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Interchangeable Focusing Screens



Since the ideal screen varies with the lens in use and the photographic field, Canon offers 13 different types of interchangeable focusing screens for the New Canon F-1. All 13 types are available for both center-weighted average and selective-area metering. Six types, screens B, C, E, I, J and K, are available for spot metering for such specialized fields as photomacrography and telephotography.

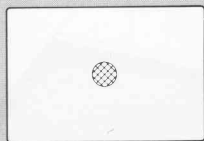
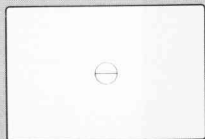
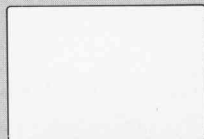
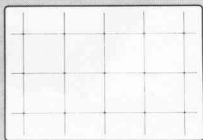
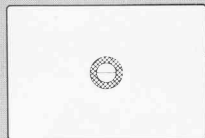
Metering Sensitivity Areas

Each screen is named according to metering area and type. The three metering areas are designated as follows:

- A - Center-weighted Average Metering
- P - Selective-area (Partial) Metering
- S - Spot Metering

The last two letters in the screen's name denote metering area and type of screen respectively. Thus, Focusing Screen FN-PE offers selective-area metering and is the type E, or New Split/Microprism, screen.

The thirteen types of screens, each designated by letter, are shown on the next three pages.

**A****B****C****D****E**

A. Standard Microprism

Laser-matte/fresnel field with microprism rangefinder spot in the center of the screen. Well suited for general photography when using an aperture of $f/5.6$ or larger.

B. New Split

Laser-matte/fresnel field with split-image rangefinder spot in the center of the screen. Since darkening of the center spot rarely occurs even with small maximum aperture lenses, this screen is suited for general applications.

C. Overall Laser Matte

Overall laser-matte/fresnel field. An ideal screen for photomacrography, telephoto photography and other applications in which an unobstructed view is required. Suitable for use with all lenses.

D. Laser Matte with Grid

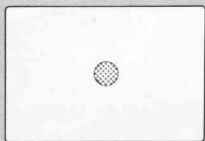
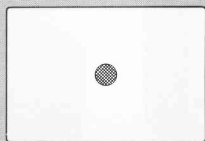
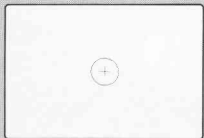
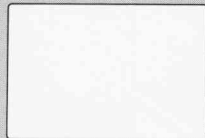
Similar to C screen, but with horizontal and vertical reference lines to facilitate accurate image placement. Especially effective for architectural and commercial photography as well as copy work. Suitable for use with all lenses; particularly recommended for TS (Tilt and Shift) 35mm $f/2.8$ lens.

E. New Split/Microprism

Laser-matte/fresnel field with split-image spot in the center and surrounding microprism collar. Provides optimum flexibility and focusing accuracy with any of the three focusing aids. Suitable for general applications. Standard screen with the New Canon F-1.

F. Microprism/Fast Lenses

Similar to A screen, but permits fast and precise focusing with lenses having maximum apertures of

**F****G****H****I****J**

f/1.2—2.8. Unsuitable for slower lenses due to darkening of the microprism rangefinder.

G. Microprism/Slow Lenses

Similar to A screen, but designed for use with lenses having maximum apertures of f/3.5—5.6. Recommended for use with telephoto lenses, it allows rapid, easy focusing without darkening of the rangefinder. Unsuitable for use with faster lenses because of focusing inaccuracy.

H. Laser Matte with Scale

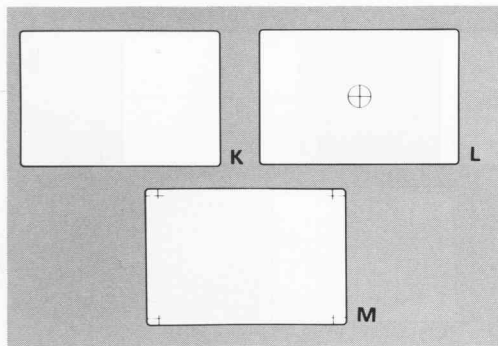
Laser-matte/fresnel field with fine matte center spot plus horizontal and vertical lines in 1mm graduations. Effective for close-up photography, photomacrography and photomicrography where the size of the image or the magnification is of particular concern. Suitable for use with all lenses.

