

COMPUTER
ELECTRIC EYE
FUJICA
35 AUTO-M

INSTRUCTIONS*



FUJICA Photography's Finest Family



COMPUTER
ELECTRIC EYE
FUJICA
35 AUTO-M

The camera that **sets itself** for any light
... **locks itself** when the light's not right!

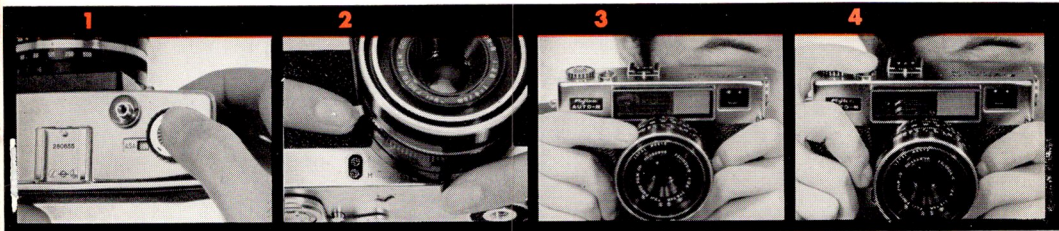
You are now the owner of an unusually fine, precision camera. It has been built to last, requires a minimum of care and is surprisingly simple to use.

You can use the FUJICA at FULLY AUTOMATIC with the camera actually adjusting both the speed and the lens opening all by itself...or...you can switch to "manual" and make any settings you wish. It even has a "fine tuner" provision called Fractional Exposure Control that enables you to get absolutely perfect pictures in difficult lighting situations.

How these features and others give you the "Best Shots I've ever taken" is explained on the following pages,...and the more you know about the FUJICA...the more fun you'll have.

FUJICA Photography's Finest Family

Practice These Simple Steps . . .



- 1. SET FILM SPEED** After loading camera, (explained on the following pages) set the ASA dial to match the film speed number on the instruction sheet packed with your film. You merely press down on the center of the dial and turn until you see your film speed number in the window.
- 2. SET AT AUTOMATIC** Push the Setting Lock towards the camera body and move the Control Knob under the lens housing so that the word AUTO appears opposite the orange dot. Set at 1/125th second by rotating the shutter speed ring so that "125" appears opposite the red diamond.
- 3. FOCUS** Look through the viewfinder; by rotating the focusing ring, you get the two "images" you see, to appear as "one". Focusing is quite simple and is explained on pages 16 and 17. Note the brilliant gold frame. This outlines exactly what will appear in your finished slide or print.
- 4. SHOOT** Press the shutter release button all the way down while holding the camera steady. The "click" tells you the shot's been taken. If you can't press the button all the way down and no "click" is heard, it means that there isn't enough light to take the picture without "Flash". This automatic feature is explained in detail on pages 14 and 15.

FUJICA'S PROGRAMMING SHUTTER

Instantly computes and automatically seeks and selects slower or faster shutter speeds

There is an electronic computer built into your FUJICA. It enables you to get perfect results in practically every possible picture situation.

Here is how it works when the FUJICA is set for automatic operation.

You select any speed which you believe is right for the shot...focus and shoot. The instant you press the shutter release, the computer goes to work. It checks the speed you have selected and *if necessary*, RE-SETS it faster or slower.

In a low light-level shot, where the electric eye would automatically open the lens wide, the computer determines if your pre-set speed is slow enough. If it is not, the speed is automatically reset to the closest slower speed that will give you correct exposure.

When shooting in bright light, if the speed you have set is too slow even for the smallest lens opening that has been set automatically by the electric eye, the programming shutter will seek and select the correct faster speed to give you correct exposure.

In every situation in which the programming shutter changes a pre-set speed, after the shot has been taken, the shutter resets itself to the originally selected speed.

Three different picture situations in which FUJICA's computer helps you take better pictures automatically are shown here.



FOR MOST SHOTS such as outdoor pictures, family groups or scenes, set the shutter at 1/125th sec. Focus and shoot. If the person, object or scene is in the shade or in very bright sunlight, your FUJICA will automatically compute and if necessary, reset the 1/125th to a slower or faster speed.

