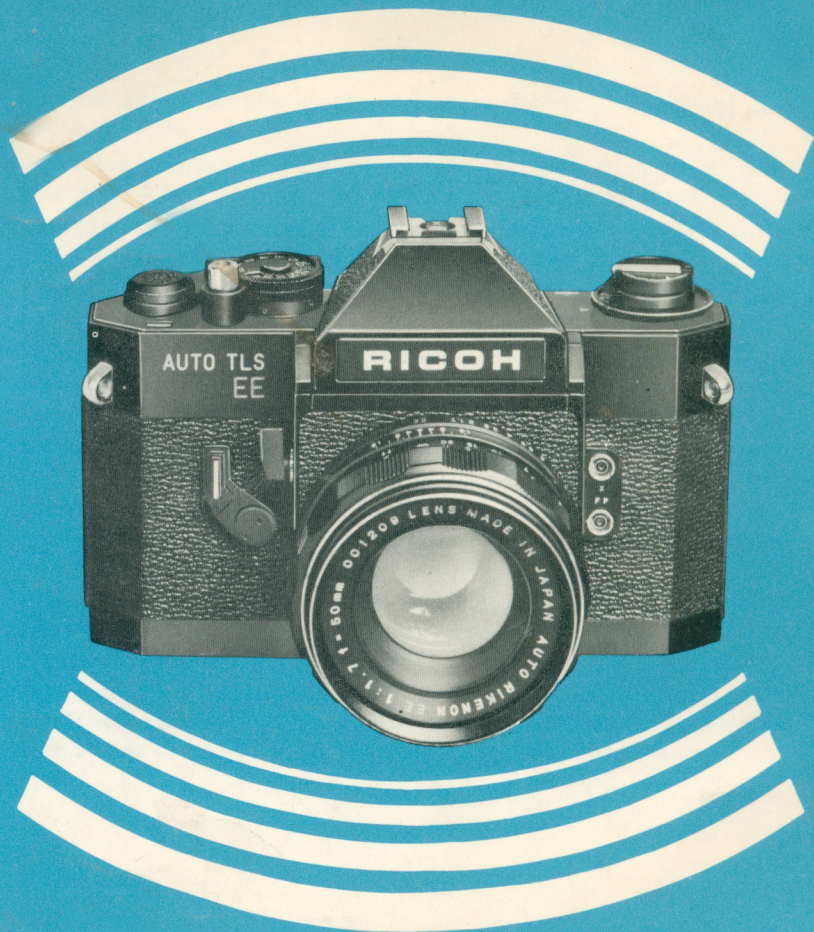


RICOH AUTO TLS EE



RICOH

FEATURES YOU'LL LIKE . . .

- ***Electric Eye exposure system** automatically set lens opening for optimum result.
- ***Full Open diaphragm metering system**—you focus and compose with lens at its widest opening—no viewfinder dimming at all times.
- ***Through-the-lens viewing** ends accidental subject cropping . . . you see your exact picture in brilliant viewfinder before you take it.
- ***Through-the-lens focusing:** Micro-prism image rangefinder plus focusing screen make extra-sharp pictures easier to take.
- ***Through-the-lens system CdS exposure meter** measures light with high degree of accuracy. Because of Thru-the-lens metering system no compensation is required for correct exposure even with a filter on.
- ***Single-stroke film-advance lever** also cocks shutter, counts exposures and prevents double exposures.
- ***Instant-return mirror:** automatically returns to viewing position the instant exposure is made—no viewfinder “blackout” to delay picture taking.
- ***High Speed AUTO RIKENON EE Lens** lets you shoot in lighting situations where slower lenses would fail; produces slides and prints of superior sharpness and color fidelity.
- ***Accurate focal plane shutter:** Full range of speeds from 1 second to 1/1000 second plus bulb let you “freeze” swift action as well as take photos of excellent quality in even dim-light conditions.

KNOW YOUR CAMERA . . .