I. Laser Matte with Double Cross-hair Reticle

Laser-matte/fresnel field with 5mm center spot containing double cross-hair reticle. Especially suited for applications requiring high magnification, such as photomicrography and astrophotography.

J. Bright Laser Matte/Short Lenses

Overall fine laser-matte/fresnel field. The brightest of the laser-matte screens, it allows rapid and easy focusing without darkening, even when using small aperture lenses. Especially recommended for focusing a dark subject or in dim light. Also useful when the lens must be stopped down, as in close-up applications. Suitable for use with lenses from 15mm to 200mm; particularly effective with 50mm to 200mm, including macro lenses. Unsuitable for lenses of 300mm and longer because of darkening at edges of screen.



K. Bright Laser Matte/Long Lenses

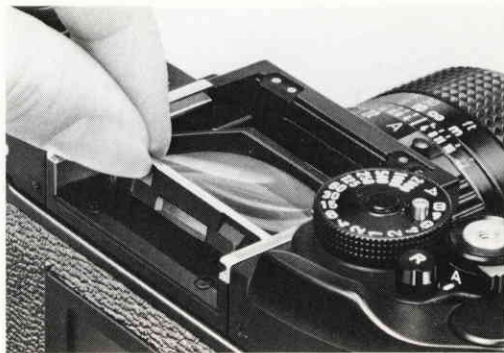
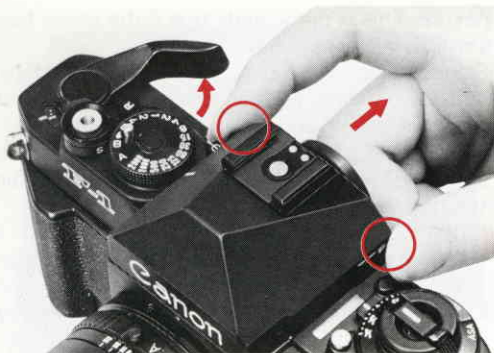
Overall fine laser-matte/fresnel field. Similar to J screen, but designed for use with lenses of 135mm and longer; especially useful with lenses of 300mm and longer. Unsuitable for use with standard or wide-angle lenses due to darkening at edges of screen.

L. Cross Split

Laser-matte/fresnel field with cross split-image in the center of the screen which divides the subject in half horizontally and vertically. Suitable for general photography when using an aperture larger than f/5.6.

M. A/B Size Laser Matte

Overall laser-matte/fresnel field with 2x2mm crosses in the four corners of the screen. Designed especially for use in the publishing field, it facilitates cropping when copying printed matter of A or B size.



Changing the Focusing Screen

If there is film loaded, shield the camera from direct sunlight while changing the screen.

1. First pull the film advance lever out to its 30° stand-off position. To remove the finder, press the two release buttons and pull it straight back.
2. Insert a fingernail into one of the notches and lift up the screen.

Note

Focusing screens for the former Canon F-1 and the New Canon F-1 are not interchangeable.

3. To remove the screen, pick it up by its frame. Never touch the Fresnel side (the underside when in the camera). If fingerprints should adhere to the screen, it may be impossible to remove them. To avoid marring its surface, lay the screen upside down with the Fresnel side up.
4. Insert the unnotched side (side with screen name) of a new screen under the metal tab, and push down the other side until the screen drops into a fully-seated position.
5. Aligning the finder with the guide rails, push it in so that it locks with a click.