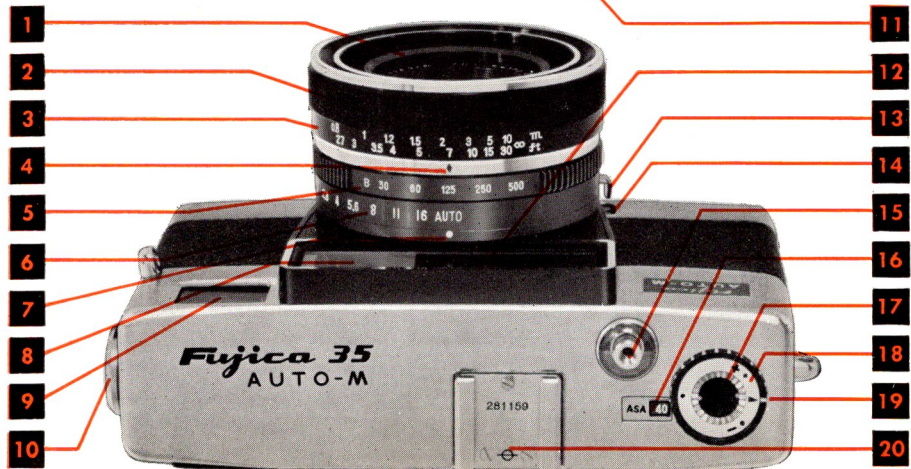


WHEN YOU WANT BOTH FOREGROUND and BACKGROUND in sharp focus, set the speed at 1/30th or 1/60th. The electric eye will then select the smallest lens opening for greatest depth of field. If this is not small enough to give you a good picture with no overexposure, the computer automatically resets the speed faster to give you correct exposure.



WHEN SHOOTING ACTION, you would naturally set a fast speed, such as 1/500th second. If, however, the light is too low for this speed after the electric eye has opened the lens wide, the computer will seek and select the fastest possible shutter speed to give you a perfect shot.

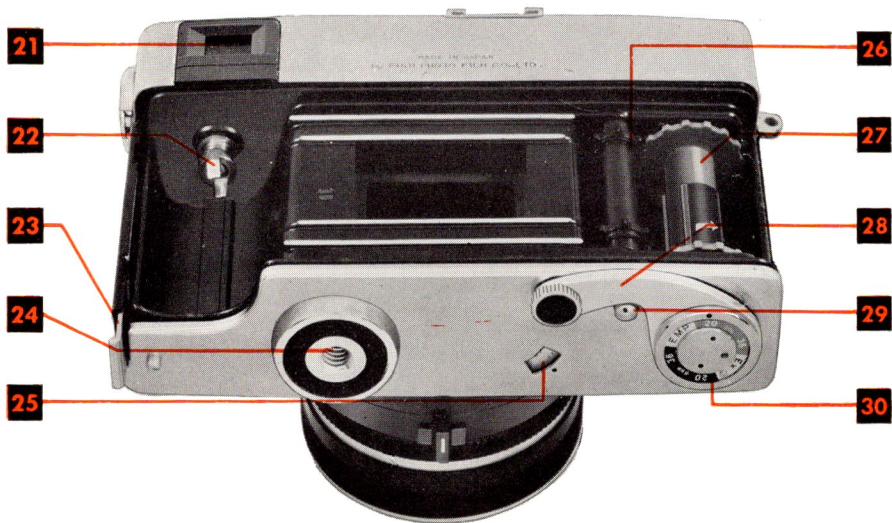
FUJICA's fully automatic operation is explained in detail on pages 14 and 15.



Front View

The Precision Components of your **FUJICA**

1. Threaded Filter Mount.
2. Focusing Ring.
3. Distance Scale Ring marked in feet and meters.
4. Red Diamond Setting Guide Mark for distance scale and shutter speed.
5. Shutter Speed Selector.
6. "AUTOMATIC" or "MANUAL" Lens Opening (aperture) selector Ring.
7. Orange Dot Guide Mark for AUTOMATIC or MANUAL lens opening setting.
8. AUTOMATIC parallax correcting Gold Frame.
9. Viewfinder window.
10. Rewind crank.
11. AUTOMATIC or Manual setting Control Knob. (on bottom side of lens housing)
12. AUTOMATIC Electric Eye.
13. AUTOMATIC or Manual Setting Lock.
14. Flash connection outlet.
15. Shutter release and close-up LIGHT-LOCK.
16. ASA film speed indicator window.
17. ASA film speed setting dial. (Depress while turning.)
18. Fractional Exposure Control settings.
19. Fractional Exposure Setting ring.
20. Accessory Shoe.