- A) Film Speed Selector
- B) Shutter Speed Dial
- C) Film-wind Lever
- D) Shutter Release Button and Cable Release Socket
- E) Exposure Counter
- F) Neck Strap Eyelet
- G) Self-timer
- H) Previewer Switch
- I) EE/Manual Ring
- J) Depth of Field Scale
- K) Distance Scale
- L) Focusing Ring
- M) Flash Socket (2)
- N) Lens Selection Dial
- O) Rewind Knob and Shaft
- P) Hot Shoe
- Q) Viewfinder Eyepiece
- R) Film Chamber
- S) Back Cover Latch
- T) Mercury Battery Compartment Cover
- U) Tripod Socket
- V) Rewind Button
- W) Sprocket Teeth (2)
- X) Take-up Spool

AUTO RIKENON EE LENSES



28mm
f2.8

135mm
f2.8

200mm
f3.5

35mm
f2.8

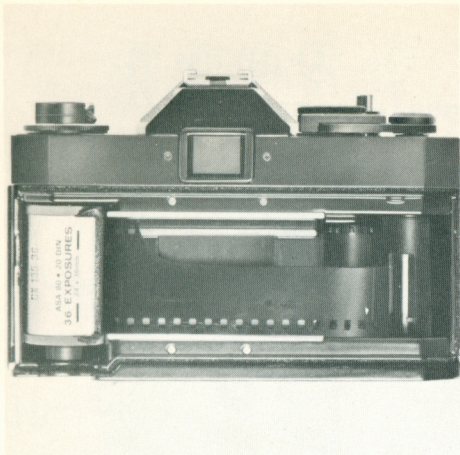


Fig. 1

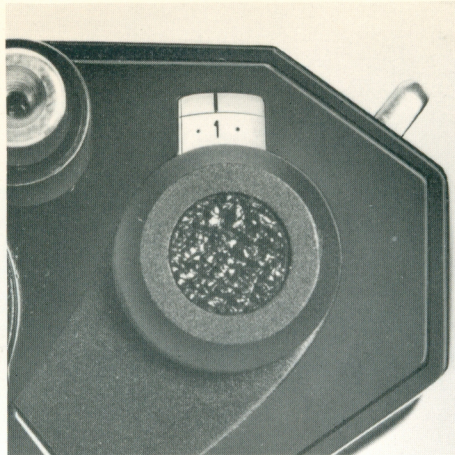


Fig. 2

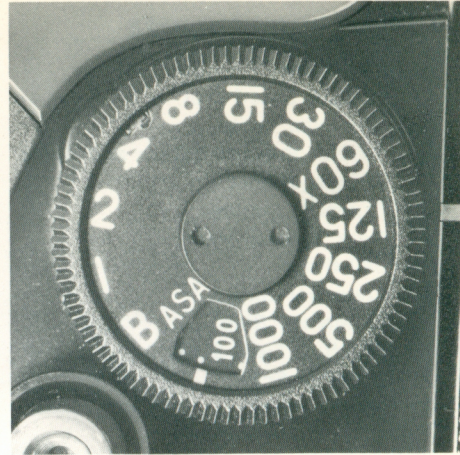


Fig. 3

Film Loading

Always load camera in shade, never in bright or direct sunlight.

Use good quality standard 35mm (20 or 36-exposure) film, color or black and white.

Press Shutter Release Button (D) . . . Pull Back Cover Latch (S) until camera back clicks open. Swing open camera back and place film cartridge into Film Chamber (R).

To place film cartridge properly make sure that the core of the film cartridge comes to bottom of the camera (Fig. 1). Rotate Rewind Knob (O) a bit so

that Rewind Shaft (O) engages film cartridge and film cartridge will be seated in place.

Pull tapered end of film across back of camera and insert into and through any one of the slits of Take-up Spool (X). Rotate Take-up Spool by advancing Film-wind Lever (C) to take up film slack . . . check to see that the gear tooth on the take-up spool has entered a sprocket hole on the film. Close the camera back and snap it shut.

Advance Film-wind Lever (C) two or three times depressing Shutter Release

ASA	25	³² 40	⁵⁰ 64	⁸⁰ 100	¹²⁰ 160	²⁵⁰ 320	⁵⁰⁰ 640	¹⁰⁰⁰ 1280	1600		
DIN	15	17	19	21	24	27	30	33			
	16	18	20	22	23	25	26	28	29	31	32

Fig. 4

Button (D) each time until Exposure Counter (E) will be automatically set to "1", ready for your first picture (Fig. 2). Set the camera for the film which you are using. To set film speed pull up Shutter Speed Dial (B) and rotate it until the ASA number of your film is opposite the red indicator mark (Fig. 3). Check the instruction sheet packaged with your film for the correct ASA speed for that film. If you are using German film, please refer to Fig. 4 for the relation between ASA and DIN.

