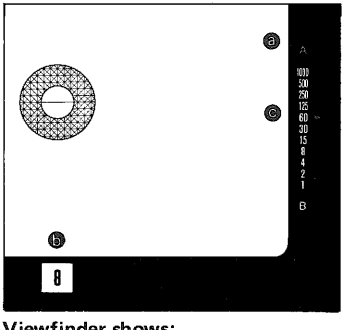


Viewfinder shows:

- ⓐ Red "A" = Aperture-priority AE mode in use
- ⓑ Aperture you selected
- ⓒ Stepless shutter speed set by camera for that aperture
  (If two LEDs glow, speed is in between.)

Selecting an aperture

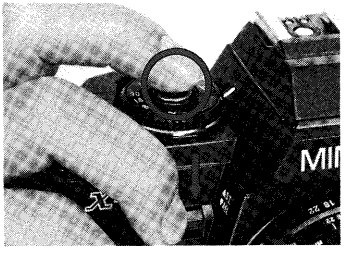
In aperture-priority auto mode, your X-570 will set the precise shutter speed for proper exposure automatically. Even so, you have considerable control over results and can adjust aperture and shutter speed over considerable ranges to suit the conditions and yourself.

For good pictures with a minimum of care where no particular effect is desired, simply set the aperture as indicated in the table. These guide settings will provide as much depth of field (p. 38) as possible while producing a shutter speed fast enough to stop the motion of most subjects and guard against blur from camera movement (p. 40).

ISO	Sunny	Hazy Sun	Heavy Overcast	Indoors
25/15°	f/8	f/4	f/2	f/1.4
64/19°	f/8	f/4	f/2.8	f/1.4
100/21°	f/11	f/5.6	f/4	f/1.4
160/23°	f/11	f/8	f/5.6	f/2
200/24°	f/11	f/8	f/5.6	f/2
400/27°	f/16	f/11	f/8	f/2.8

(These are only guidelines for typical picture-taking situations. For additional information see p. 46).

AE LOCK



To obtain proper exposure in high-contrast lighting situations where your subject is on the edge of the frame or occupies only a small portion in the center, use the AE lock as follows:

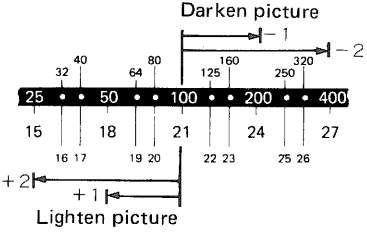
1. Shift the camera's position so the subject fills most of the frame. For small subjects, you may need to move closer (or zoom closer).
2. Press the AE lock all the way down and hold it there.
3. Recompose your picture as desired.
4. Release the shutter while still holding the AE lock down.

NOTES

- The AE lock cannot be used in M mode or with the self-timer.
- If you wish to change the film speed or aperture, do so before pressing the AE lock.
- For precise exposure control when using the AE lock with a variable-effective-aperture zoom lens (as Minolta 35-105mm f/3.5-4.5 MD Zoom), slightly adjust the aperture after engaging the AE lock to compensate for the change when zooming (or do not zoom after engaging the lock).

EXPOSURE ADJUSTMENT

If it is difficult to adjust the framing and use the AE lock, you can adjust exposure by temporarily changing the film speed in 1/3-stop increments and/or using manual mode (p. 34). The example below shows how to when using ISO 100/21° film.



NOTE

- Sometimes you can also adjust exposure for a single photo by slightly shifting the camera so the shutter speed changes the desired amount, then pressing the AE lock.

STOP-DOWN METERING

MD and MC lenses and accessories have auto diaphragms and meter couplers that enable focusing and metering at full aperture, then automatically stop the lens down to the selected aperture.

Non-meter-coupled automatic diaphragm lenses and accessories enable full-aperture focusing, but require stopping the lens down (by pressing preview button) for metering.

Non-meter-coupled manual-diaphragm lenses and accessories must be manually opened up for focusing, then stopped down for metering and exposure.

Specific instructions for various combinations are shown at right.

LENS		Type	Meter coupled	Non meter coupled	
			Auto diaphragm	Auto diaphragm*	Manual diaphragm
		Minolta designation	MD, MC	Auto Rokkor Auto ~	Rokkor
ACCESSORY	Lens only		①	②	③
	Meter coupled	MC Auto Extension Tubes	①	②	③
		MD or MC Tele Converters			
	Non meter coupled	Auto Bellows I	②	②	③
		Auto Bellows III**			
		Bellows II, Bellows IV	③	③	③
		Compact Bellows			
		Extension Tube Set II			
		Reverse Ring II			

① In A mode, do not press preview button when checking auto speed or releasing shutter. In M mode, do not press preview button when checking speed.

② In A mode, press preview button when metering and releasing shutter. If metered value is held by AE lock, lens can be reopened for fine focusing before releasing shutter. In M mode, press preview button to check metered speed.

③ Metering is at manually set aperture in A and M modes. Pressing preview button has no effect.

* Press preview button on camera or lens.

** Press preview button on bellows (or lens).

For stop-down metering (and metering at fixed aperture of mirror [RF] lens), make sure metered value is within applicable range from table on next page.

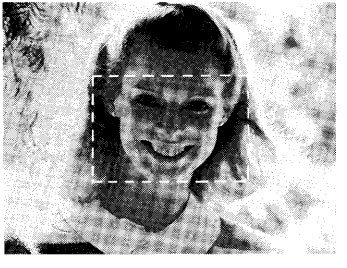
Stop-down metering range

ISO	Shutter speed
12/12°	4 to 1/1000
25/15°	4 to 1/1000
50/18°	2 to 1/1000
100/21°	1 to 1/1000
200/24°	1/2 to 1/1000
400/27°	1/4 to 1/1000
800/30°	1/8 to 1/1000
1600/33°	1/15 to 1/1000
3200/36°	1/30 to 1/1000

A. Without AE lock or adjustment

C. Without AE lock or adjustment

B. With AE lock (or exposure increase)



D. With AE lock (or exposure decrease)

Rectangle shows AE-lock metered area.