Exposure Compensation

With center-weighted average metering, the camera's meter reads the average brightness of the subjects in a scene, with special emphasis placed on those in the center. Certain lighting conditions, however, may necessitate exposure correction. If there is bright light, such as the sun or a window, behind the subject, the meter may be influenced by that light and your subject will be underexposed. On the other hand, if you are shooting an actor on a dimly-lit stage, the meter may be "fooled" and your subject will be overexposed. Thus it is preferable, whenever possible, to meter the part of the scene which requires the most accurate ex-

posure. This is particularly true if the scene has strong contrasts in brightness.

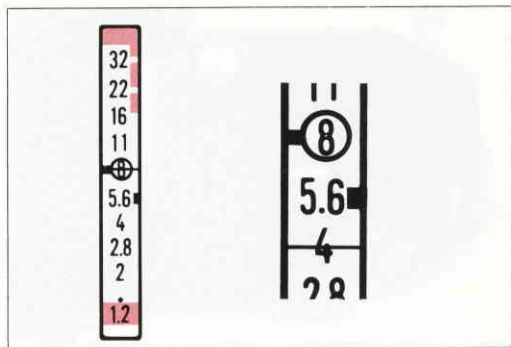
Selective-area metering is less influenced by the surrounding lighting conditions provided the main subject covers most of the 12% metering area. However, if the subject is quite small, some exposure compensation may still be necessary.

Since spot metering allows you to select a small, exact area, it is virtually unaffected provided the subject fills the 3% center spot.

Exposure compensation may also be necessary if you wish to intentionally overexpose or underexpose the shot for creative effect.

You can compensate exposure in any one of the following ways:

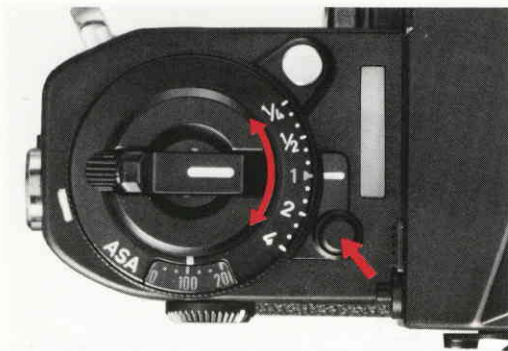
1. Manual Exposure
2. Exposure Compensation Dial
3. Adjusting the ISO Setting



1. Manual Exposure

After setting the desired shutter speed, turn the aperture ring until the aperture needle aligns with the meter needle. You can now over- or underexpose the subject in one-half f/stop increments simply by turning the aperture ring to a larger or smaller aperture. Note that the diameter of the aperture needle's circle is

equivalent to one f/stop. This method of exposure correction is useful, for example, when shooting a subject with strong backlight.



2. Exposure Compensation Dial

The exposure compensation dial allows you to make exposure corrections in increments as small as 1/3 f/stop. To make a correction, simply turn the dial, while pressing the lock release button, until the desired correction aligns with the index. The whole numbers are for increasing exposure while the fractions are for reducing exposure. The numbers "2" and "1/2" are equivalent to one f/stop (or one step of the shutter dial), while "4" and "1/4" are equivalent to two f/stops (or two steps of the shutter dial). The intermediate settings indicate increments of 1/3 f/stop. The table above

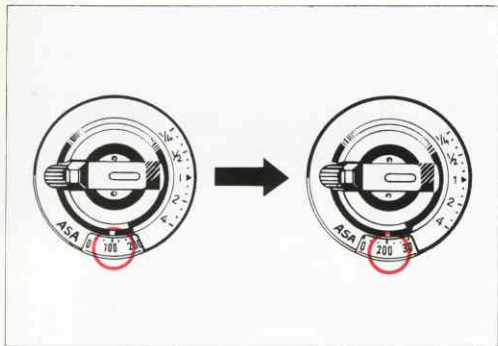
chart	ISO 6	1/4 .. 1/2 .. 1
	ISO 12	1/4 .. 1/2 .. 1 .. 2
	ISO 25—1600	1/4 .. 1/2 .. 1 .. 2 .. 4
	ISO 3200	1/2 .. 1 .. 2 .. 4
	ISO 6400	1 .. 2 .. 4

shows which settings can be used depending on the ISO film speed.