Battery Loading

Unscrew Mercury Battery Compartment Cover (T) with a coin and remove it. Place a mercury battery in the compartment with plus (+) end up (Fig. 5) and replace the cover. The mercury battery is the power source of the Electric Eye and will last for one year approximately. For replacement use Eveready EPX625, Mallory RM625 or equivalent.

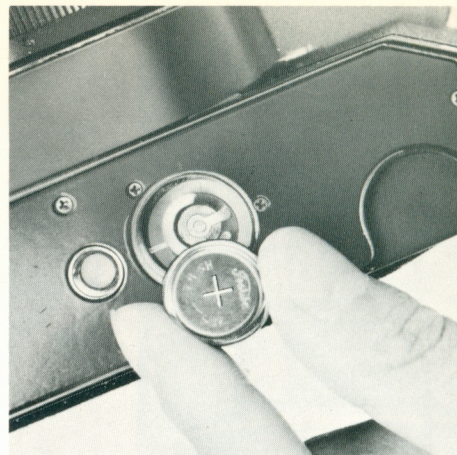


Fig. 5

Correct Exposure

Your RICOH AUTO TLS EE has a built-in thru-the-lens Electric Eye exposure control system which regulates the lens opening automatically for correct exposure. You can also operate the camera manually, if you so desire. You can enjoy picture-taking in one of the following manners.

1. Electric Eye Exposure Operation

The camera will automatically compute and set the lens opening for



Fig. 6

correct exposure when it is set for Electric Eye exposure control. Set EE/Manual Ring (l) at EE position (Fig. 6), and rotate Lens Selection Dial (N) until the speed of your lens comes opposite the white marker (Fig. 7). For example, if the speed of your Auto Rikenon EE lens is f1.7, set the Dial at 1.7. Turn the Shutter Speed Dial (B) until the desired shutter speed number is set opposite the white indicator line. Be certain the Dial is set at a click stop. (Fig. 8).

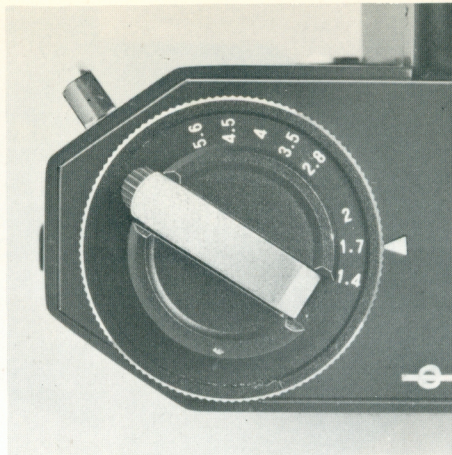


Fig. 7

Do not set Shutter Speed Dial (B) at "B" when you wish to operate camera on EE exposure control. Make sure that the Film-wind Lever (C) is wound, as the exposure meter switch is incorporated in Film-wind mechanism, it automatically turns "ON" only when Film-wind Lever (C) is wound and turns "OFF" when Shutter Release Button (D) is pressed. This device is to prevent unnecessary discharge of mercury battery when camera is not in use.