WHEN TO USE AE LOCK OR ADJUST EXPOSURE

The following suggestions on when to use the AE lock or to adjust exposure can serve as starting points for trial; individual conditions and taste will, of course, determine what exposure you choose.

- In situations where there is a great brightness difference between the subject and background and the most important area is considerably darker than the area surrounding it, use the AE lock to lock the meter reading with the subject filling most of the finder, or set the film-speed ring for exposure increase. Examples are pictures with strong backlighting and no fill-in illumination (such as photos A and B), or subjects against a background of snow or light-colored sand, unless the bright area occupies a very small part of the frame.

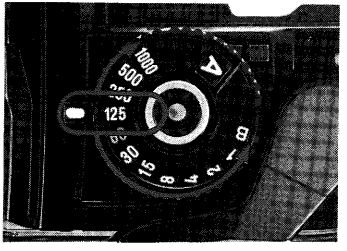
- If the most important subject area is much brighter than the rest of the picture, use the AE lock or set the film-speed ring for exposure decrease. Examples are subjects in a spotlight or shaft of sunlight or against a very dark background (such as photos C and D), unless the background occupies only a small area in the frame.

- When copying documents printed on white stock or on other predominantly light-colored materials, you should increase exposure somewhat. Similarly, you will probably find it desirable to decrease exposure somewhat for predominantly dark copy material, or that on a dark background.

- When using an R60 (red) filter, adjust exposure +1 stop.

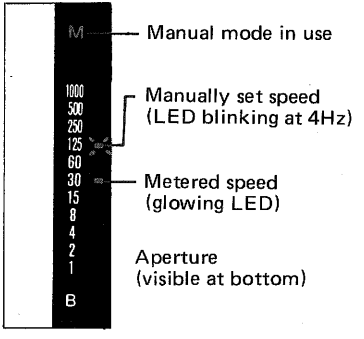
MATCH-LED MANUAL EXPOSURE MODE (M mode)

Basic setting



Set mode/shutter-speed selector at desired click-stop from 1 (1 sec.) to 1000 (1/1000 sec.).

Viewfinder shows:

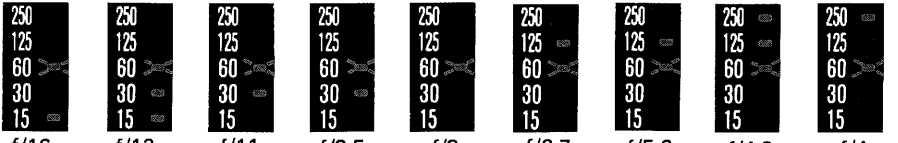


Taking a picture in M mode

In the X-570's match-LED manual mode, the manually set shutter speed is indicated by an LED blinking at 4Hz, and the metered speed (at aperture and film speed set) by a glowing LED. To obtain normal metered exposure, you simply adjust the aperture and/or shutter to match up these LEDs. There are two ways:

- First set the shutter at the desired click-stop, then turn the aperture

Darken picture — Lighten picture



ring until no LEDs light up other than the LED blinking next to the selected speed.

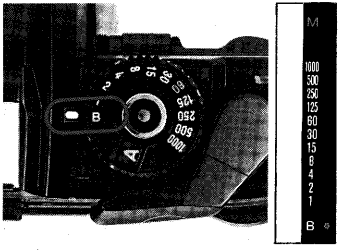
• First set the aperture as desired, then turn the shutter-speed selector so the blinking LED matches up with the glowing LED. If two LEDs are glowing, adjust the aperture ring slightly so only one glows. Do not set the shutter speed between click-stops.

NOTE

• Diagrams on the previous page show how to set the aperture and shutter speed for normal exposure at the metered value (center) or for plus or minus adjustment by varying the aperture in half-stop (0.5EV) increments. You can, of course, use more adjustment than shown, adjust the speed (in full stops) instead of aperture, or completely disregard the metered value for full-manual operation.

Long exposures ("B" setting)

When the mode/shutter-speed selector is set at "B" (viewfinder's "M" and ✱ at "B" light), the shutter will open when you press the operating button and remain open until you release it, making exposures longer than one second possible. A tripod (p. 42) or other firm support should generally be used. To avoid jarring the camera when pressing or releasing the operating button, use a standard cable release (preferably a lockable type for longer exposures) or a Minolta remote cord (p. 43). The eyepiece cap (p. 25) should be used to prevent stray light from affecting the exposure.



NOTES

• The self-timer does not operate at the "B" setting.

• With fresh batteries at moderate temperatures, exposures at least 10 hours long are possible. At lower temperatures, maximum exposure time may be shorter.

• For automatically timed long exposures, use the accessory Multi-Function Back (p. 51).

FOCUSING

Focusing aid

The X-570's standard focusing screen has a split-image spot surrounded by a band of microprisms in the center of an Acute Matte field.

To focus the camera visually with usual lenses, look through the viewfinder and turn the focusing ring of the lens until:

- Upper and lower subject images in the spot are exactly aligned with no broken lines between them,
- Subject image in the band does not shimmer or appear broken up, and
- Subject image within the focusing aid appears clearest and seems to blend with that on the matte field surrounding it.

Though the most satisfactory focusing aid and method depend upon the conditions and your personal preference, the above method may provide the best results with medium wideangle to medium telephoto lenses.