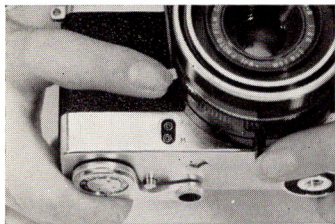


Back View

The Precision Components of your **FUJICA**

- 21.** Viewfinder Eye Piece for focusing and automatic parallax correcting gold frame.
- 22.** Film Cartridge Holder.
- 23.** Camera Back Slide Lock.
- 24.** Standard Thread Tripod Socket.
- 25.** Automatic Reset Exposure Counter.
- 26.** Film Sprocket Wheel.
- 27.** Film Take-up Spool.
- 28.** Single Stroke Rapid Wind Trigger. One short stroke advances the film, winds the shutter, counts exposures, locks internally to prevent blanks or accidental double exposures.
- 29.** Rewind Button. Press before rewinding film after complete roll has been exposed.
- 30.** Film Load Reminder. Set it after loading your film to remind you what film is in camera.

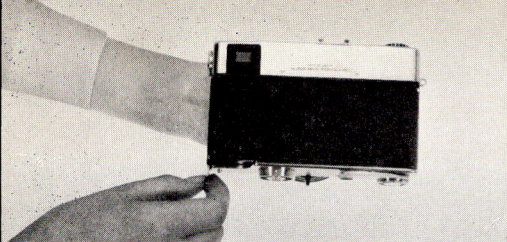
How to Load your Camera with Film



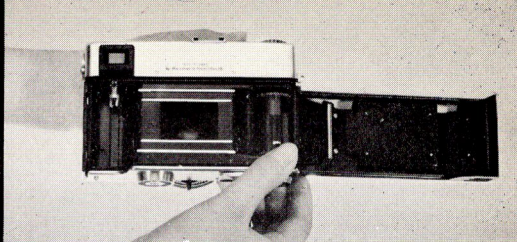
The FUJICA can be loaded while set at AUTO or at any of the MANUAL positions. However, the camera has a special feature which prevents the shutter from being released in subdued light while the camera is at AUTO...and it is always best to load a camera in subdued light to avoid fogging the film. Therefore, you'll find it more convenient to set the AUTO-M at any of the MANUAL positions for loading.

To set the camera at MANUAL, press the SETTING LOCK in the direction of the arrow engraved on the face of the lock, toward the camera body. Move the Control Knob until any of the yellow numerals aligns with the orange dot.



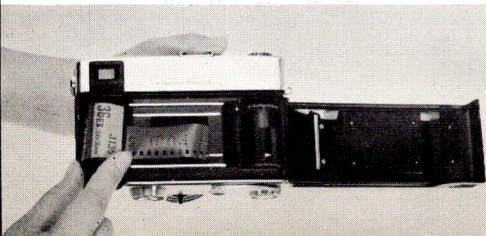


- 1.** Pull down the camera Back Slide Lock. The camera back will spring open automatically. Swing it open completely.

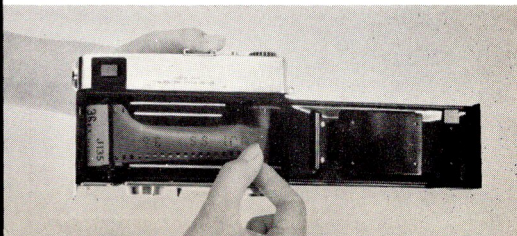


- 2.** Rotate the film take-up spool with your thumb in the direction of the White Arrow, until the slot is clearly visible.

- 3.** Insert any standard 35 mm cartridge in the film chamber as shown, with the narrow leader of the film at the bottom.