This means of exposure compensation is possible regardless of the exposure mode, and is useful for bracketing. It is particularly advantageous for AE photography since it allows you to adjust the exposure quickly.

IMPORTANT

Once you have made an exposure correction, do not forget to reset the dial to "1." Otherwise, all following frames will be incorrectly exposed.



3. Adjusting the ISO Rating

You can also correct exposure in manual or AE by changing the film speed setting on the camera.

A film with an ISO rating twice that of another film requires only half the amount of light for correct exposure. Thus if you have an ISO 100 film loaded and you wish to underexpose the subject one f/stop, simply change the ISO setting to ISO 200.

It is possible to over- or underexpose the subject by up to two f/stops using any of these three methods. For compensating more than two f/stops, make the adjustment by changing the ISO rating or by manually setting the aperture and shutter speed.

Note

When it is difficult to determine exactly how much correction to make, bracket the exposure, using any of the three methods.

“Pushing” the ISO Rating

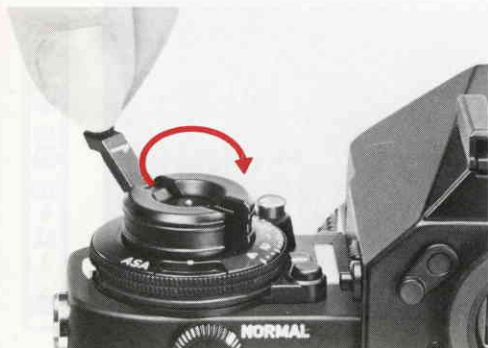
There may be occasions when, due to insufficient lighting, you are forced to use undesirably slow shutter speeds. In this case, you can “push” the ISO setting on the camera to a higher value. Usually this is done by multiplying the normal ISO film speed by a multiple of two, such as two or four. The entire roll of film must be shot at the “pushed” ISO setting; otherwise, exposure will not be correct for all frames. It is also necessary to inform the developing lab of the change in the ISO rating or the film will be incorrectly developed. However, since not all films can be “pushed” with acceptable results, it is recommended to read the film data sheet or other photographic literature before you try this technique.

Rewinding the Film



When you have reached the end of the film, the film advance lever will stop before the end of its stroke.

1. Turn the rewind lever in the direction of the arrow and push it down until it locks.

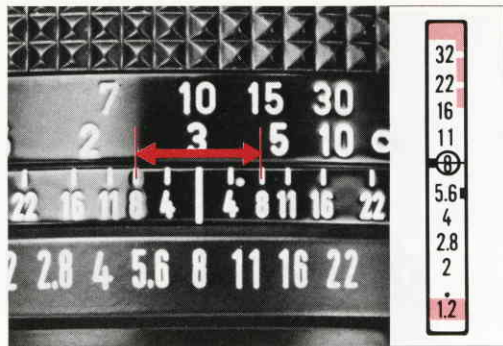


2. Unfold the rewind crank and turn it in the direction of the arrow. You will hear a sound as you turn the rewind crank which indicates the film is being rewound. When you no longer hear the sound, the film is completely rewound.
3. Pressing the safety stopper, open the camera back by pulling up the rewind knob and take out the film. Be sure to shield the film from direct sunlight while unloading.

Notes

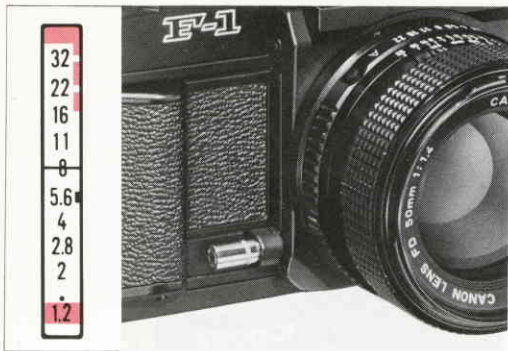
1. If you are not sure the rewind lever is engaged, or if you have accidentally engaged it, gently press the shutter button and the lever will pop back up.
2. The frame counter does not count backwards as you rewind the film.
3. The frame counter will return to "S" and the rewind lever will automatically disengage when you open the camera back.