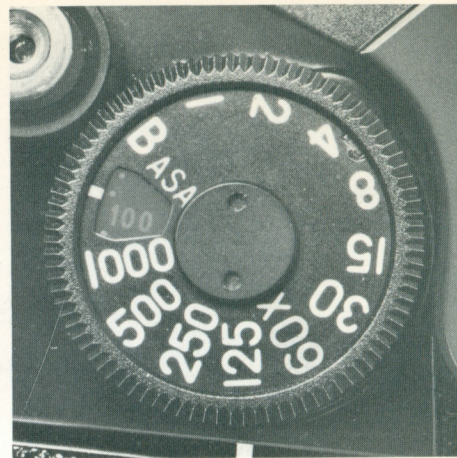
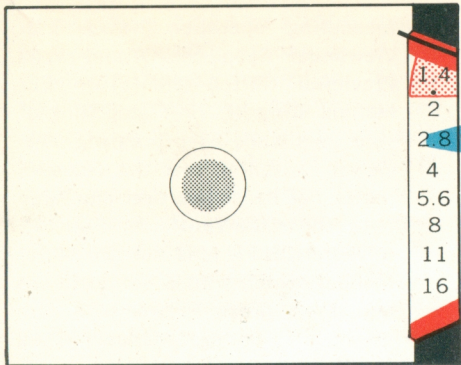
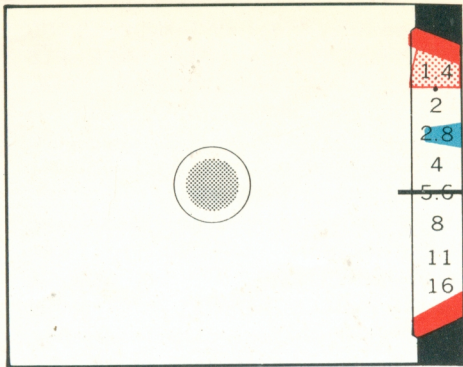


Fig. 8

On the right hand side of the viewfinder you will see f-stop scale in between red warning marks. The upper red mark indicates under-exposure and the lower shows over-exposure. The black exposure meter needle tells the f-stop number at which opening the lens is set. If you find the exposure meter needle in either one of the red marks, this is incorrect exposure (Fig. 9). Adjust shutter speed so that the needle appears on f-stop scale (Fig. 10). As long as the camera is set



(Fig. 9)



(Fig. 10)

for EE operation the built-in high sensitive CdS exposure meter automatically sets lens opening for optimum exposure indicating f-stop number at which your picture is taken. The red mask which moves in response to Lens Selection Dial (N) indicates the area your lens does not cover.

For your quick reference, the range of EE operation of shutter speed and lens opening in connection with the film speed is shown in Fig. 11. For example, any shutter

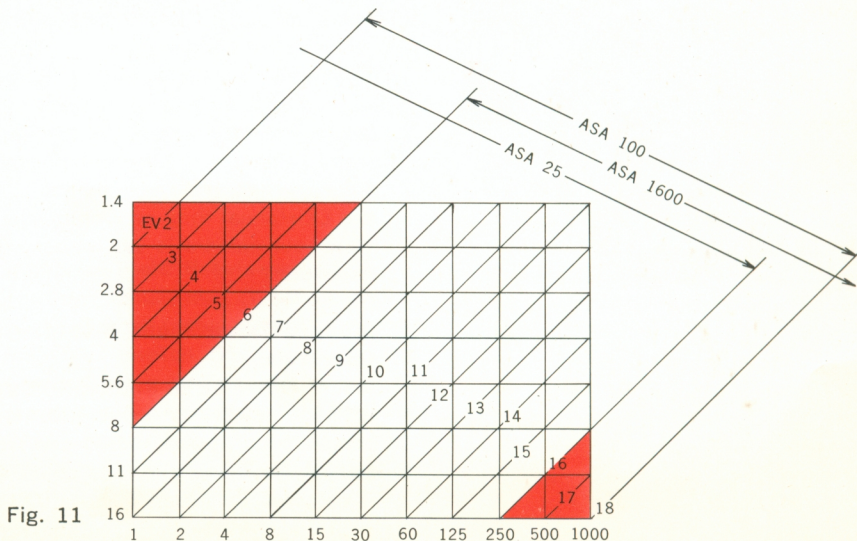
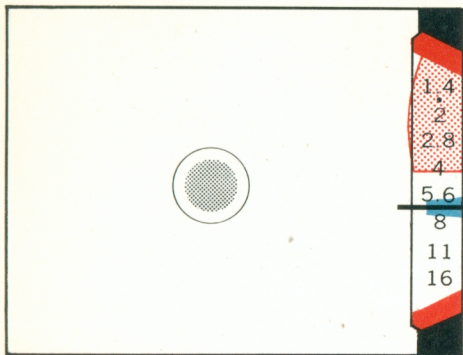


Fig. 11



(Fig. 12)

speed ranging from 1 sec. to 1/1000 sec. with lens opening of F2~F16 is available for EE operation in case you use an ASA 100 film, and the red zones show the uncoupling areas.

