

Yashica FX-D

Basically a Contax 139 Quartz
without better flash abilities / display readouts

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DESCRIPTION OF PARTS

- | | |
|-------------------------------------|---|
| (1) Exposure Counter | (11) Film Rewind Crank |
| (2) Shutter Speed Dial | (12) Film Rewind Knob |
| (3) Electromagnetic Shutter Release | (13) Exposure Check Button |
| (4) Film Advance Lever | (14) (Auto Exposure)
Lock Lever/Self-Timer Lever |
| (5) Shutter Speed Index | (15) Self-Timer LED |
| (6) Accessory Shoe | (16) Lens Release Button |
| (7) Flash-Ready Signal Contact | (17) Focusing Ring |
| (8) Direct X Contact | (18) Aperture/Distance Scale Index |
| (9) Exposure Compensation Index | (19) Aperture Ring |
| (10) Film Speed Dial | (20) Aperture Mark |



(21) Film Chamber

(22) Film Rewind Stud

(23) Film-Speed-Dial Release Button

(24) Viewfinder Eyepiece

(25) Cable Release Socket

(26) Film Transport Sprocket

(27) Take-up Spool

(28) Camera Back

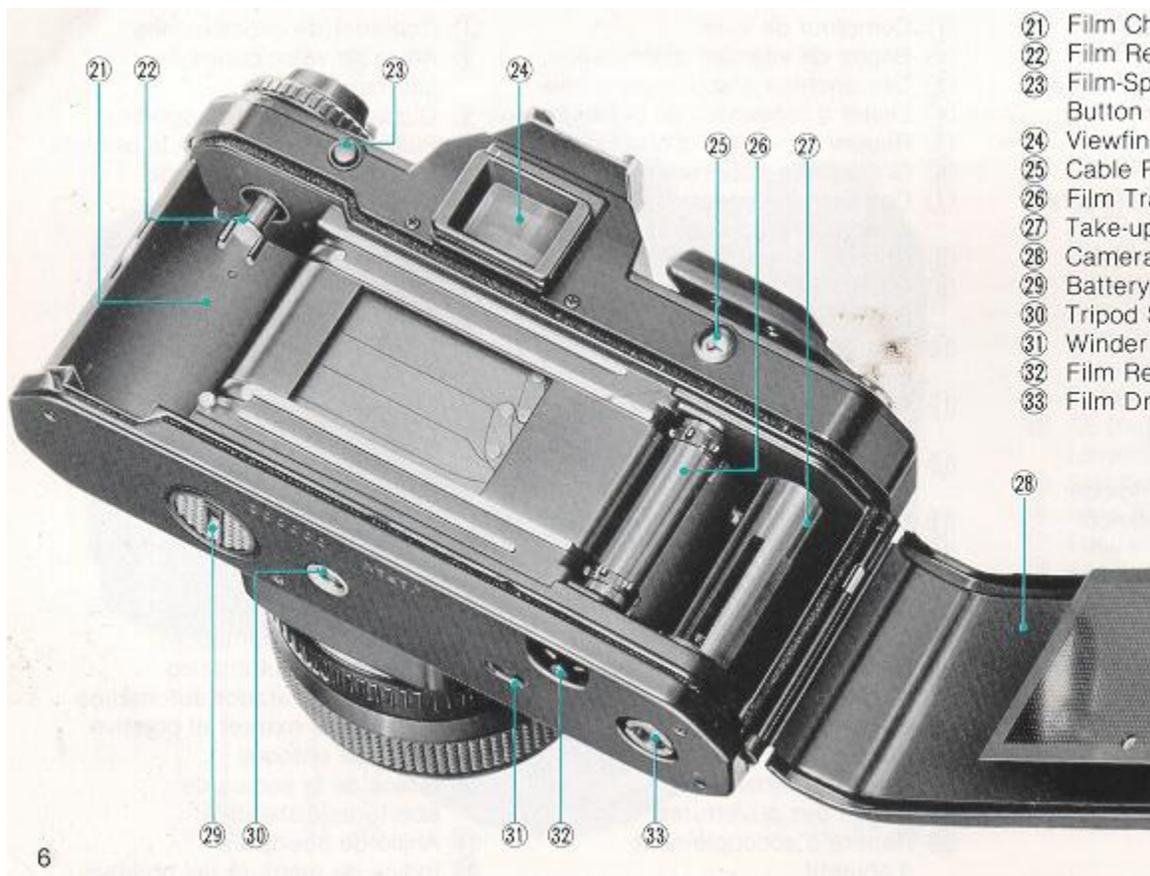
(29) Battery Compartment Cover

(30) Tripod Socket

(31) Winder Coupling Terminal

(32) Film Rewind Release Button

(33) Film Drive Coupling



- 21 Film Ch
- 22 Film Re
- 23 Film-Spe
- Button
- 24 Viewfinc
- 25 Cable R
- 26 Film Tra
- 27 Take-up
- 28 Camera
- 29 Battery
- 30 Tripod S
- 31 Winder
- 32 Film Re
- 33 Film Dri

LENS CHANGING

Mounting the Lens First remove the camera-body cap and then insert the lens mount into the camera-body mount, matching the red dot on the lens mount with that on the camera body. Then, gripping the lens barrel firmly, turn the lens clockwise until it locks with a click, bringing the red dot on the camera opposite the aperture/distance scale index.



Removing the Lens While pressing the lens release button, turn the lens counterclockwise slightly and remove it from the camera-body mount. Always keep caps on the camera-body mount and the lens mount when the lens is left off the camera. When using a lens cap of the clip-on type, attach or remove it from the lens by pressing in the two side-tabs.

- Avoid touching camera interior or lens surface with your fingers.
- Avoid direct sunlight when removing or mounting the lens with film loaded in the camera.

INSTALLING BATTERIES

Batteries power all the camera's necessary functions including shutter system, exposure control, etc. The FX-D Quartz will not operate without batteries.

Use two 1.5 V silver-oxide batteries (SR44, Eveready S76, Ucar S76, Mallory MS-76 or equivalent) or alkaline manganese batteries (LR44 or equivalent).