Checking Depth of Field



There are two ways to check depth of field. One is by using the depth-of-field scale on the lens. This is a scale of f/stops repeated on each side of the distance index.

1. First focus. Then press the shutter button halfway and note to which f/stop the meter needle points in the viewfinder. Find the two f/stops on the depth-of-field scale which correspond to that number.
2. Draw imaginary lines from those two numbers to the distance scale. The effective depth of field lies between those two distances.



You can check depth of field visually in the following way:

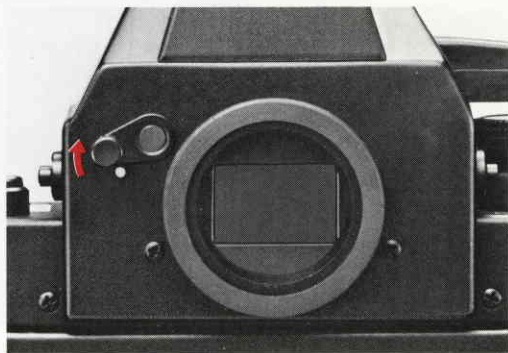
1. Focus the subject. Then press the shutter button halfway and note to which f/stop the meter needle points in the viewfinder.
2. Turn the lens' aperture ring to that f/stop.
3. Push in and then release the stop-down slide so that it unlocks and you can see its red line. Now, just by looking at your subject through the viewfinder, you can see the range of sharp focus.
4. After checking depth of field, push in and then release the stop-down slide.

Note

It is impossible to release the stop-down slide when the lens' aperture ring is on "A." If you are using the camera in shutter-priority AE, first disengage the lens from "A" and set the working aperture. After checking depth of field, return the aperture ring to the "A" mark.



1. First make sure the film is advanced to the next frame.
2. Turn the self-timer/lock lever to "S."
3. Focus the subject and take a meter reading. Do not set the shutter dial to "B" because the self-timer will not function on this setting.
4. Press the shutter button. A "beep-beep" sound will be emitted. The shutter will be released automatically ten seconds later. At two seconds before shutter release, the camera will begin to beep at a faster rate.
5. Following exposure, turn the lever back to "A" or "L" unless you want to use the self-timer for the next shot.



Notes

1. In shutter-priority AE, the camera is designed to reflect any last-second changes in lighting and will not set the exposure until an instant before the shutter itself is released.
2. In aperture-priority AE, the camera sets the shutter speed the moment you press the shutter button. Therefore, do not stand in front of the lens while you press the shutter button or exposure may be incorrect.
3. If you have started the self-timer and wish to cancel its operation, press the battery check button.

Eyepiece Shutter

If your eye will not be to the eyepiece during shutter release, close the eyepiece shutter to prevent stray light from entering and causing underexposure. This is particularly important in self-timer AE photography, and also applies to remote control and night photography.

To close the eyepiece shutter, push the lever clockwise. The red dot is a reminder that the eyepiece shutter is in place.



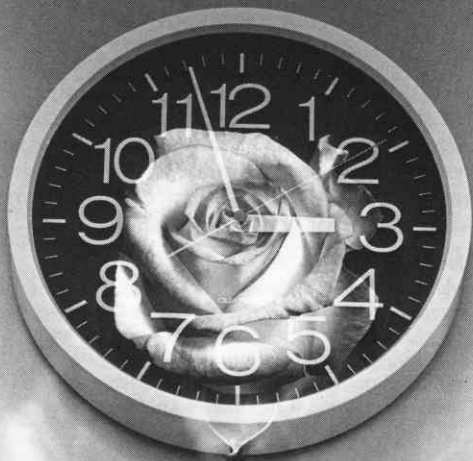
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Multiple Exposures



The New F-1's provision for multiple exposures allows you to easily make two or more exposures on the same frame for creative effect.