- 4.** Thrust the end of the film leader into the Film Take-Up Spool Slot until it catches securely, making sure the sprocket teeth engage the film perforation.

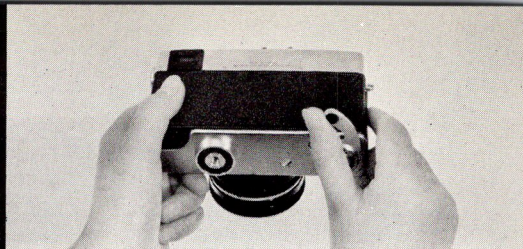


How to load your film (cont'd)



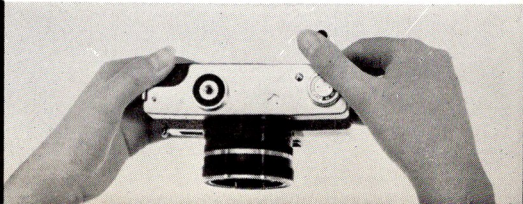
- 5.** While gently holding down the film cartridge with your thumb, press the shutter release button. Give the Film Advance Trigger one full stroke to start the film on the take-up spool and to take up the slack in the film leader. The teeth of the Film Sprocket Wheel should now engage the sprocket holes in the film. If they do not, rotate the take-up spool with your finger until a sprocket tooth engages a sprocket hole in the film. Be sure the sprocket tooth does not disengage as you close the camera back.

Press camera back in firmly to close camera; lock back in position by pushing up the Slide-Lock. Note the Exposure Counter is now at "S".



- 6.** Press the shutter release button and advance the trigger. Repeat several times until the number "1" appears in the exposure counter window on bottom of camera. You are ready for your first exposure.

- 7.** One short stroke of the Trigger advances film, winds shutter and counts exposures. The Rewind Button on the bottom of the camera turns when the film is advancing properly.



SPECIAL NOTE REGARDING THE **LAST** SHOT IN THE ROLL

If you try to continue shooting *after* the last possible exposure has been made on your roll of film (20 or 36 depending on the film being used), the film advance trigger will "lock" at about half its usual full stroke distance. **DO NOT FORCE IT ANY FARTHER.** Just depress the film rewind button. This unlocks the trigger which can now be advanced its full stroke distance. The following explains how to unload the film.

UNLOADING the FUJICA AUTO-M

After the last exposure has been made, it is necessary to rewind the exposed film back into the original cartridge before removing it from the camera. To do this, press the Rewind Button. It will remain depressed. Then swing out the handle of the Rewind Crank and turn in the direction of the engraved arrow. You are now rewinding the exposed film back into the original cartridge. A slight resistance will be felt while doing this. Continue winding until no more resistance is felt. The film is now totally contained in the cartridge.

Open the back of the camera by sliding the back lock down and remove the loaded cartridge from the chamber.
NOTE: It is always advisable to have exposed film processed as quickly as possible to retain maximum detail in your pictures.



How your **FUJICA** takes perfect pictures **automatically!**

In any picture situation, correct exposure depends on two factors: The amount of light falling on the film, which is determined by the lens opening, and the length of time the light is allowed to fall on the film, which is determined by the shutter speed. With the Auto-M set at AUTO, the Electric Eye and the Programming Shutter automatically set the correct combination of lens opening and shutter speed for the lighting situation and the film you are using. When you press the shutter release, three things happen:

1. The *Computer* Electric Eye automatically sets the correct lens opening in relation to
2. your pre-selected *shutter speed*. But, the shutter speed is automatic, too! Let's say you have set a shutter speed of 1/125 second. If this shutter speed is too fast, even with the lens fully open, for correct exposure, the Programming Shutter will automatically seek and select the correct slower shutter speed that will give perfect exposure. Conversely, if the speed you have set is too low, even with the lens at its smallest opening, for correct exposure, the Programming Shutter will seek and select the faster shutter speed that will give correct exposure.
3. *Automatic Locking*. In addition to "setting itself" for any light, your FUJICA also "locks itself" when the light's not right. For

example, if you try to take a picture in a very low light level situation, the built-in computer will select the slowest shutter speed and the largest lens opening. If, however, this combination will not result in a correct exposure because the light is entirely too dim, the FUJICA "locks itself". You cannot press the shutter release button all the way down and you will not hear the usual click. This is your signal to switch to manual and make a time exposure or switch to flash. (Page 22 tells you how to make a time exposure and how to use flash.)