2. Full Aperture Light Measuring Operation

Mount either AUTO RIKENON EE or NON-EE RIKENON or any other screw-mount lens onto camera body. Any screw-mount lens up to F5.6 lens speed will do. Set Lens Selection Dial (N).

Make sure that Lens Selection Dial (N) is set at proper number. Read the f-stop number indicated by the exposure meter needle in the viewfinder and take note of the number. Rotate EE/Manual Ring (I) or F-stop Ring and set the same number on the EE/Manual Ring or F-stop Ring. Now your camera is set for correct exposure.

3. Stopped Down Light Measuring Operation

Mount either AUTO RIKENON EE or NON-EE RIKENON or any other screw mount lens onto camera body. No setting of lens opening is required for Stopped down light

measuring operation. Look into Viewfinder Eyepiece (Q) and press Previewer Switch (H). Turn EE/Manual Ring (I) or F-stop Ring of your lens while keep pressing Previewer Switch so that the exposure meter needle comes over the blue indicator in the Viewfinder (Fig. 12). If your NON-EE lens has an Auto/Manual switch with it, set it at Auto and then press Previewer Switch or you may set it at Manual. When the lens is set at Manual, no pressing on Previewer Switch is required. Auto/Manual switch may be moved back to Auto position before you shoot.

In case you use an extension ring set, bellows attachment or other type of accessories in between the lens and camera body, follow the procedures of the stopped down light measuring operation for setting correct exposure.

Setting the Shutter

The shutter speed setting governs the among of time the film is exposed to light. "60" (1/60 second) is recommended for subjects not in motion. Where motion exists, shutter speeds

ranging from 1/125 to 1/1000 should be used . . . 1/1000 second speed will "freeze" extremely fast action. To get maximum "depth of field" (area of sharp focus in front of and behind subject) or when shooting in poorly lit areas, speeds ranging from 1/30 to 1 second and "B" (bulb) are available. When using these slower speeds, use a tripod or other firm support to prevent movement of camera and blurred pictures. When set at "B" the shutter will remain open as long as the Shutter Release Button (D) is depressed (preferably by a cable release accessory). The "B" setting is used for long exposures for example when using street lights or electric signs as a light source, or under poor light conditions when flash is not being used.

Note: The "B" setting disconnects Electric Eye circuit and the camera will no longer operate on EE.

Viewing and Focusing

Look into Viewfinder Eyepiece (Q) to compose your picture and focus the lens. Rotate Focusing Ring (L) until subject becomes clear in the micro-

prism image, the center circle area (Fig. 13). When your subject appears sharp in the micro-prism image, your picture has been focused. To take the picture hold the camera as steady as you can and press Shutter Release Button (D) slowly and smoothly. Since you are viewing through the lens there is no parallax problem . . . what you are viewing in the viewfinder will appear in your picture. Even when you shoot close-ups there is no danger of accidental cropping as may occur when the viewfinder is above or to one side of the lens.

Depth of Field

An area in front of, and behind your subject will also be in sharp focus. How much of an area will be sharp in your final picture can be determined in two ways:

Depth of Field Previewer

Turn EE/Manual Ring (I) off EE and set it at desired f-stop number and press Previewer Switch (H). Pressing Previewer Switch will set the lens at the opening you have set on the EE/Manual Ring. This will enable you to preview the area of sharpness in the picture before you take it.