1. Open the battery compartment cover on camera base by turning it counterclockwise with a coin.
2. Insert two batteries into the battery holder according to polarity diagram shown on the holder. Then replace the holder in the battery compartment and firmly secure the compartment cover.

To check battery condition, press the exposure check button and note the LED (Light-emitting diode) display in the viewfinder. When the batteries are good, the LEDs will light steadily or flash at regular intervals as shown in the illustration below. The FX-D Quartz is designed to give you advance warning when the camera is about to stop functioning due to weakened batteries. When the batteries are weak, the normal lighting pattern will change to that shown on the right side of the following illustration.

BATTERY CHECK

LEDs Leucht-dioden LED LED	Good Batteries Gute Batterien Piles en bon état Pilas en buen estado	Weak Batteries Schwache Batterien Piles affaiblies Pilas gastadas
Steady Light Ständiges Aufleuchten Eclairément ininterrompu Luz continua		
Flashing Blinken Clignotement Intermitente	 1 sec./1 s/1 sec./1 seg.	 1 sec./1 s/1 sec./1 seg.

Batteries must be replaced--when the batteries are weak, causing the LEDs to flash in an erratic pattern; or when the voltage drops below rated level, causing the LEDs to remain unlit even if the battery check or shutter release button is pressed.



AE LOCK LEVER WARNING

When the "AE-L" (AE Lock) mark is set on the index mark "▼", the power is turned on and the LED in the viewfinder flashes to warn that the AE Lock is operating. Switch the lock lever in this position, power will continue to drain unless the lever is reset to the "o": mark.

**TO PREVENT UNNECESSARY BATTERY DRAIN,
always reset the lever to the "0" mark when AE lock function is no longer needed.**

Battery Precautions

Batteries are apt to perform poorly in sub-zero temperatures, causing picture taking difficulties and LED failure. Keep the camera as warm as possible and carry extra batteries just in case those in the camera should fail. Batteries affected by such extreme temperatures will recover power after being kept warm for a while.

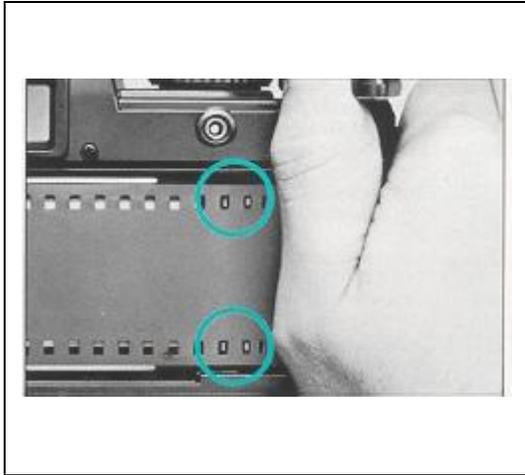
- When installing batteries, wipe the cell cap and base clean. Oily residue on battery terminals could cause poor electrical contact.
- Remove the batteries when the camera is not used for extended periods.
- Make it a rule to carry spare batteries with you on long trips.
- Do not throw batteries into a fire or attempt to take them apart. THIS IS DANGEROUS. Also keep batteries out of reach of small children.

FILM LOADING

*Always use a standard 35 mm film cartridge (12, 20, 24 or 36 exposure roll).
Avoid direct sunlight when loading film.*



1. Open the camera back by pulling the film rewind knob all the way out.
2. Place the film cartridge in the film chamber. Then, push the rewind knob back in, turning it slightly until it falls into position, if necessary.
3. Draw out the film leader and insert the tip into any slot on the take-up spool.



4. Advance the film slightly with the film advance lever until the perforations on both sides of the film engage the sprocket teeth. If necessary, trip the shutter for blank shots and keep advancing the film until both rows of perforations engage the sprocket. Close the camera back and press until it locks into place.

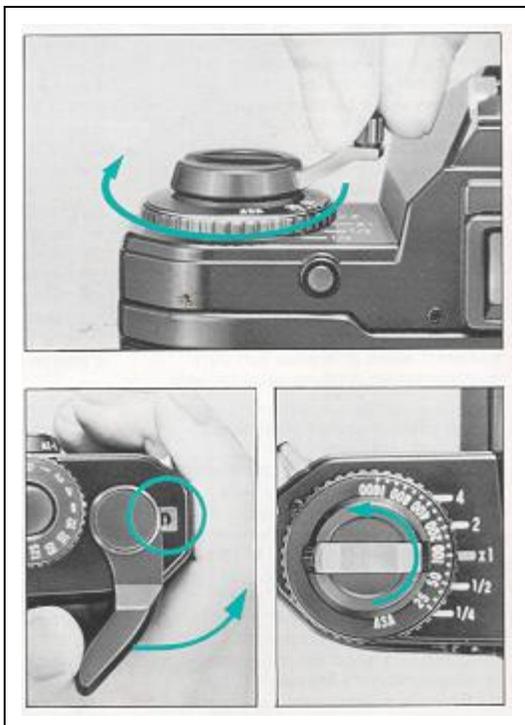
· Use one full stroke of the film advance lever to advance the film. The electromagnetic shutter release will not function unless the lever is given a full stroke. The film advance lever is easier to operate if kept in the standoff position (20° arc).

When taking blank exposures always be sure to remove the lens cap and point the camera toward a bright area, or set the shutter speed dial to a fast shutter speed (1/1000, 1/500 sec., etc.). Reset the shutter speed dial to AE after blank exposures have been made. Otherwise, excessively long exposures will result, hindering film advance to the first exposure.

5. Unfold the rewind crank and turn it gently in the direction of the arrow to take up film slack.

6. Wind the film advance lever and trip the shutter alternately until the exposure counter reads "1". Now you can start taking pictures. (Set the shutter speed dial to AE or manual mode.) If the film rewind knob rotates in unison with the operation of the film advance lever, it means that the film is feeding properly.