To select a shutter speed, rotate the Shutter Speed Ring until the desired speed aligns with the Red Diamond. Note that the "B" position cannot be selected while the Auto-M is set at AUTO. This is the position you will use for time exposures.

Close-Up Light Lock

For critically correct automatic exposures, such as in shooting portraits against an excessively dark or light background, approach your subject and hold the camera a few inches from his face. Press the Shutter Release halfway down and hold it there. Then, back up to your shooting position, focus the camera and shoot. The AUTO-M will "hold" the "close-up" exposure setting... automatically.

NOTE: The automatic shutter speed shifts described on this page all take place in a fraction of a second. If you want to shoot at a fixed combination of shutter speed and lens opening, the FUJICA can be switched to manual operation. See page 18.

FOCUSING YOUR FUJICA AUTO-M

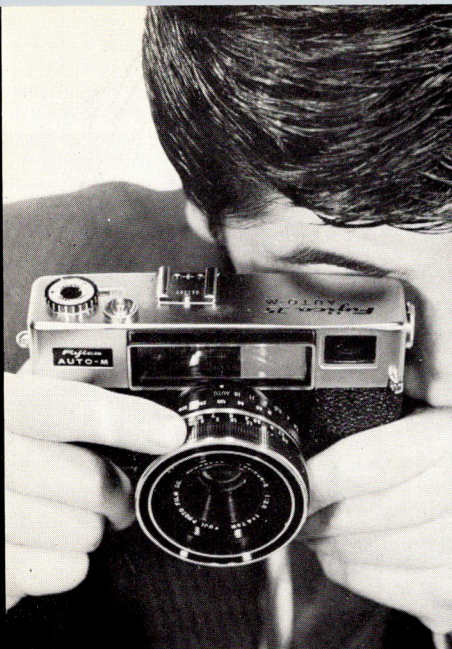
Focusing and composing your FUJICA is unusually simple...even in dim light. Hold the camera at eye level and look through the viewfinder. Note that everything you see appears surprisingly bright and clear. The viewfinder can also be considered your Preview Picture Window because everything you see will be in your finished color slide or print.

GOLD SQUARE FOCUSING

When viewing your subject, you'll notice a gold square in the center of the viewfinder. If you are out-of-focus, you will see two images of the subject side by side in this gold square. To focus the camera, rotate the Focusing Ring until the images are exactly superimposed, appearing as one image. It is best to focus with the left hand to avoid covering the focusing window on the camera's right. Ignore the numbers on the Focusing Ring unless you wish to allow for "Depth of Field". This is explained on Page 23.

AUTOMATIC PARALLAX CORRECTION

When you rotate the Focusing Ring, note that the Gold Frame seems to move in the Viewfinder Window. This is automatic compensation for the difference in viewpoint between the viewfinder and the lens. It will eliminate chopping off heads in extreme close-ups. Just keep your subject in the center of the frame.



Rotating the Focusing Ring to get sharp focus.

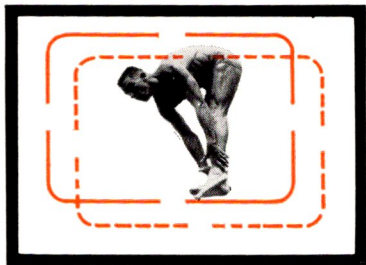


Out-of-Focus



In Focus

Automatic Parallax Correcting Gold Frame



Just keep your subject within the gold frame and you eliminate "cropped" heads or feet.

How to use your **FUJICA . . . Manually**

you are now in complete control

As your photographic interests and skills grow, your FUJICA AUTO-M permits you to make manual settings for any special or unusual effect you may wish.

You can experiment with any combination of shutter speeds and lens openings. You can "bracket" your shots . . . that is, shoot the same picture at several different settings and then select the slide or print you prefer.