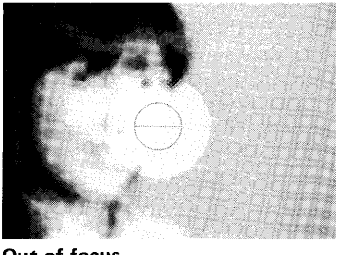
Generally speaking, however, you will probably find that focusing is easiest if:

- Split-image spot is used for subjects having vertical lines.
- Microprism band is used for lenses from medium wideangle through medium telephoto, especially with subjects not having vertical lines.
- Matte field is used for longer-focal-length lenses or for macro or other work involving considerable lens extension.

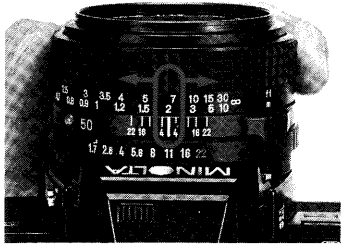
NOTE

- The X-570's standard focusing screen can be replaced at any authorized Minolta service facility by any of eight optional focusing screens (p. 53).

In focus



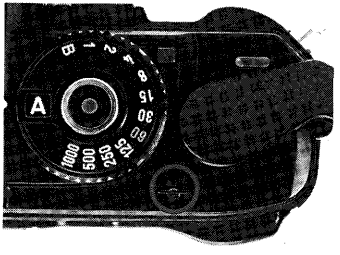
Out of focus



Distance scale

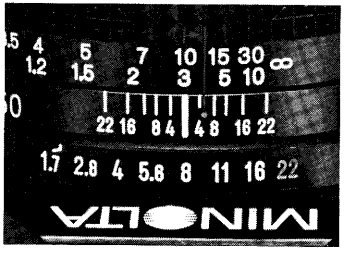
You may find that in the following situations it is easier to focus by estimating the distance to your subject, then aligning the corresponding figure on the distance scale with the index:

- If you are taking long exposures or flash pictures when it is too dark to focus through the lens.
- If you want to prefocus on your subject, such as in quickly shot candid photos.



Film-plane index

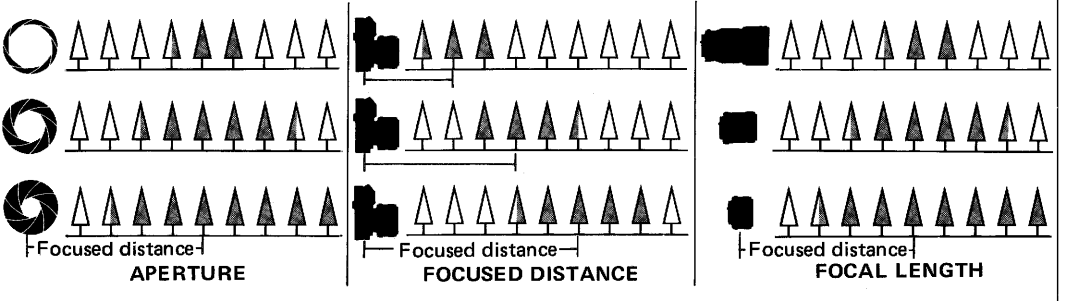
The symbol beneath the film-advance lever indicates the position occupied by the film in the camera. It can be used for measuring the distance from subject to film when taking close-ups, photomacrographs, and photomicrographs, where the exact distance is sometimes important.



Infrared index

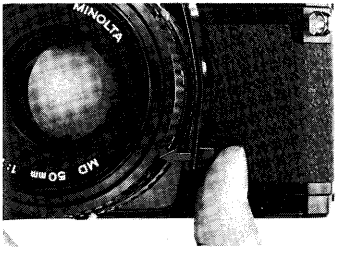
For proper focus when using infrared film, first focus your subject as usual with visible light, then attach a red filter and turn the focusing ring to the right to align the point of proper focus on the distance scale with the small red dot (or red "R" on MC and old-type MD lenses) on the depth-of-field scale. Set exposure according to the film manufacturer's recommendations.

DEPTH OF FIELD



The range behind and in front of the focused distance within which the image appears acceptably sharp is called the depth of field.

It extends a greater distance behind the focused distance (usually about 1/3 in front, 2/3 behind) and is determined by three factors: the aperture, the distance at which the lens is focused, and the focal length of the lens. As illustrated by shaded trees above, depth of field increases as the lens is stopped down (e.g., f/1.7 to f/22) and becomes greater the farther from the camera the lens is focused. It decreases as the lens is opened up (e.g., f/22 to f/1.7) and the closer the lens is focused. Depth of field is greater for short-focal-length lenses than for telephotos at the same focused distance and aperture. It is at its least for any given lens in normal mounting when the lens is at maximum aperture (as when metering and focusing normally with Minolta MD or MC lenses) and at minimum focusing distance.

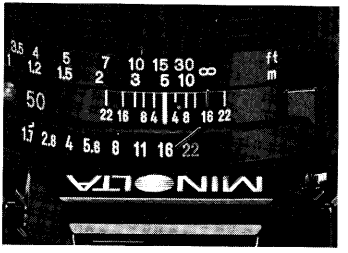


Preview button

Depth of field at any focused distance and aperture can be checked visually by pushing the preview button all the way in. This will stop the diaphragm down to the aperture corresponding to the f-number set on the aperture ring, allowing you to see through the viewfinder how much of the subject is acceptably sharp.

Depth-of-field scale

When the lens is focused at a given point, the image will be in satisfactory focus from the nearer value to the farther value on the distance scale indicated by the depth-of-field marks for the aperture in use. For example, if a 50mm f/1.7 lens is focused at 3m (about 10 ft.) and the aperture is f/8, the corresponding graduations to left and right of the index indicate acceptable sharpness from about 2.4 to 4.2m (approx. 8 to 14 ft.).



The depth-of-field scale can also be used to zone focus, i.e., set the focusing ring so that some anticipated action will take place within the limits of the depth of field. For example, if you want any subject within a range of 2.6m (approx. 8-1/2 ft.) to infinity to be reasonably sharp and the lighting conditions allow you to set an aperture of f/16 with a 50mm f/1.7 lens, set the lens so the infinity mark is opposite the "16" on the right end of the scale.