Exposure Counter

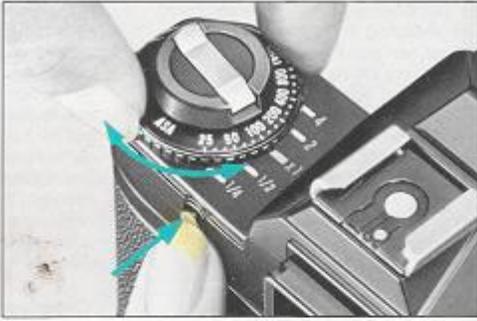


The exposure counter moves each time the film advance lever is fully stroked, and automatically resets to "S" (Start) when the camera back is opened, regardless of whether the camera is loaded or not.

The exposure counter starts with "S", then "1", followed by even numbers from "4" through "36". The odd numbers are indicated by dots marked between the even numbers.

The orange-colored numbers "12", "20", "24" and "36" correspond to the number of exposures in standard 35mm film cartridges.

SETTING THE FILM SPEED



While pressing the release button for the film speed dial, turn the film speed dial until the ASA film speed number for the film being used lines up with the index mark "X1" (orange colored). Then, let go of the release button and check to see that the dial is properly set on a click-stop.

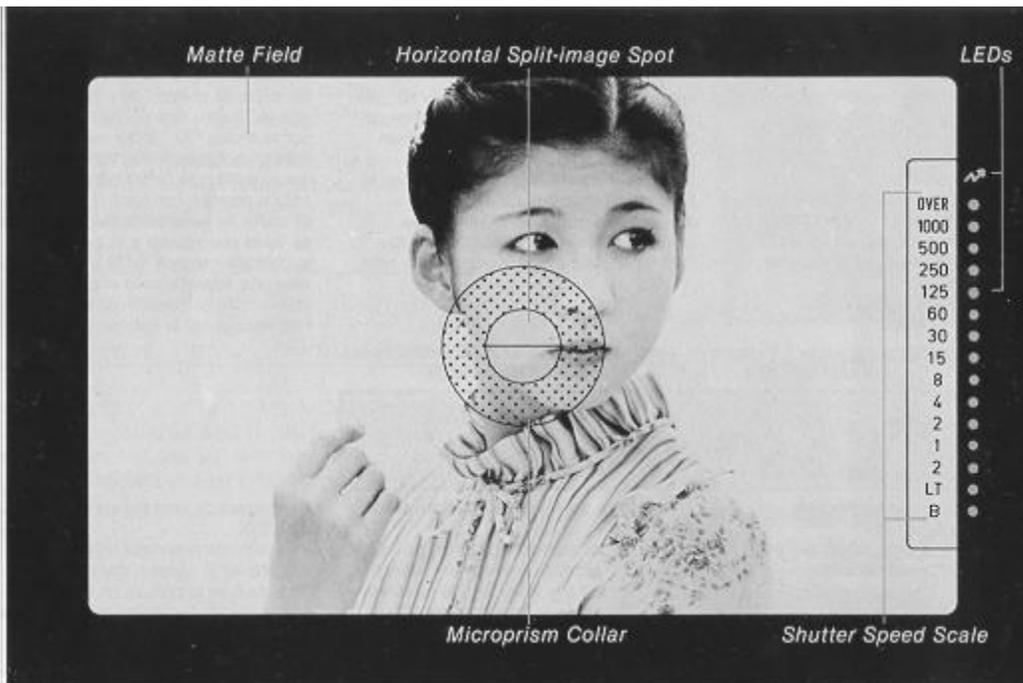
The film speed dial must be set to the speed of the film loaded in the camera to insure proper exposure.

The ASA (or DIN) film speed rating is shown on the film box.



Memo Holder with ASA/DIN Conversion Scale

To help you recall what kind of film is being used in the camera, insert film box tab into the handy memo holder. The holder can also be used for keeping notes and data.



The viewfinder of the FX-D Quartz, features TTL (through-the-lens) metering at full aperture for bright, easy focusing. It also gives other essential information.

Split image Spot/Microprism Collar

A convenient three-way system incorporating a horizontal split-image spot in the center, surrounded by a microprism collar, and an outer matte field permits rapid, sharp focusing.

Shutter Speed Scale

The figures along the right side of the viewfinder indicate the various shutter speeds. The black figures indicate speeds from 1/1000 second down to 1 second (for example, "1" = 1 second, "2" = 1/2 second, ... "125" = 1/125 second, ... "1000" = 1/1000 second, etc.). The red "2" represents 2 seconds; the red "LT", long exposures up to 11 seconds on AUTO; and "B", shutter selector is on B (Bulb), or if selector is on AUTO, it indicates underexposure. "OVER" at the top of the scale denotes overexposure.

LED Indicators

When the exposure check button is depressed, one or more of the red LEDs (light-emitting diodes) to the right of the shutter speed scale will light steadily or flash to indicate the shutter speed in use.

The LEDs will remain lit for 10 seconds after releasing the exposure check button. The " (M) " mark at the top of the LED display lights green when the camera's exclusive CS-201 auto flash unit is fully charged.

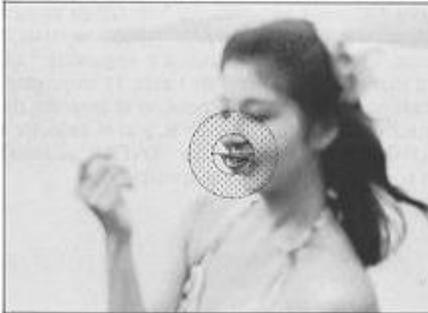


Focusing' with the FXD Quartz is done by using any element of its convenient three-way focusing system consisting of a split-image spot, a microprism collar and an outer matte field.

FOCUSING



In focus/Scharf/Bonne mise au point/Enfocada



Horizontal Split image Spot

When using the split-image spot to focus, turn the focusing ring until the top and bottom halves of the image merge. If the image is out of focus, the two halves will not merge.

Microprism Collar/Matte Field

To focus with the microprism collar, turn the focusing ring until the glittering effect disappears from the collar area, giving you a sharp, clear image when in focus. To focus with the outer matte field, turn the focusing ring until the image appears sharp and clear, free of any foggy effect.

