lbs	865gr / 1.9lbs	802gr / 1.75lbs	865gr / 1.9lbs	865gr / 1.9lbs	567gr / 1.25lbs	740gr / 1.6lbs	414gr / 0.9lbs	414gr / 0.9lbs
Front filter thread	?	77mm x 0.75mm	72mm x 0.75mm	no	?	?	82mm x 0.75mm	77mm x 0.75mm	77mm x 0.75mm	77mm x 0.75mm	?	72mm x 0.75mm	72mm x 0.75mm
Rear filter thread	?	?		no	?	?	no	35mm x 1.0	35mm x 1.0	35mm x 1.0	?	30.5 x 0.75mm	30.5 x 0.75mm
Side filter slot	?	?		yes	no	no	no	no	no	no	yes	no	no
Focus type	manual	manual	manual	manual	manual	manual	manual	manual	manual	manual	manual	manual	manual
Lens mount	Removeable 42 x 0.75mm T/T2/YS-mount	Removeable 42 x 0.75mm T/T2/YS-mount	Removeable 42 x 0.75mm T/T2/YS-mount	FIXED 42 x 1.0mm (AKA Universal, Praktica, Pentax) screwmount	Contax/Yashica	Contax/Yashica	Contax/Yashica	Removeable 42 x 0.75mm T/T2/YS-mount	Removeable 42 x 0.75mm T/T2/YS-mount	Removeable 42 x 0.75mm T/T2/YS-mount	Contax/Yashica	Removeable 42 x 0.75mm T/T2/YS-mount	Removeable 42 x 0.75mm T/T2/YS-mount
Lenshood	yes	Sliding built-in	yes	Sliding built-in	Sliding built-in	no	Sliding built-in	no	no	no	no	no	no
Tripod socket	one or four, depending on model	?	?	rotating	rotating	no	rotating	fixed	fixed	fixed	no	no	no
Coating	single-coated	multi-coated	multi-coated	single-coated	single-coated	multi-coated	single-coated?	single-coated	multi-coated	multi-coated	ML multi-coated	multi-coated	multi-coated
Circa	mid-1960's	1972-1976	mid-1970's	early 1970's - 1974	1975-?	1975-?	1975-?	1978-early 1980's	1978-early 1980's	1978-early 1980's	early 1980's-?	early 1980's-?	early 1980's-?
Original price (Today's $)	$200 ($1,500)	$250 ($1,100)	$100 ($450)										
	Despite the Cold War, the first 500mm f8 mirror lens offered by Spiratone was a Soviet lens -- also sold with variations as the MTO, ZM-5A, 3M-5A-MC, Maksutov, etc. and sold by several other companies such as Exacta, Hanimex, Lenco, and Samigon.	This lens came in two or more designs (one being in the XQ line-up with a YS mount) with slight differences. But all versions were LONG and HEAVY. Sigma soon came out with a much smaller and lighter model.	This is so similar to the Sigma 500mm f8 that it has to be the same thing. It may likely have been sold by Spiratone at the end of the Sigma production when Sigma decided on a much improved model.	A slower, smaller, lighter, less expensive 500mm than the original Yashica 500mm CAT. But that was an f5 lens similar too, and perhaps designed after, the Zeiss Mirotar 500mm f4.5. Even though it was not multi-coated it is regarded as one of the best 500	It's the same lens as the Yashinon-DX 500mm to the left but it was only made with a fixed Contax/Yashica mount. The last sale on EBAY in April 2016 was for $368.	Almost the same lens as the Yashica Reflex 500mm to the left. It was slightly smaller and lighter. The tripod socket was removed as was the built-in lens shade, but it now is multi-coated. This is the rarest Yashica 500mm f8 CAT. Not many were made before	It is different from the Yashica 500mm to the left. All Mirotar lenses are marked "Carl Zeiss" without any mention of Contax, Yashica, Kyocera or Tomioka. Either way, it is marked "MADE IN JAPAN" next to the lens mount and was designed by Zeiss, but made	Serial number start with 5320000	Serial number start somewhere between 5320281 and 5322126. Two changes to the lens. First, multi-coating was added and the rear filter has a slightly different style wrench.	Serial numbers start somewhere between 5322126 and 5328047. Slightly smaller, thinner, lighter body with a small change to the distance display -- now in a metal "window" on the scale. All other features appear the same.	A smaller, lighter version with a new optical design and closer focusing. How could they do it? More plastic?	Serial numbers start with 811XXX, 823XXX, 824XXX, etc. The first three numbers might refer to different manufactuers, different markets/sellers, or different designs & features. The first version had a tripod socket. These were probably made in Korea, an	The tripod socket is removed and there might be other changes as well.