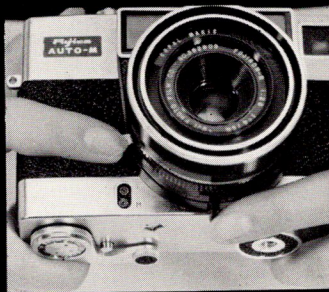
The lens openings are numbered -2.8, 4, 5.6, 8, 11 and 16. The largest opening is 2.8 and the smallest is 16. The shutter speeds include 1/30th, 1/60th, 1/125th, 1/250th and 1/500th second. These are marked 30, 60, 125, 250 and 500 on the shutter speed ring.

To set a lens opening, first advance the film trigger, depress the setting lock and rotate the lens opening ring until the setting you wish is aligned with the orange dot. Note that you cannot rotate the lens opening ring out of the AUTO position (automatic) until you have advanced the film trigger.

To set a shutter speed, merely rotate the shutter speed ring until the speed you want is aligned with the red diamond.



Advance the film trigger



Set your lens opening



Set your shutter speed



FRACTIONAL EXPOSURE CONTROL .

perfect exposures, even in difficult lighting situations . . . **automatically!**

Although most of your picture taking will be done with the FUJICA set at “Automatic”, there will be times when you’ll want to slightly increase or decrease the exposure. (See examples.) It’s like tuning up your car’s engine for the finest possible performance, but much simpler, of course. All you have to do is turn a dial.

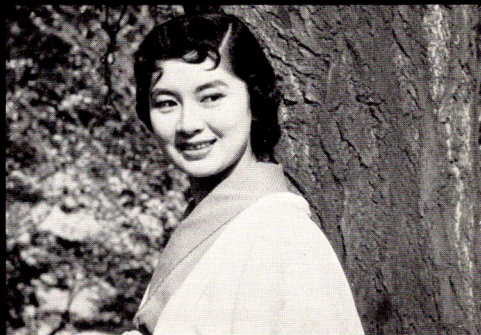
Note the white mark in the center of the Fractional Exposure Setting Ring (No. 19). Also examine the Fractional Exposure Control Settings (No. 18). Keep the White Mark aligned with the Red Triangle for normal shooting. To increase exposure by one f/stop, move the White Mark to the Orange Dot on the + side. To decrease exposure by one f/ stop, move the White Mark to the Orange Dot on the — side.

Some Typical Examples :



Strong Back or Side Light

With sun directly behind or at the side of your subject, set the Fractional Exposure Control at the orange dot on the + side. This will avoid the shadows filling in solid black on your subject's face while retaining a lovely halo of light around her head.



Brilliant Front Light

With the sun directly behind you and your subject against a dark background, set the Fractional Exposure Control at the orange dot on the - side. This will avoid "burning out" of details in the foreground and will retain soft shadows that help "model" the subject.

How to take **FLASH** Pictures with your **FUJICA**

Your FUJICA's shutter is fully synchronized for both flashbulbs and electronic flash. For flashbulbs, insert the cord of your flash unit in the socket (No. 14) marked "M".

For electronic flash, insert the unit's cable in the socket marked "X".

TIME EXPOSURES with your FUJICA AUTO-M

For time exposures, set the camera for manual by first advancing the film trigger. Then press the setting lock (No. 13) and rotate the lens opening ring (No. 6) until the aperture you wish is aligned with the orange dot (No. 7). Now rotate the Shutter Speed ring (No. 5) until the yellow "B" aligns with the red diamond. Focus. Press the shutter release button (No. 15) and the lens will remain open as long as you keep the button depressed. When you release it, the lens will close.

How to use the FUJICA Flash Synchronization

Determine from instruction sheet packed with your film its Tungsten rating. Set shutter speed selector ring at speed you want. Refer to chart for guide number based on film rating and shutter speed. Divide this guide number by the number of feet between your flash bulb and subject and set lens aperture closest to the number you get. For example: Assume that you are using a film with an ASA of 64 and you have set the shutter speed at 1/125th. Refer to chart and you will note that this combination gives you a guide number of 135. If your subject is 10 feet away, divide the 135 by 10. The result is 13.5. Set the lens opening between 11 and 16.