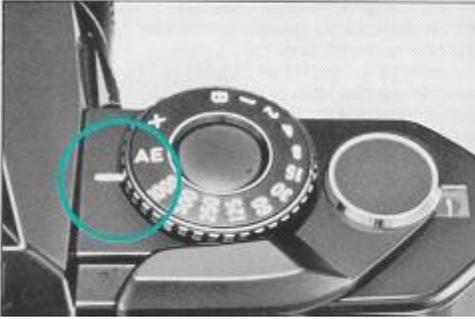


When using a lens of relatively small maximum aperture (f/4 or slower), or when undertaking close-up photography, the microprism collar and the split-image spot are apt to darken, causing focusing difficulty. In such a case, use the outer matte field for focusing.

Dipter Lens

Special correction lenses are available for those who find it difficult to focus with their eyeglasses on. There are 8 types available: -5D (diopters), -4D, -3D, -2D, OD, + 1 D, + 2D, and + 3D. Choose the one suited to your eyesight needs. These lenses should be used with an accessory eyecup.

SHUTTER SPEED DIAL



The shutter speed dial regulates the length of time the light exposes the film plane. The dial is set by turning the desired speed reading to the shutter speed index. The shutter cannot be used at intermediate settings.

"AE" (Automatic Exposure)

In the AE mode, the camera will give correct exposures by automatically controlling the shutter speed for the prevailing aperture setting and image brightness. To check the shutter speed selected, press the exposure check button and note the LED reading in the viewfinder.

"1000" to "1", "X" and "B" Settings The figures such as "1000", "60" and "1" represent 1/1000, 1/60 and 1 second respectively, and adjusting the dial at these figures will set the respective shutter speeds. Light transmission is halved with each larger number (for example, from "125" to "250") on the scale, and conversely is doubled with each smaller number. The "X" mark denotes flash synchronization at 1/100 second. "B" stands for Bulb, which is used to make long exposures under your control.

SETTING THE APERTURE

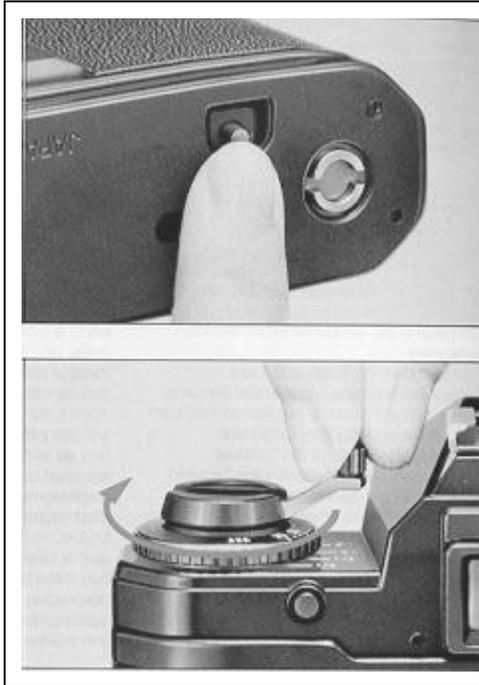
The aperture ring regulates the amount of light passing through the lens to the film plane. To set the aperture, align the desired f/number on the ring with the aperture/distance scale index.



The amount of light transmission is halved with each larger number (such as from "4" to "5.6") on the scale, and conversely it is doubled with each smaller number. The aperture also controls the depth of field, a lens property giving you varying depth in the plane of focus at different apertures. The aperture ring can be used at in-between positions. Except for some special lenses, all Yashica and Zeiss lenses feature automatic diaphragms. The automatic diaphragm lens, when mounted on the camera, remains at full aperture even when the aperture setting is at minimum. When the shutter release is pressed the lens stops down and reopens immediately after wards.

FILM REWIND

When the exposure counter shows you have completed a roll of film, always be sure to rewind the film before opening the camera back.

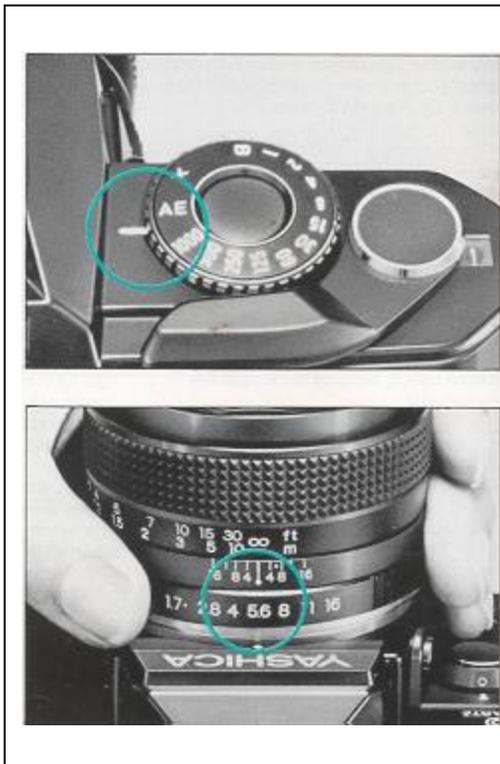


1. Press the film rewind release button on the base of the camera. Continuous pressing is unnecessary as the button is an automatically resetting type.

2. Unfold the film rewind crank and turn it in the direction of the arrow. Keep turning until you feel a light resistance shortly before the film comes off the take-up spool and continue turning until the crank eventually rotates freely.

· If the film is wound beyond its last frame, it will be only partially advanced. When this occurs, press the film rewind release button and rewind the film. Avoid advancing the film forcibly or you will tear the film.

AUTOMATIC EXPOSURE



Your FX-D Quartz is an aperture priority automatic exposure camera. You merely set the lens aperture and the camera will automatically select the correct shutter speed for the prevailing lighting conditions. The correct shutter speed is indicated by the LEDs in the viewfinder. The camera features center-weighted metering at full aperture, heavily weighted to measure the light in the viewfinder center.

1. Set the Shutter Speed Dial on "AE"

Now your camera is ready to automatically select the correct shutter speed using its electronically controlled metering system.

2. Setting the Aperture

Turn the aperture ring to any desired f/stop. Use the following table as a guide in selecting the appropriate f/number.