BLUR FROM CAMERA/SUBJECT MOVEMENT

A blurred photograph results when movement of the subject or camera during exposure causes a shift in the position of the image on film.

The shutter speed required to "freeze" an object's action normally increases as the object's speed increases; however, no matter what the speed, an object moving across the viewfinder field requires a faster shutter speed than one moving at the same speed directly toward or away from the camera. Similarly, a moving object near the camera (or one appearing nearer due to use of a longer-focal-length lens or a close-up accessory) requires a faster shutter speed than one farther away.

Blur from camera motion depends on such factors as the lens being used, the apparent closeness of the subject when viewed through the lens, the shutter speed, and the camera-support method. Since longer-focal-length lenses and close-up accessories increase the relative size of the subject, even a slight movement of the camera will be magnified on film; the greater weight and size of such lenses and accessories may also make it difficult to hold them steady. A good rule to follow is that the slowest shutter speed that can be safely used by most people when hand-holding a lens is the reciprocal of the focal length. For example, for a 125mm lens, the speed would be 1/125 sec.; for a 300mm lens, it would be 1/500 (1/300 raised to the next faster speed to be on the safe side).

Use of a sufficiently fast shutter speed is also important when taking pictures from a moving, vibrating vehicle such as a boat, car, train, or plane (especially to prevent blurring the foreground, if any) or from a vibrating object such as a bridge. To reduce transmission of the vibrations through your body to the camera, relax your body and avoid direct contact with the object as far as possible.

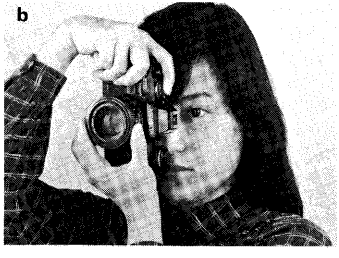
SUPPORTING THE CAMERA AND RELEASING THE SHUTTER

In order to obtain sharp, blur-free photos, it is important to release the shutter gently while keeping the camera as still as possible. Always, regardless of shutter speed, release the shutter with a slow, steady squeeze — never a quick jab — preferably while holding your breath.

Shown at right are some ways of holding the camera to provide adequate support at normal and fast shutter speeds. If you grasp the camera firmly with your right hand on its front and back grips, you can easily shift it back and forth for horizontal (a) and vertical (b) pictures without removing your hand from its controls. Also, by cradling the camera in your left hand to support it, you can readily focus and set the aperture, then shoot; another way is to use your left hand to focus, then grasp the left part of the body for support. Photo (c) shows an alternative for holding the camera vertically. You should, of course, experiment to find the way that suits you best.

a

b



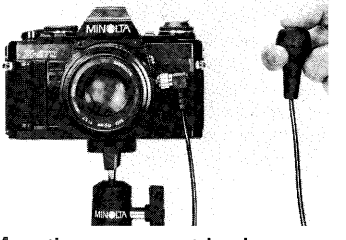
c

Slow-shutter-speed warning

When the main switch is set at "▪▮▮" and the operating button is touched or slightly pressed (or AE lock is engaged), a slow-shutter-speed warning will beep if the camera sets (in A mode) a shutter speed of 1/30 second or slower. Though the actual danger of blur from camera or subject movement depends on many factors (p. 40), including your own ability to hold the camera steady, you may wish to use the figure "30" as a reference point to gauge the chance of blur.

When a slow shutter speed is unavoidable, use one of the following methods (given in order of increasing steadiness) to prevent blur from camera movement:

- Hold the camera firmly against your face (in horizontal position, place your thumb between camera and face for support), brace your arm(s) against your body, and spread your feet slightly or lean against a tree, etc. Another way is to kneel on one knee and rest your elbow on the other.
- Steady the camera aginst a post or other firm, non-vibrating support.
- Use a minipod or similar device to prop the camera on a table, ledge, etc.
- Mount the camera on a sturdy tripod.



Mounting camera on tripod

For maximum sharpness when making exposures too long to permit hand-holding the camera, as well as for self-timer pictures, mount it on a tripod using the socket on the camera bottom. Release the shutter in one of the ways explained on the next page.

CAUTION

- Do not use excessive force when attaching the camera to a tripod with a screw that extends more than 5.4mm (1/5 in.).

Self-timer

The X-570's electronic self-timer can be used to delay release of the shutter for 10 seconds:

1. Mount the camera on a sturdy support, compose your picture, and focus.
2. Set the mode/shutter-speed selector at any setting other than "B", and make sure the film is advanced.
3. Pull the self-timer switch up.
4. To start the timer, press the operating button.

A visual signal and (if main switch is at "▪▪▮▮") audible beeps indicate how much time is left before the self-timer releases the shutter. The self-timer LED blinks and the camera beeps as follows:

First 8 sec.	twice per sec.
Next sec.	eight times
Last sec.	continuously

NOTES

- If you wish to cancel the self-timer after it has been started, push the self-timer switch down or turn the main switch off.
- Be sure to turn the self-timer off after the picture has been taken. If you do not, the next picture will also be taken after a 10-sec. delay.
- When taking self-timer pictures in A mode, use the eyepiece cap (p. 25).

Other ways of releasing shutter

The shutter can also be released by using one of the following:

- Minolta Remote Cord S (50cm, 20 in.) or Remote Cord L (5m, 16-1/2 ft.)
- Minolta Cable Release II or other standard cable release
- Minolta Wireless Controller IR-1 Set (p. 52)
- Minolta Multi-Function Back (p. 51)

The remote cords and cable release should be screwed into the shutter-release socket on the side of the lens mount.