FLASH EXPOSURE GUIDE NUMBERS FOR BLACK & WHITE & INDOOR COLOR FILM (±5 or ±25 BULB IN 4-5" POLISHED REFLECTOR) INSERT FLASH CORD INTO "M" SOCKET

ft/(m)

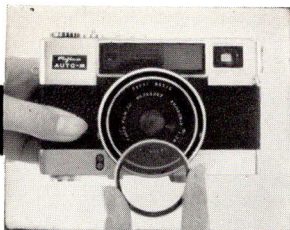
Tungsten Film Rating	Up to 1/60'	1/125"	1/250"	1/500"
16	90(27)	70(21)	50(15)	35(11)
20	110(34)	90(27)	70(21)	50(15)
25	120(37)	95(29)	75(23)	55(17)
50	155(47)	125(38)	95(29)	70(21)
64	170(51)	135(41)	105(32)	75(23)
100	240(73)	190(58)	145(44)	105(32)
160	340(104)	270(82)	210(64)	150(46)

DEPTH-OF-FIELD

Depth of field is the distance behind and in front of your subject which will appear to be in sharp focus. It varies with the distance at which the camera is focused (See pages 14 & 15). A small lens opening results in greater depth of field. A large lens opening results in a shallow depth of field. You can use depth-of-field creatively to throw unwanted or cluttered backgrounds out-of-focus while keeping your subject sharply focused. The following table will give you proper distance settings (No. 3) for desired depth-of-field at each lens aperture.

ft. m. f.	2.7 0.8	3	— 1	3.5	4 1.2	5 1.5	7 2	10 3	15 5	30 10	∞ ∞
2.8	2.61~2.78 0.77~0.82	2.89~3.10 —	— 0.96~1.04	3.36~3.64 —	3.82~4.19 1.14~1.25	4.72~5.30 1.41~1.59	6.47~7.61 1.85~2.16	8.96~11.3 2.69~3.38	12.8~18.0 4.20~6.17	22.3~46.0 7.24~16.1	86.3~∞ 26.3~∞
4	2.58~2.82 0.76~0.83	2.85~3.15 —	— 0.94~1.05	3.30~3.71 —	3.75~4.28 1.12~1.28	4.61~5.45 1.38~1.63	6.27~7.91 1.80~2.24	8.58~11.9 2.58~3.58	12.0~20.0 3.93~6.86	20.0~59.6 6.47~21.9	60.4~∞ 18.4~∞
5.6	2.54~2.88 0.75~0.85	2.80~3.22 —	— 0.92~1.08	3.23~3.80 —	3.66~4.40 1.10~1.32	4.48~5.65 1.34~1.69	6.02~8.35 1.73~2.35	8.11~13.0 2.44~3.88	11.1~23.0 3.62~8.06	17.7~98.5 5.67~41.7	43.1~∞ 13.2~∞
8	2.47~2.96 0.73~0.87	2.72~3.33 —	— 0.90~1.12	3.13~3.95 —	3.53~4.61 1.06~1.38	4.29~5.99 1.29~1.79	5.68~9.11 1.64~2.55	7.51~14.9 2.26~4.45	10.0~29.8 3.23~10.9	15.1~∞ 4.79~∞	30.2~∞ 9.20~∞
11	2.40~3.07 0.71~0.90	2.63~3.47 —	— 0.87~1.17	3.01~4.16 —	3.38~4.89 1.01~1.46	4.07~6.47 1.22~1.93	5.30~10.2 1.54~2.85	6.87~18.3 2.07~5.43	8.9~47.3 2.86~19.8	12.7~∞ 4.00~∞	22.0~∞ 6.69~∞
16	2.29~3.28 0.68~0.96	2.50~3.74 —	— 0.82~1.27	2.84~4.55 —	3.16~5.44 0.95~1.62	3.75~7.47 1.13~2.22	4.78~13.0 1.39~3.53	6.01~29.6 1.81~8.62	7.5~∞ 2.39~∞	10.0~∞ 3.15~∞	15.1~∞ 4.60~∞

Circle of Confusion 0.03 mm



How **Filters**

can help you take better pictures

Filters are colored discs of optical glass which are placed in front of the lens to emphasize or de-emphasize colors in the subject you are photographing. For example: a yellow filter may be used with black-and-white film to make clouds stand out against the sky by darkening the blue of the sky.