Lighting condition strong (Using ASA 100 Film)	f/number
Outdoors, bright sunlight	16, 11, 8
Outdoors overcast	5.6, 4
Indoors or night photography	2, 2.8, 2, 1.7, 1.4



2. Focusing and Composing Look through the viewfinder, compose the picture, and focus using the split-image spot, the microprism collar or the outer matte field.

Check the Exposure Center the subject in the viewfinder and press the exposure check button. If the LED light against any of the readings from "1000" through "LT", the indicated shutter speed will give you the correct exposure. If two LEDs light up simultaneously, the shutter will operate at an intermediate shutter speed between those indicated by the two numbers. (For further details, refer to the section on "Exposure Check" shown below.)



Press the Shutter Release to Take Picture If the shutter release is held down after the shutter has tripped, an LED will light to indicate the shutter speed that was used for the exposure. And it will remain lit while the finger is pressing down on the shutter release.

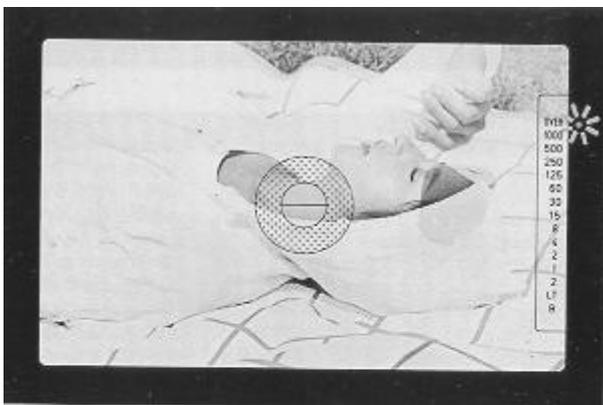
Shooting at Particular Shutter Speeds Although FX-D Quartz is an aperture-priority automatic exposure camera, it can also be used on shutter priority mode to shoot at any particular shutter speed. Press the exposure check button and turn the aperture ring until the LED indicator opposite the desired shutter speed lights, then press the shutter release.



<Exposure Check>

When the exposure check button is depressed, the red LEDs in the viewfinder will light to indicate the correct exposure, or flash to warn of overexposure (with an audible warning) or underexposure. The LEDs will remain lit for 10 seconds upon release of the exposure check button. However, if the shutter is released while the LEDs are lit, they will go off after the exposure has been completed.

When Any LED Lights from "1000" Through "LT" exposure will be correct and you may shoot immediately. If one LED lights, the shutter will operate at the speed indicated on the scale. When 2 LEDs light simultaneously, an intermediate shutter speed between the two indicated speeds will be used. If "30" or a slower speed is indicated, there is a danger of camera movement when hand-held exposures are made. In this case, use an aperture that will give a reading above "30", or use a tripod or other means of steadying the camera during exposure.



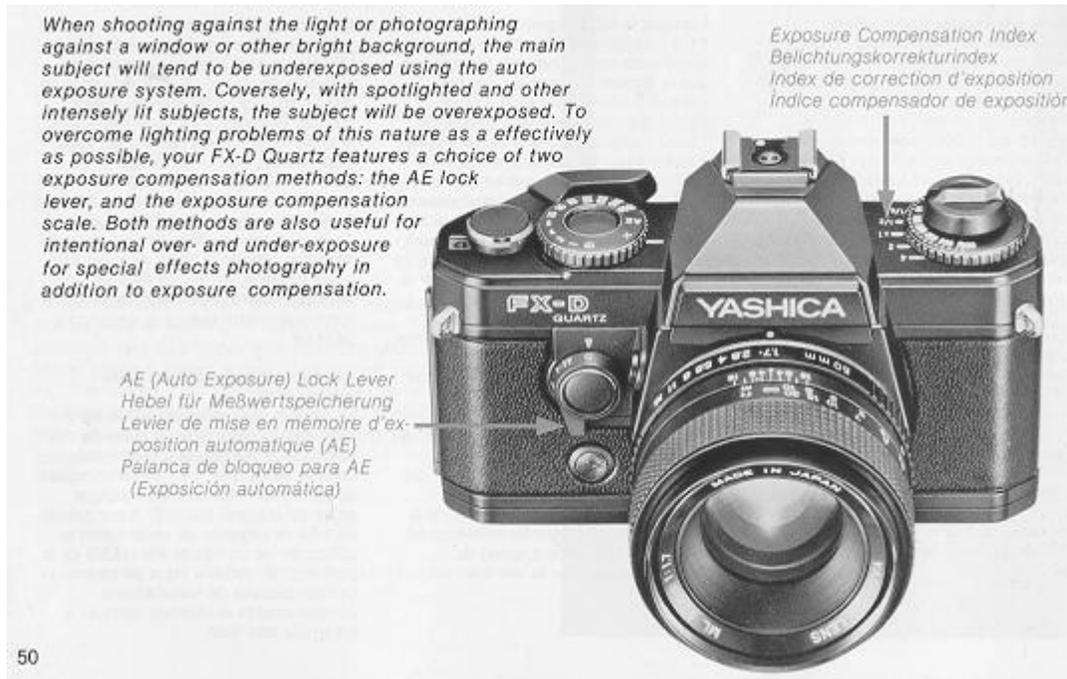
When the LED in the "Over" Position Flashes the camera is warning of overexposure. At the same time, an audible warning will sound. Since the light is too bright, turn the aperture ring until "1000" or a lower number is indicated (and the audible warning stops) before shooting. If the LED continues to flash in the "Over" position and the audible warning persists even after you have stopped down the aperture ring to its limit, use a neutral density filter (a light reduction filter) to reduce light transmission.



When the LED in the "B" Position Flashes the camera is warning of underexposure. Turn the aperture ring to a wider lens aperture until "LT" or a faster shutter speed is indicated before shooting. (At "LT" or under 1/30 sec. position, the use of a tripod is recommended.) If the LED in the "B" position still flashes even after you have opened the aperture fully, switch to flash photography.

EXPOSURE COMPENSATION

When shooting against the light or photographing against a window or other bright background, the main subject will tend to be underexposed using the auto exposure system. Conversely, with spotlighted and other intensely lit subjects, the subject will be overexposed. To overcome lighting problems of this nature as effectively as possible, your FX-D Quartz features a choice of two exposure compensation methods: the AE lock lever, and the exposure compensation scale. Both methods are also useful for intentional over and under-exposure for special effects photography in addition to exposure compensation.