FLASH PHOTOGRAPHY

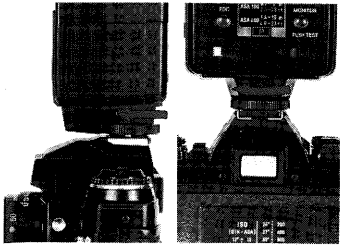
A silicon photocell in the mirror compartment measures light passing through the lens (TTL) and striking the film when using a PX-series Auto Electroflash unit in A mode. This system (Direct Autoflash Metering) provides accurate and easy flash control at any aperture on the lens, as well as flash exposure adjustment by temporarily changing the camera's film-speed setting. It is thus ideal for depth-of-field control and other creative flash techniques with a wide variety of lenses and accessories.

The table below tells you how PX and other flash units are used with the X-570. For specific instructions, see the applicable owner's manual.

	PX-series Auto Electroflash	X-series Auto Electroflash	Other
Camera connection	Hot shoe (or off-camera cables)	Hot shoe	Hot shoe or sync cord
Flash mode and aperture setting	Controllable by camera's selector: A: TTL autoflash at any aperture 1-1000, B: manual flash (aperture depends on distance) *	Selected on flash: Auto: by on-flash sensor at designated aperture(s) Manual: aperture depends on distance	
X-sync shutter speed	Shutter automatically releases at 1/60 if flash charged (except when camera set at "B" or AE lock used)		Electronic flash: 1 to 1/60, B M, MF, or FP bulb: 1 to 1/15, B
Flash-ready signal	LED next to "60" or "B" blinks at 2Hz; flash's monitor lamp lights		Monitor lamp on flash
If shutter released ** before flash charged:	Photo taken without flash at existing settings		Flash may or may not fire
Flash-distance check (FDC) signaling	"60" LED blinks at 8Hz (in TTL); FDC lamp on flash	FDC lamp on models 320X, 132X only	FDC lamp on models 320, 128 only

* P-mode TTL on PX units is for use only with X-700 camera. 360PX also has on-flash sensor for auto control at any of 3 apertures.

** With 360PX not set at "TTL" or with X-series unit, mode LED goes out after charging.



Connecting flash units

Cordless clip-on flash units are attached and electrically connected by simply sliding them into the camera's hot shoe. Sync cords of clip-on or bracket-type units must be plugged into the camera's sync terminal.

Bracket-type flash units attach to the camera's tripod socket.

Slow-shutter sync

In some situations (p. 47) a more natural effect can be obtained by engaging the AE lock at a speed less than 1/60 to override auto sync-speed setting. To do so with a PX flash unit in TTL mode:

1. Meter the background and set the aperture so the shutter speed will be less than 1/60, then engage the AE lock. When the flash is charged, the LED(s) at that speed blinks.
   - If the flash is already charged and the LED at "60" continues blinking when you engage the AE lock, you will need to release it, adjust the aperture toward f/22, then press the lock again to make sure a slower speed is used.
2. While holding the AE lock down, release the shutter. If exposure was sufficient, the LED(s) at that speed will blink more rapidly.

NOTES

- Make sure your main subject is within flash range for the aperture set.
- Make sure the shutter speed is sufficient to stop motion in the scene (unless ghost images are desired) and that the camera is suitably supported (pp. 40, 42).
- If the metered speed was above 1/60, it will automatically be switched to 1/60 and the background may be overexposed.
- The AE lock can also be used for slow-shutter sync with X-series flash units, but their limited choice of apertures may make it difficult to lock a corresponding shutter speed less than 1/60 for the background.
- Slow-shutter sync does not work in M mode. With a flash unit other than PX or X, you can manually set the shutter for slow-shutter sync.

CREATIVE CONTROL

Aperture

Sometimes you may want to select an aperture so as to obtain a particular effect, such as rendering a certain range in sharp focus or emphasizing a subject against an out-of-focus background.

Large apertures (e.g., f/1.7) yield a shallow field of sharp focus (photo A), while small apertures (e.g., f/22) give greater depth of field (photo B).

A

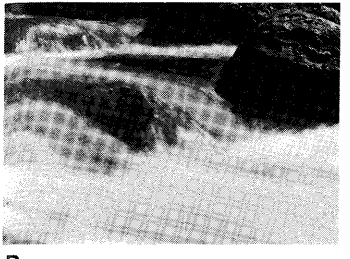
B

Shutter speed

Sometimes the subject or effect you want may make the shutter speed more important. In A mode turn the aperture ring until the LED next to the desired shutter speed lights, or use M mode to set the speed.

Fast shutter speeds such as 1/500 to 1/1000 sec. can "freeze" action (photo C). Slow shutter speeds such as 1/2 to 1 sec. can be used to emphasize subject flow or motion (photo D).