1. First advance the film to the next frame.
2. Then take up any film slack. To do this, *unfold* the rewind crank and gently turn it in the direction of the arrow until it stops.





3. Focus, compose your subject and take the picture.
4. Turn and press down the rewind lever in the usual manner; the film will now remain stationary for multiple exposures.
5. Gently turn the film advance lever. This will cock the shutter for the next exposure.

You can make any number of exposures on the same frame simply by repeating steps 3, 4 and 5 above in the proper order. Each time you turn the film advance lever, the camera's frame counter will advance once. There is, however, a possibility of slight movement of the film if you make an excessive number of exposures on the same frame.

If you have engaged the rewind lever for multiple exposure and wish to cancel it, lightly press the shutter button *before* turning the advance lever. Note that it is not advisable to make multiple exposures on the first or last several frames due to possible film curl which may adversely affect image registration.

Note

Multiple exposures are also possible when the AE Power Winder FN or AE Motor Drive FN is attached to the camera. To release the shutter, use either of the two shutter buttons of the power drive. To return to normal shooting, cap the lens and take a blank shot using the camera's shutter button.

Exposure in Multiple Exposures

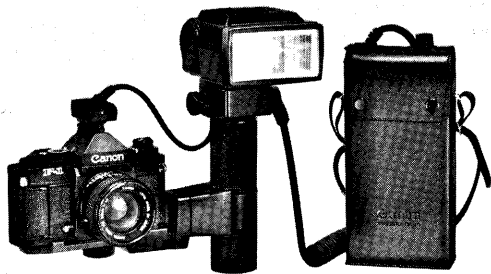
Generally, the first exposure of a series should be of a relatively dark subject so that the image in the next exposure will show up clearly. For best results, it is advisable to decrease the exposure for each shot. Depending on the situation, there are several ways to do this. One way is to change the ISO setting to a higher value as described earlier. In this method, you must first decide how many exposures you want to make on the same frame. If a double exposure, make both exposures at twice the

normal ISO rating; if a triple exposure, make all three exposures at three times the normal ISO rating, and so forth.

Another way to correct exposure is to use the exposure compensation dial. This method is the same as that of changing the ISO. That is, for a double exposure, set the dial to "1/2" for both exposures; for a triple exposure, at the setting between "1/2" and "1/4", and so on. Both methods described above are merely guidelines, and your technique will benefit greatly from practice.

Number of Multiple Exposures	Exposure Compensation Scale
Double	1/2
Triple	Between 1/2 and 1/4
Quadruple	1/4

Flash Photography



**I. AE Flash Photography with Speedlites
133A, 155A, 177A, 188A, 199A, 533G
and 577G.**

Once the Speedlite is attached to the camera and its pilot lamp is glowing, the camera switches automatically to the X sync speed of 1/90 sec. provided the shutter dial is not on "B."



133A



155A



177A



188A



199A



533G



577G

In addition, the meter needle points simultaneously to the aperture which you have set on the back of the Speedlite. Thus you do not have to take your eye away from the viewfinder; as soon as the meter needle points to the auto working aperture, the flash is ready. Now simply turn the lens' aperture ring until the aperture needle aligns with the meter needle.

With the AE Finder FN attached and the shutter dial on "A," the camera will switch automatically to the X sync speed of 1/90 sec. and the meter needle will point to the right of 1/60 sec. Set the same aperture on the lens as that set on the Speedlite.

With the power winder or motor drive attached and the lens' aperture ring set to the "A" mark for shutter-priority AE, the camera will automatically switch the shutter speed to 1/90 sec. and the aperture to the f/stop which you have set on the Speedlite as long as the shutter dial is not on "B."

After the shutter is released, the camera automatically switches back to the speed actually set on the shutter dial until the Speedlite's pilot lamp glows again.