<Using the AE (Automatic Exposure) Lock Lever>

Set the AE lock lever by aligning the "AE-L" mark with the orange-colored "▼" index mark. The shutter speed in effect when the AE lock lever is set remains stored in the camera's memory system, and the LED in the viewfinder flashes to indicate that shutter speed. When the shutter release is pressed, the shutter releases at the memory-stored shutter speed. When the "o" mark on the lock lever is reset to the "▼" index mark, the memory will be cleared and the LED system will stay lit for about 10 seconds.

· To avoid battery drain, always return the AE lock lever to the "o" (orange-colored) mark after using the AE lock function.



Photo (1)



Photo (2)

Examples Using the AE lock

For example, suppose the background is excessively bright and you wish to photograph a subject at the side of the picture. Your subject will be underexposed as shown in photo (1) if you take the picture using the correct exposure indicated by the camera. In this case, either center the finder on the subject and set the AE lock, or walk up to the subject, take a direct exposure reading at close range and then set the AE lock. Then resume your camera angle, frame your subject as desired and obtain a properly exposed photo of your subject as shown in photo (2).



Once the shutter speed is locked in, it remains locked in until the AE lock is released. Thus, when using a winder to take sequential photos of a moving subject as shown in photo (3), lock in the exposure reading and release the shutter for properly exposed photos regardless of changes in background brightness. In situations which call for intuition and experience, such as bright backgrounds, backlit subjects, and spotlighted subjects, you can easily obtain the correct exposure by using the AE lock.



<Using the Exposure Compensations Scale>

For normal exposures in the AUTO mode, the ASA film speed value of the film in use is locked at the "X1" setting. To set the exposure compensation: depress the film speed dial release button, turn the dial until the speed value of the film in use lines up with the desired compensation scale reading. The exposure compensation scale can be used at intermediate settings and can be click-stopped in 1/3 increments between scale readings.

* Always reset the ASA speed value for the film being used to "X1" when exposure compensation is no longer needed.

ASA Film Speed	Exposure Compensation Range
ASA-Filmempfindlichkeit	Belichtungskorrekturbereich
Sensibilité ASA	Plage de compensation d'exposition
Sensibilidad ASA de la película	Alcance de la compensación de la exposición
ASA 25	1/4 · 1/2 · X1 · • · •
ASA 50	1/4 · 1/2 · X1 · 2 · •
ASA 100 — 400	1/4 · 1/2 · X1 · 2 · 4
ASA 800	• · 1/2 · X1 · 2 · 4
ASA 1600	• · • · X1 · 2 · 4

· At some film speeds, exposure compensation settings cannot be used, as indicated in the table as follows (these settings exceed the camera's ASA film speed range).

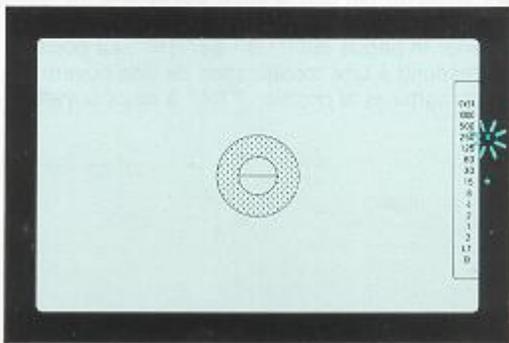
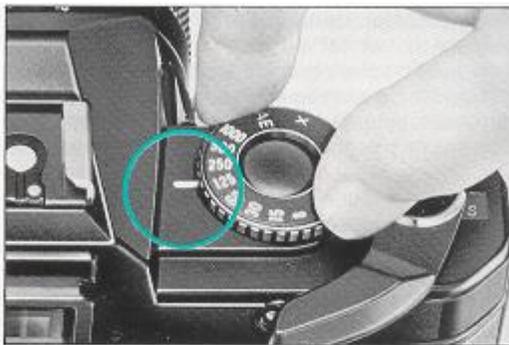
Values "2" and "4" Increase the Amount of Exposure

In situations such as shooting against the light or where your subject is back-lit by a bright sky or beach scene, or when you want to overexpose intentionally, set the dial at "2" or "4". The "2" setting corresponds to a change of one f-stop, and the "4" to two f-stops.

Values "1/2" and "1/4" Decrease the Amount of Exposure

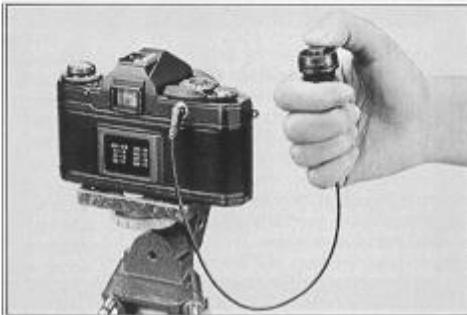
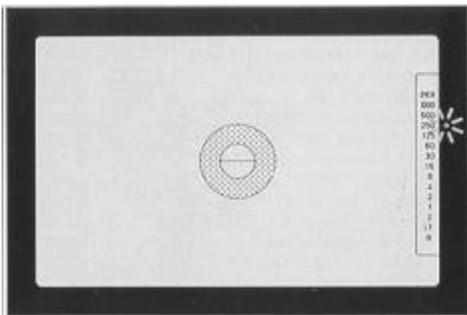
In situations where the background is dark because of spotlighting of the subject or where you want to underexpose intentionally, set the dial to "1/2" or "1/4". The "1/2" setting corresponds to a change of one f-stop, and the "1/4" to two f-stops.

MANUAL EXPOSURES



The FX-D Quartz can also be used in the manual mode for shooting at a desired shutter speed, exposures at the B setting, and flash photography at X with flash units other than the camera's exclusive CS-201 Auto Flash. For manual exposure, turn the shutter speed dial from the AE setting to the desired manual shutter speed number. In the manual mode, the shutter speed selected will be indicated by a flashing LED inside the viewfinder. Intermediate shutter speed settings cannot be used.