C

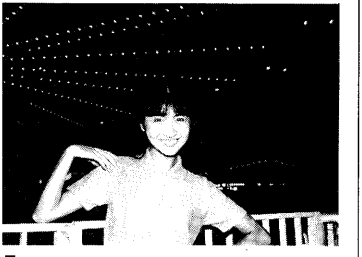


D

Slow-shutter flash

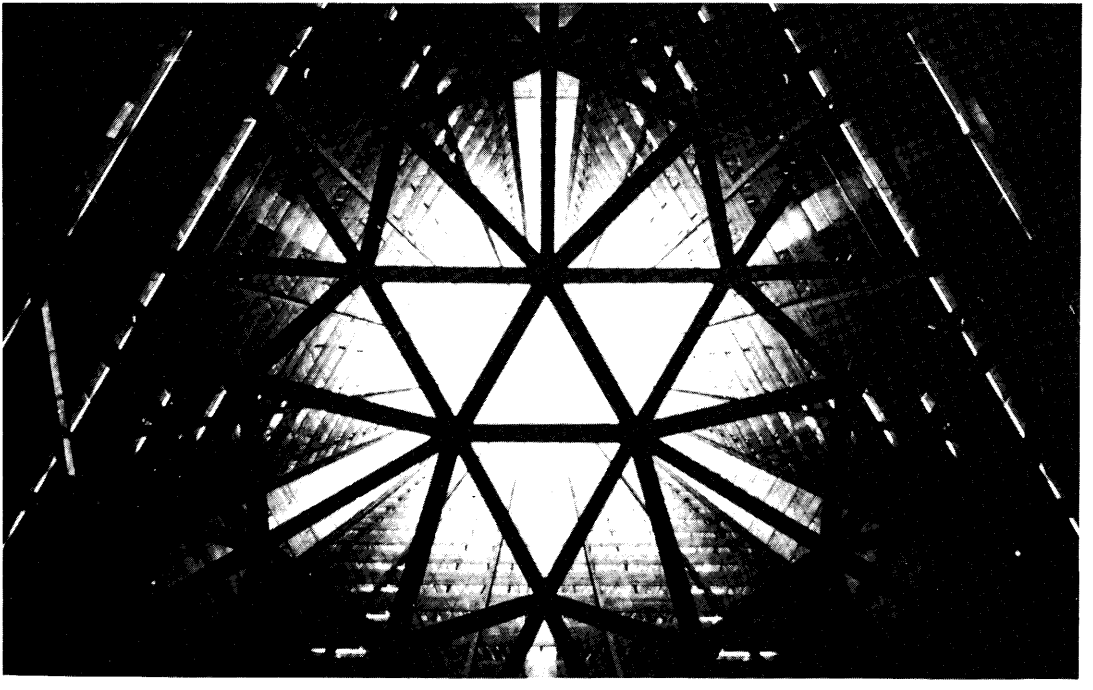
If you are photographing a subject against a relatively dark background (as outdoors at dusk) or in a large room, using the flash at normal sync speed may create an underexposed background (photo E), since the flash burst is cut off when the subject itself is properly exposed, but the shutter closes before the background is.

Using slow-shutter sync (p. 45) to set an aperture and shutter-speed (less than 1/60) combination for proper exposure of the background will often result in a more natural light balance between subject and background (photo F).

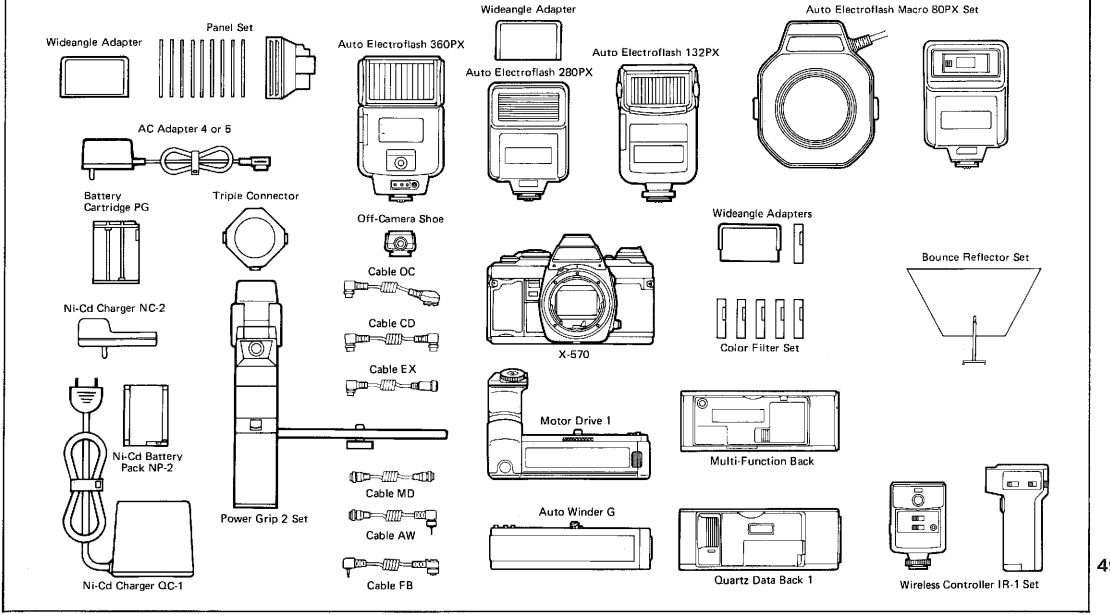


E

F



ACCESSORIES



See system guidebook in camera box for lenses and other accessories.

AUTO ELECTROFLASH 280PX, 132PX, 360PX, MACRO 80PX SET

With the X-570 set at "A" and one of these flash units attached, the camera's Direct Autoflash Metering system provides through-the-lens (TTL) off-film flash control at any aperture. Viewfinder flash-ready signaling, auto sync-speed setting, and sufficient-exposure confirmation are other features that make them extremely simple to use.

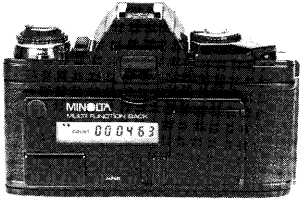
The compact, lightweight 280PX has energy-saving thyristor circuitry and a power-level selector enabling 2fps winder/motor-drive sync.

The inexpensive yet versatile 132PX gives you the option of vertical bounce and automatically turns itself off when disconnected.

Among the many handy features of the top-of-the-line 360PX are: horizontal/vertical bounce, variable GN/power control (enabling sync at up to 2fps), auto power switch off, terminals for off-camera cables and direct auto charge control by the Multi-Function Back in time-lapse photography, and a built-in auto sensor for use with other cameras.

The lens-mounted Macro 80PX Set has four flashtubes that can be independently switched on or off to control lighting of close-up and macro subjects.