Your FUJICA AUTO-M accepts standard $\#5$ or FUJICA screw-in filters.

Filters for **Color** Photography

Two kinds of filters are commonly used for color photography...

85-C—permits use of indoor (tungsten) color film in sunlight. For ASA correction, see instruction sheet packed with the film.

SKYLIGHT—“ultra-violet” filter cuts haze. No ASA correction is needed.

Filters for black-and-white photography

These come in a great variety of colors, each for a specific purpose. Some of the commonly used filters are described in the table on this page.

Since the filter screens out part of the light, more exposure is needed to compensate for its use. Each filter is assigned a "filter factor". This is a number by which exposure must be increased to compensate. For example: if you use a filter with a factor of 2, exposure must be doubled. The handiest way to do this is to divide the filter factor into the ASA speed rating of the film and set that number in the ASA window.

Example : Film with an ASA 400 Yellow Filter, Factor 2
400 divided by 2 is 200
Set 200 in ASA window

FILTER GUIDE - Black & White

D = Daylight

T = Tungsten

Filter	Uses	Filter Factor
(light yellow)	darkens blue sky for cloud effects, lightens foliage, corrects rendition of colors in daylight	D 2 T 1.5
(deep yellow)	cuts haze, darkens blue sky, for aerial & landscape pictures	D 3 T 2
(light green)	outdoor portraits, lightens foliage, corrects rendition of colors in tungsten light	D 3 T 2
(red)	very dark skies, cuts haze	D 4 T 3

Special Note :

The filters shown on chart are not to be used with color films which require specific filters...see film manufacturer's recommendations for using indoor type film outdoors and visa versa.

How to STOP FAST ACTION with your FUJICA AUTO-M

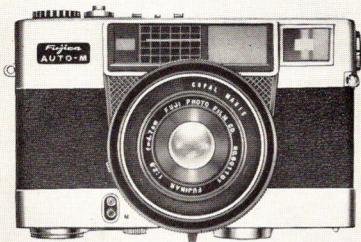
Two factors govern the amount of shutter speed you'll need to stop action. 1. The distance between the camera and the subject; the closer the moving subject is to the camera, the faster the shutter speed must be. 2. The angle at which the action is taking place; action directly across the lens requires most shutter speed—action at a 45° angle to the lens requires a medium-fast shutter speed—action directly towards or away from the camera requires no increase in speed.

The table shown on this page will give you an approximation of the shutter speeds needed to stop various kinds of action. The word "Pan" means to follow the action by turning your body with your camera held at eye-level shooting position and taking the shot as you turn.



Subject at 25 ft/8m	away from camera	45° to camera	Across View
Walking	1/30	1/60	1/125
Children at play swimming, skating street activity	1/60	1/125	1/250
Vehicles at 20 m./30 km. p.h., football, track	1/125	1/250	1/500
Vehicles at 40 m./60 km. p.h., tennis, skiing	1/250	1/500	1/500 and pan
Horse racing, airplanes	1/500	1/500	1/500 and pan

HOW TO CARE FOR YOUR FUJICA AUTO-M



Cleaning the Lens Clean the lens as *infrequently* as possible. Never scrub the lens as this may scratch the fine coating. Use an ear syringe to blow out dust particles. Then, remove larger bits of dirt with a camel's-hair lens brush or #2 sable artist's brush. **ALWAYS REMOVE FINGERMARKS IMMEDIATELY.** Body acids can etch fingermarks into the lens coating. Use a good standard lens tissue and wipe the lens surface lightly. Stubborn marks may be removed with a drop of lens cleaning fluid on the tissue.

Wipe the electric eye and viewfinder windows with a lens tissue, not a handkerchief.

Remove any dust and film particles from the interior of the camera after every roll of film. Blow out particles with an ear syringe. Never blow into the camera. Remove stubborn particles with a brush, as above. Clean the pressure plate with a lens tissue. To keep your camera looking bright and new, always keep it in its case when not in use.



In U. S. A.:

FUJI Photo Optical Products Inc.

111 Fifth Avenue, New York 3, New York

In Canada:

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