1. Turn the shutter dial to the desired manual shutter speed setting.
2. Press the exposure check button. The LED will flash at the shutter speed selected on the shutter speed dial, while a second LED will steadily light at the camera's recommended shutter speed for the aperture setting in effect. For correct exposure, turn the aperture ring until the flashing and steadily lit LEDs merge.



3. Now only the flashing LED will be on to indicate correct exposure. Frame your subject, focus and release the shutter. If you wish to shoot at a preset aperture in the manual mode, reverse the procedure: turn the shutter dial until the flashing LED merges with the steadily on LED. If two steadily lit LEDs remain on, you will have to slightly adjust the f-number for the correct exposure.

"B" (Bulb) Photography

For long exposures of night scenes and astrophotography, set the shutter speed dial to the B setting. The shutter will remain open as long as the shutter release button is depressed, so it will be necessary to use a tripod or other support, and the exclusive Contax Cable Switch S (optional accessory), to prevent camera vibration.

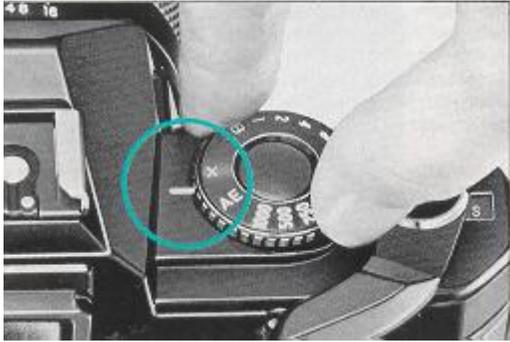
FLASH PHOTOGRAPHY

When shooting indoors or at night, or when fill-in lighting is needed for daylight shooting, an auto flash or flash bulb unit can be used to great advantage.



CS-201 Auto Flash unit

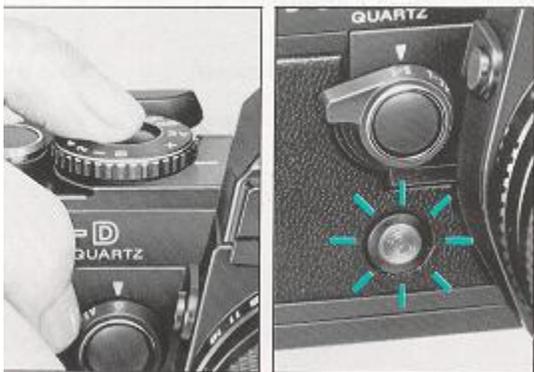
In the AUTO mode, you can use the CS-201 Auto Flash unit with the FX-D Quartz for automatic flash photography at a recommended aperture. With the auto flash unit set at AUTO, the camera automatically switches to the synchro shutter speed of 1/100 sec., lights up the "an" mark in the viewfinder and flashes the LED at the 1/125 second mark when the flash unit is fully charged, letting you know electronically that the camera is ready for flash shooting. Automatic exposure mode is in operation when the flash unit is turned to "OFF" or when the flash unit is in the process of charging. For detailed operating instructions, refer to the instruction booklet which accompanies the CS-201 Auto Flash unit.



Other Flash Units

When other flash units are used with the FX-D Quartz, set the shutter speed dial to "X" (shutter releases at 1/100 sec. but LED flashes at "125" in the viewfinder) or to a shutter speed of 1/60 sec. or slower. The necessary information displayed inside the viewfinder is the same as for manual operation. To determine the flash exposure, follow the instructions accompanying the flash unit.

- The FX-D Quartz has direct contact type connection for electronic flash and flash bulb units of the cordless type.
- With flash bulbs (FP, M and ME types), a shutter speed of 1/30 sec. or slower is recommended.



*When you wish to include yourself in a group or special occasion picture, use the handy quartz self-timer. The FX-D Quartz has an electronically controlled two-way audiovisual wafting that beeps and flashes to let you know not only when the self-timer is on but also when it is about to release the shutter.*em>**

1. *First focus the camera, then set the "S-T" mark on the AE lock lever to the "I" index mark. The lock lever can be set either before or after advancing the film.*

2. *Check to see that the film has been advanced and then press the shutter release. The camera will start beeping and the self-timer LED will start flashing and will continue to do so for ten seconds before the shutter is tripped. To warn you that the shutter is about to be released, the audio-visual signals accelerate 2 seconds before shutter release.*



When you have finished using the self-timer, always be sure to reset the **AE LOCK LEVER** to the "0" mark. If the lever is left in the "S-T" position, the camera will continue operating in the self-timer mode.

- Even after the self-timer has been set in motion, it can be interrupted at any time in the interim by shifting the lock lever to "AE-L" or to "0".

- When taking pictures with the eye away from the viewfinder eyepiece, such as when the self-timer or any remote control device is being used, you should cover the eyepiece with the accessory eyecup to prevent extraneous light from entering through the eyepiece. As shown in the photograph, you can attach the accessory eyecup, slide it up and then fold it back so as to block the light from reaching the eyepiece. An alternate method is to look through the viewfinder at the scene to be photographed, and set to the AE lock.



Release Socket

This may be used to attach remote control devices such as the Cable Switch S. Infrared Controller S. Radio Controller, etc., or as a contact for connecting the Auto Bellows or the RTF 540 Auto Flash unit. The socket receives electrical signals from these accessories which are used to operate the shutter

- Do not connect an ordinary cable release (mechanically operated type) to this release socket as this can cause damage to the socket device.



Infrared Compensation Mark

With infrared film (and a red filter) it is necessary to correct for the infrared rays used for focusing. Both Yashica ML and Zeiss To lenses have an infrared compensation mark (R index) on the depth-of-field scale on the lens barrel (Zeiss Mirotar lenses and some Yashica lenses do not have this mark because they do not require any correction). First use the normal focusing procedure, then turn the focusing ring until the distance at which you have focused is opposite the red compensation mark.

DEPTH OF FIELD



One property of lenses is that when they are focused on a certain subject, not only the subject itself, but all objects in a certain range in front and in back of the subject will be nearly enough in focus to appear sharp to the unaided eye. This range is called the depth-of-field. The depth-of-field of a given lens varies, as follows:

- (1) If the aperture is stopped down the depth-of-field increases; if the aperture is opened up the depth-of-field decreases.
- (2) As distance to the subject increases, depth-of-field increases; as distance to the subject decreases, depth-of-field decreases.