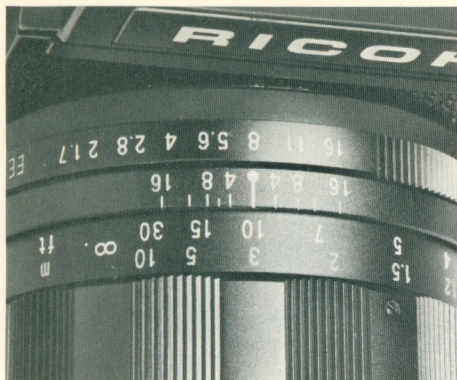


IN FOCUS

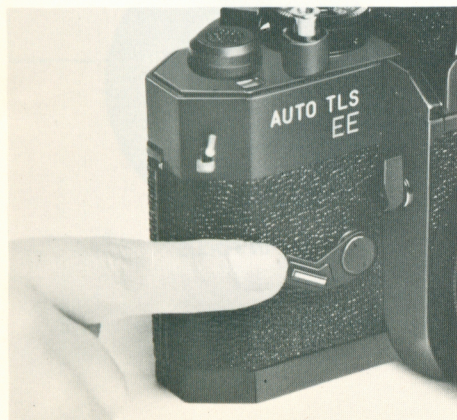


NOT IN FOCUS

(Fig. 13)



(Fig. 14)



(Fig. 15)

Depth of Field Scale

The area of sharpness in front of and behind your subject can be determined on the Depth of Field Scale (J). Locate, on the Depth of Field Scale, the two f numbers corresponding to the f-stop in the viewfinder (EE operation) or f-stop you have set on EE/Manual Ring (Manual operation). The distance shown on the Distance Scale (K) between these two f-stop numbers will be the area of sharpness in your picture (Fig. 14).

The Self-timer

By using the Self-timer, you can also get into the picture. Merely move the Self-timer Lever (G) away from the lens (Fig. 15) and press the shutter Release Button. There will be an about 10-second delay before the Self-timer will automatically release the shutter and make the exposure for you. Camera should be placed on a tripod or other sturdy support.

Changing the Lens

Your camera is equipped with a 50 mm lens, which is the proper focal length for general-purpose picture taking. You may select additional lenses from the wide range of AUTO RIKENON EE or RIKENON lenses which include extreme-

ly wide angle lenses through long focal length telephoto including telephoto zoom lenses. To remove the lens, continuously turn the lens in a counter-clockwise direction until it can be removed (Fig. 16). To insert another lens, turn lens in a clockwise direction until lens is secured in position.

Flash Pictures

Your camera has FP and X synchronizations designed to permit flash pictures with most types of flash bulbs and also electronic flash. The flash connecting cord from your flash gun or electronic flash is connected to one of the Flash Sockets (M). If your electronic flash has a direct contact, mount it onto Hot Shoe (P) and no connecting cord is necessary.

The Fig. 17 indicates the synchronization ranges of FP and X. For instance, the shutter speed ranging from B to 1/60 sec. is available for the electronic flash unit connected to X Socket.

Unloading Film

Always unload your camera in the shade, never in bright light. After the last picture on the roll has been taken, press Rewind Button (V). Lift up crank on Rewind Knob (O). Turn crank in a

clockwise direction until the entire roll has been rewound. Tension on the crank will decrease noticeably (Fig. 18). Open the camera back by pulling Back Cover Latch (S) and remove the film cartridge. Have film processed as soon as possible.

Tips for Better Pictures

- Read the instruction booklet carefully.
- Before you go on a trip or photograph a special event, shoot a practice roll of film.
- Keep fingers and neckstrap clear of the camera lens.
- When you reach the end of the roll of film (check Exposure Counter), the Film-wind Lever becomes harder to advance . . . don't try for "just one more shot": it's time to rewind.
- Protect your camera from dust, dirt and rough handling. Do not expose camera or film to excessively high temperatures.
- Always make sure Shutter is released to prevent unnecessary discharge of mercury battery when the camera is not in use.
- Put Lens cap to protect lens.
- Do not place AUTO RIKENON EE lens with its pins on rear part pressed.



Fig. 16

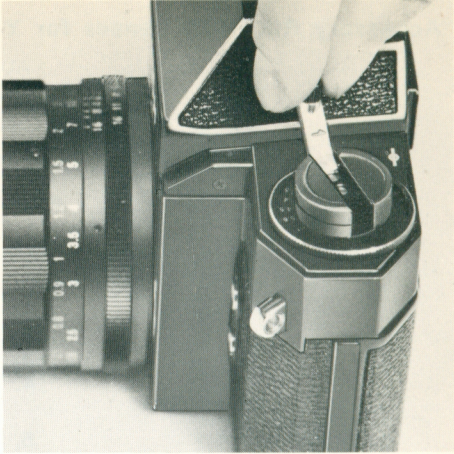


Fig. 18

Fig. 17

	B	1	2	4	8	15	30	60	125	250	500	1,000
FP										(FP class)		
X				(Strobo)								
				(F class, M class, MF class, FP class)								