A wide range of accessories for PX flash units expands their usefulness for creative flash photography. Designed for the 280PX and 360PX, Power Grip 2 features well-balanced handling, sync at up to 3.5fps, auto power switch off, auto charge control (with Multi-Function Back), and bounce flash at a great range of angles. Filter panel sets and a bounce reflector are available for the 360PX and 132PX, and an AC adapter for the 360PX and Macro 80PX Set. Cables and connectors enable simple, accurate TTL autoflash operation for close-up, directional, and multi-flash techniques.



MULTI-FUNCTION BACK

The quartz/microcomputer-controlled Multi-Function Back connects cordlessly to the X-570 in place of its regular back to perform a variety of camera-control and data-imprinting functions. By simply pressing keys while viewing its liquid-crystal display, you can set it for time-lapse photographs at a huge range of intervals, automatically timed long exposures, and/or multi-frame sequences. The quartz timer and auto calendar enable recording the time accurate to the second, or the year/month/day in any of three orders. Or you can set the imprinter to record any six-digit code number, to consecutively number each frame, or for no imprinting. Manually controlled imprinting before or after taking the picture is also possible, and data exposure can be selected at any of six levels to match the sensitivity of the film in use.

QUARTZ DATA BACK 1

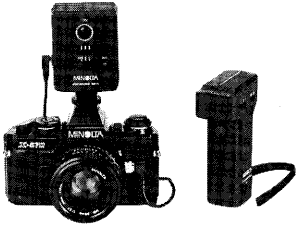
Quartz Data Back 1 replaces the X-570's regular back to record data on film for classifying your pictures. Its highly accurate quartz clock and auto calendar (good through 2099) imprint day/hour/minute, or year/month/day in any of three orders. In other modes, any six-digit number or consecutive frame numbers counting up or down from any starting number can be imprinted, with optional dashes or blank spaces. Data is easily set by pushing three keys and referring to a liquid-crystal display, and two film settings let you vary data exposure with film type. The unit's clock and calendar continue operating even when the liquid-crystal imprinter is turned off.

MOTOR DRIVE 1 and AUTO WINDER G

With Motor Drive 1 attached, you can capture the action with single-frame or continuous operation at either 2 or 3.5 frames per second. The comfortable handgrip has two operating buttons, each with a Minolta "touch switch", enabling full viewfinder readout for either horizontal or vertical framing.

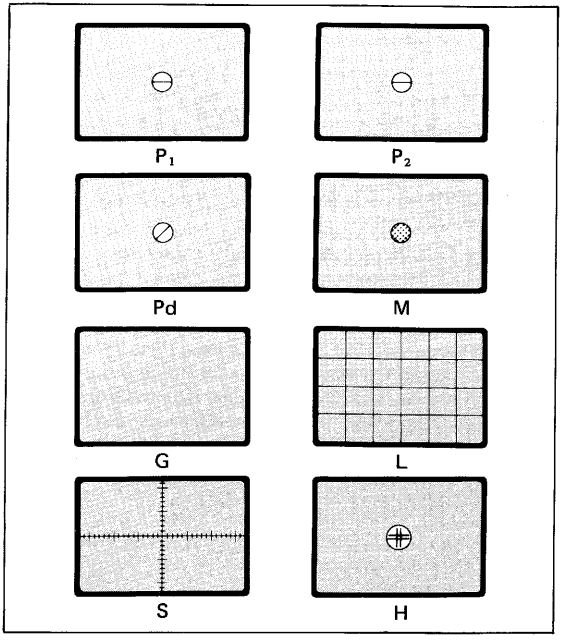
Auto Winder G lets you focus full attention on the creative aspects of photography by freeing you from winding the film after each picture. Continuous sequences up to 2fps are also possible by holding the camera's operating button down.

Both units are designed to attach quickly and easily without access caps to remove or store. Their film-advance mechanisms stop automatically at the end of the roll, and film can be easily loaded and unloaded without removing the units.



WIRELESS CONTROLLER IR-1 SET

The IR-1 infrared transmitter/receiver set lets you trigger the X-570 from up to 60m (about 200 ft.) away for remote-controlled single-frame exposures, continuous sequences, or time exposures. When used with extra receivers, the three-channel transmitter enables independent operation of up to three cameras or groups of cameras, or simultaneous operation of an unlimited number of cameras.



OPTIONAL FOCUSING SCREENS

The X-570's standard focusing screen can be replaced by any of eight optional Acute Matte screens at authorized Minolta service facilities. Types and usages are as follows:

PM: horizontal split/microprism band; standard type (not shown); general photography

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P_1: horizontal split; general photography
P_2: horizontal split; general photography with f/2.8 or larger max. aperture lenses
Pd: diagonal split; general photography
M: microprism spot; general photography
G: matte field only; general, close-up, and telephoto photography
L: matte field with grid; general photography
S: horizontal and vertical measuring scales; general, macro-, micro-, and astrophotography
H: clear spot with engraved double cross; macro-, micro-, and astrophotography

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Interchangeable lenses and other SLR system accessories are shown in the system guidebook included in the camera box.