(3) The depth-of-field is greater behind the subject on which the lens is focused than in front of it. Different lenses have different depth-of-field limits. A lens of short focal length has greater depth-of-field at any set distance than a lens of long focal length.



Depth-of-Field Scale

The actual depth-of-field of a lens is shown by a scale on the lens. In the example shown in the photograph below, when a standard 50 mm f/1.7 lens is focused at 5 meters with an aperture of f/16 in use, objects at distances between the two "16" figures on the depth-of-field scale, in this case from about 2.7 meters to infinity, will be nearly enough in focus to appear sharp to the naked eye.

ACCESSORIES FOR THE FX-D QUARTZ



FX Winder

A compact, automatic film winder of the grip type developed as standard accessory for the FX-D quartz. The winder has a maximum speed of 2 frames-per-second (1/60 to 1/1000 sec.) and synchronizes with all shutter speeds. Its front-mounted grip is designed to provide greater ease of operation and handling, and better holding balance during shooting.



CS-201 Auto Flash Unit

The CS-201 is an auto flash unit specially designed for use on the FX-D Quartz providing a guide number of 20 (ASA 100, on the metric system). Merely set the camera and the auto flash unit on "AK" and "AUTO" respectively. When the unit is charged, the camera will automatically switch to the synchro shutter speed, and the red LED display and the "I" mark in the viewfinder will flash and light steadily to let you know that the flash unit is ready for shooting. When taking pictures on auto flash, setting the lens aperture at f/4 (using film of ASA 100) will automatically give you the proper amount of light at distances from about 1 meter to 5 meters.

SPECIFICATIONS

Type: 35 mm single-lens reflex with aperture preferred automatic exposure.

Image size: 24 x 36 mm.

Lens mount: Contax/Yashica large-diameter bayonet mount.

Shutter: Electronically controlled vertical-running, all-metal focal plane shutter.

Shutter speeds: Quartz-timed electronically-controlled shutter with speeds semi-continuously variable on AUTO from 1/1000 to 1 seconds. Manual shutter speeds from 1/1000 sec. to 1 sec., plus X (1/100 sec.) and "B"
Synchro contact: X contact (1/100 sec.).

Auto flash control: When used with CS-201 Auto Flash Unit, shutter speed automatically set at 1/100 sec. upon full charging of the flash unit.

Self-timer: Quartz-timed electronic self-timer with 10 sec. delay. LED flashes and audible warning device sounds during operation, simultaneously accelerating 2 sec. before shutter release.

Shutter release: Electromagnetic release system; auxiliary remote release via "Release socket".

Exposure control: Through-the-lens (TTL), center-weighted metering at full aperture using SPD (Silicon Photo Diode) cell. Aperture-preferred automatic exposure (LED matching type on Manual). EV 1 to EV 18 sensitivity range at ASA 100 with f/1.4 lens. ASA range 25--1600.

Exposure check button: Pressing button activates LED indicators for ten sec.

AE lock: Setting AE lock lever locks in shutter speed in effect at time of setting.

Exposure compensation: + 2 EV (Doubles as film speed dial).

Viewfinder: Fixed eye-level pentaprism type; field shows 95% of picture area; 0.86 magnification (with 50 mm lens)

Focusing screen: Horizontal split-image spot, surrounded by a microprism collar and an outer matte field.

Viewfinder display: Shutter speeds indicated by 16-indicator LEDs (correct exposure on AUTO; exposure selected on Manuals; over- and under-exposure indications; special mark shows when flash is fully charged; battery check warning.

Film advance: With rapid advance lever; 130° setting angle; 20° standoff position.

Winder: Accepts Contax 139 Winder II.

Film rewind: Film rewind crank and film rewind release button (automatic resetting type).

Exposure counter: Automatic resetting type.

Accessory shoe: Direct X contact, and terminal for coupling CS-201 Auto Flash Unit.

Camera back: Opens by lifting film rewind knob; with memo holder.

Power source: Two 1.5 V silver-oxide batteries (Eveready S76, Ucar S76, Mallory MS-76 or equivalent); or alkaline-manganese batteries (LR44 or equivalent)

Battery check: Indicated via lighting or flashing of LEDs inside the viewfinder.

Dimensions: 135 x 86 x 50 mm.

Weight: 460 grams with batteries.

CAMERA CARE

· The above specifications and design are subject to change without notice.

· Excessive heat may adversely affect the film, batteries or camera system and result in improper exposure. Avoid leaving the camera in direct sunlight, glove or trunk compartment, rear-seat shelf of cars and other hot areas. If the camera has been exposed to excessive heat, allow it to cool to normal temperature before use.

· Salt air, sand, dirt and other foreign matter will damage the camera's internal system if allowed to penetrate inside. Take care to keep the camera clean when using it at the seashore or in sandy areas. Shocks from dropping or bumping are another major cause of camera malfunction. Always handle your camera with great care to ensure years of trouble-free operation.

· Avoid touching the lens, viewfinder eyepiece and other glass surfaces with your fingers. Blow dust and dirt away from these surfaces with a blower/brush, or wipe gently with a soft cloth (after brushing) if necessary. Clean smudges and smears on lens and mirror surfaces with high quality lens-cleaning solution and tissue. Always take extra care in cleaning the lens and mirror surfaces to avoid scratching.

· Sudden and frequent changes in temperature could lead to corrosion of electrical contacts and cause other malfunctions. When shooting in cold or hot areas, avoid extreme temperature changes as much as possible.

· Make it a point to always check the camera functions before taking pictures (travel, wedding, business photos, etc.).

· It should be noted that when print films are processed, standard service-size prints will show an area slightly less than that seen on the negative.

Note on Filter Usage: When certain brands of commercially available filters are used with Zeiss To and Yashica ML lenses, there is a possibility of vignetting (image cut-off of the picture area). For this reason, we strongly recommend the use of Contax and Yashica brand filters with all Yashica and Zeiss lenses used on your camera.