Accessory RIKENON Lenses for Your RICOH AUTO TLS EE Camera

AUTO RIKENON EE f2.8 28mm, f2.8 35mm wide-angle and f2.8 135mm, f3.5 200mm telephoto lenses plus wide range of RIKENON lenses from 17mm to 800mm and other accessories are available to enable you to expand the real pleasure of photography with your RICOH AUTO TLS EE camera.

	Focal Length	Lens Speed	F-stop Control	Lens Sect.	Lens Elem.	Min. Focus (m)	Angle of view	Filter Size (mm)	Net Gr.	Weight Lb.
AUTO RIKENON EE LENSES										
1.	28mm	f2.8	Auto	6	7	0.3	74°	58	210	0.46
2.	35mm	f2.8	Auto	5	6	0.4	62°	52	220	0.49
3.	135mm	f2.8	Auto	4	4	1.8	18°	55	420	0.92
4.	200mm	f3.5	Auto	4	4	3.0	12°	62	700	1.54
AUTO RIKENON LENSES										
5.	17mm	f4.0	Auto	10	11	0.3	102°	72	450	0.99
6.	21mm	f3.8	Auto	8	9	0.3	90°	72	290	0.64
7.	24mm	f2.8	Auto	8	10	0.2	85°	62	255	0.56
8.	28mm	f2.8	Auto	6	7	0.3	75°	58	240	0.53
9.	35mm	f2.8	Auto	5	6	0.4	63°	49	220	0.48
10.	135mm	f2.8	Auto	4	4	1.8	18°	55	405	0.89
11.	200mm	f3.5	Auto	4	4	3.0	12°	67	740	1.63
12.	300mm	f5.5	Auto	3	5	6.0	8°	62	850	1.87
13.	400mm	f6.3	Auto	3	4	8.0	6°	72	1,050	2.31
14.	55mm-135mm Zoom	f3.5	Auto	9	13	1.5	43°-18°	62	650	1.43
15.	90mm-190mm Zoom	f5.8	Auto	6	7	2.0	27°-13°	55	560	1.23
16.	70mm-230mm Zoom	f4.5	Auto	8	13	2.5	34°-11°	67	1,300	2.86
RIKENON LENSES										
17.	500mm	f8.0		4	4	4.0	5°	77	1,000	2.20
18.	600mm	f8.0	Preset	3	3	10.0	4°	90	2,600	5.72
19.	800mm	f8.0	Preset	4	4	18.0	3°	112	2,370	5.21
20.	60mm Macro lens	f2.8	Preset	4	5	0.2	40°	58	390	0.86
21.	135mm Bellows lens	f3.5	Preset	4	4		18°	49	195	0.43
22.	Fisheye			6	9		180°		260	0.57

- 23. **Bellows Attachment** Has focusing knob for maximum sharpness at extremely close distances . . . excellent for extreme close-ups.
- 24. **Extension Ring Set** This is used to photograph objects at extremely close distances. Rings can be used separately or in combination depending upon distance from object you desire to photograph.
- 25. **Microscope Attachment** Allows camera to be attached to microscope for photographing objects utilizing microscope magnification. Plus a broad line of other photographic accessories.

The following accessories are also available for your Ricoh Auto TLS EE camera.

- 26. Close-up Lens #1 100-32cm
- 27. Close-up Lens #2 50-24cm
- 28. Bellows Attachment "A"
- 29. Delux Bellows Attachment "B" w/slide copier & focusing track
- 30. Extension Ring Set (Auto., 3 pieces per set)
- 31. Microscope Attachment
- 32. Diopter adjuster, (-3, -2, +0.2, +1, +2, +3)
- 33. Eyepiece Magnifier, $\times 2$
- 34. Copy Stand
- 35. Cable Release
- 36. Deluxe Hand Grip (Foldable bracket)
- 37. Sliding Rubber eyecup
- 38. Gadget Bag

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