TECHNICAL DETAILS

Type: Quartz/electronically governed 35mm single-lens reflex auto-exposure (AE) camera

Exposure-control modes: Aperture-priority automatic ("A") and match-LED manual ("M")

Lens mount: Minolta SLR bayonet of integrally lubricated stainless steel (54° rotating angle); coupling for full-aperture metering, finder display input, and automatic diaphragm control, providing aperture-priority AE with virtually all Minolta SLR interchangeable lenses/accessories; spring-return button for depth-of-field preview, or stop-down meter readings with other than MD or MC lenses (standard lenses: MD 50mm f/1.2, f/1.4 or f/1.7)

Exposure control and functions: Low-voltage, low-current computer circuit (incorporating quartz crystal with constant frequency of 32,768 Hz for digital sequential and shutter-speed control, digital and analog LSIs, samarium-cobalt impulse-release magnet, and linear-resistance inputs) varies shutter speed steplessly according to aperture set in A mode, to yield proper exposure for film speed set; auto-exposure range: EV 1 to EV 18 (e.g., 1 sec. at f/1.4 to 1/1000 at f/16) at ISO 100/21° with f/1.4 lens; AE lock enables holding meter reading for exposure at that value regardless of subject-brightness changes

Shutter: Quartz-controlled horizontal-traverse focal-plane type; stepless speeds 1/1000 to 4 sec. set automatically with endlessly rotatable selector dial locked at "A" setting or fixed speeds 1 to 1/1000 sec. or "B" (bulb) set manually at detented indications; electromagnetic shutter release locks when voltage too low for proper operation

Metering: TTL center-weighted averaging type, by silicon photocell mounted at rear of pentaprism for available light measured full aperture with MD or MC lenses and accessories or at stop-down aperture with non-meter-coupled lenses or accessories; by another SPC mounted with optic in side of mirror compartment for through-the-lens (TTL) off-film Direct Autoflash Metering at taking aperture during exposure to control burst duration of PX-series flash units

Film-speed range: ISO 12/12° to 3200/36° set by ASA dial that locks at 1/3-EV increments

Mirror: Triple-coated oversize instant-return slide-up type

Viewfinder: Eye-level fixed pentaprism type showing 95% of 24x36mm film-frame area; magnification: 0.9X with 50mm standard lens focused at infinity; power: −1D, adjustable with accessory snap-on eyepiece lenses; Fresnel-field focusing screen having artificially regular-patterned matte field plus central split-image horizontally oriented focusing aid surrounded by microprism band, interchangeable with Type P_1, P_2, Pd, M, G, L, S, or H screens at authorized Minolta service stations; visible around frame: mode indication (A or M), shutter-speed scale (1, 2, 4, 8, 15, 30, 60, 125, 250, 500, 1000) with LED setting indication (glowing LED or LEDs for metered speed in A and M mode; LED blinking at 4Hz opposite manually set speed for match-LED manual), 1-4 sec. auto-speed indication (under-range LED glows), triangular over-/under-range LED indicators blinking at 4Hz, "B" setting indication (* next to "B" on scale lights up), flash-ready signal (LED next to "60", AE-locked slower speed, or "B" blinks at 2Hz), FDC signal (LED next to "60" or AE-locked slower speed blinks at 8Hz for 1 sec. after sufficient flash exposure with PX flash units), battery check (by blinking of mode indicator when cells near exhaustion; no LEDs light when cells exhausted), f-number set with MD or MC lenses; display and metering activated by normal finger contact or slight pressing of operating button or by engaging AE lock, continue for 15 sec. after finger removed, except go out during exposure

Flash sync and control: Hot shoe and PC terminal for X sync; camera-control contact on hot shoe for automatic setting of shutter at 1/60 sec. (except when AE lock engaged for sync at slower auto speeds or mode/shutter-speed selector set for sync at "B") and flash-ready signaling with PX and X units; other electronic units synchronize at 1/60 sec. and slower manual speeds or "B" settings; class MF, M, and FP flashbulbs, at 1/15 sec. or slower settings: second contact on hot shoe for burst control by Direct Autoflash Metering

Film advance: Manual: by lever with single 130° stroke after 30° unengaged movement; motorized: through built-in coupler key with accessory Motor Drive 1 or Auto Winder G; release button for rewind on camera bottom; advancing-type frame counter; Safe Load Signal indicating film loading and advancing condition

Power: Two 1.5v alkaline-manganese (LR44: Eveready A-76 or equiv.), two 1.55v silver-oxide (SR44: Eveready S-76, EPX-76, or equiv.), or one 3v lithium (CR-1/3N) cell(s) contained in camera base power both auto exposure control and manual operation; three-position main switch with indication for off, on, or on with audible piezoelectric slow-speed warning and self-timer operating indication; battery check by touching or slightly pressing operating button or engaging AE lock (mode LED blinks when cells approach exhaustion); no LEDs light and shutter will not release when voltage too low for proper operation

Self-timer: Electronic for 10-sec. delay, with operation indicated by camera-front LED that blinks at 2Hz for 8 sec., then 8Hz for 1 sec., then remains on until shutter releases, plus simultaneous audible indication when main switch in appropriate position; engaged by switch on body, cycle started by pushing operating button, cancelable anytime before release

Other: Audible 4Hz piezoelectric warning when auto speed is 1/30 sec. or slower whenever finger contacts "touch switch" normally or presses operating button slightly (or engages AE lock) with main switch appropriately set; integral front handgrip; detachable back with integral handgrip, memo holder, and ISO (DIN·ASA) table; positive 4-slot take-up spool; remote shutter-release socket

Size and weight: 51.5 x 89 x 137mm (2 x 3-1/2 x 5-3/8 in.), 480g (16-15/16 oz.)without lens and/or power cells

Standard accessories: Carrying strap with slide-on spare battery holder and eyepiece cap

Optional accessories: Auto Electroflash 360PX, 280PX, 132PX, Macro 80PX Set, off-camera cables and connectors, Power Grip 2, etc.; Multi-Function Back, Quartz Data Back 1; Motor Drive 1, Auto Winder G; Wireless Controller IR-1 Set; MD, MC, and other Minolta interchangeable lenses and applicable Minolta SLR system accessories

Specifications subject to change without notice

STORAGE

- If the camera is not to be used for more than two weeks, the batteries should be removed.
- It is advisable to operate the film-advance lever and release the shutter once or twice from time to time during extended storage.
- If the camera is to be stored for a long period of time, the body and lens should be returned to their original packing and kept in a cool, dry place away from dust or chemicals, preferably in an airtight container with a drying agent such as silica gel.

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