II. Slow-sync Flash Photography

With Speedlites 199A, 533G and 577G, you can select a shutter speed slower than 1/90 sec. The advantage of slow-sync flash photography is that the background in the picture will be lighter. You can choose among three working apertures on each of these Speedlites for optimum control of depth of field. For this technique, first set the AUTO/MANU switch of the Speedlite to "MANU." Then turn the camera's shutter dial to any speed from 1/60 sec. to 8 seconds. The picture will be taken at the speed you have set on the shutter dial and the flash will fire at the release of the first shutter curtain. If the shutter dial is set to a speed from 1/2000 to 1/125 sec. or " $\frac{1}{2}$," the shutter speed will automatically switch to 1/90 sec. As in normal AE flash photography, the meter needle will point to the aperture which you have set on the Speedlite as soon as the pilot lamp lights up. Simply turn the aperture ring until the aperture needle matches the meter needle. With the motor drive or power winder attached and the lens' aperture ring set to the "A" mark, the aperture will be controlled automatically as well.

IMPORTANT

Before mounting a flash unit, make sure its power switch is OFF.

Note

If using a viewfinder which does not have an accessory shoe, such as the Waist-Level Finder FN, connect the Speedlite to the camera's PC socket via a synchronization cord. Then turn the shutter dial to " $\frac{1}{2}$ " (1/90 sec.) and set the same aperture on the lens as that set on the flash unit.



III. General Flash Photography

When using an automatic flash unit other than a Canon Speedlite, first turn the shutter dial to "1/90" (1/90 sec.). Then turn the aperture ring to the same aperture which you have set on the flash. With the shutter dial on "1/90," other types of electronic flash units can be synchronized either through the hot shoe or via the PC socket on the side of the camera. These allow two separate flash units to be fired simultaneously. Set the shutter dial according to the information in the table on the following page.

When shooting with a flash bulb or a manual flash unit, calculate the aperture with a guide-number formula or with the calculator dial if the flash unit has one. Turn the lens' aperture ring to that aperture.

$$\text{Aperture} = \frac{\text{Guide Number}}{\text{Shooting Distance}}$$

When calculating, make sure that the guide number and shooting distance are both in the same unit, whether meters or feet.

Manual flash photography is possible with Speedlites 155A, 177A, 188A, 199A and 577G. With any of these flash units, the shutter speed will switch automatically to 1/90 sec. as soon as the pilot lamp lights up, provided the shutter dial is not on "B." The meter needle, however, will not point to the auto working aperture as in normal AE flash; instead, it will point to the overexposure warning zone. Since the meter needle does not indicate that the flash is charged, check the pilot lamp to make sure it is glowing before you shoot. Following the procedure above, manually set the aperture on the lens.

For more details, see the instructions of the flash.

Synchronized shutter speeds	1/2000	1/1000	1/500	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1	2	4	8	1/90	B
FP						▲	●	●	●	●	●	●	●	●		●
M & MF						▲	●	●	●	●	●	●	●	●		●
Electronic Flash (X)					●	●	●	●	●	●	●	●	●	●	●	●

● =okay ▲ =possible unevenness in picture depending on bulb

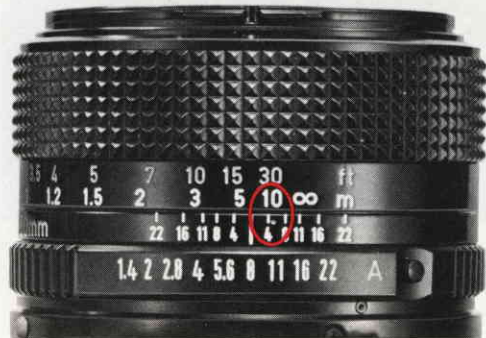
CAUTION

It is recommended to use a Canon flash unit on this camera. Using a flash or flash accessory of another make may cause the camera to work improperly or even possibly damage the camera itself. If you use a non-Canon flash, turn off the unit before you attach it to or remove it from the camera's hot shoe. Before removing the flash, press the flash test button if it has one to discharge any power remaining in the capacitor. These are merely precautions; following these steps will not necessarily prevent the camera from being damaged by the flash unit.



Infrared Index Mark

Infrared light has longer wavelengths which focus on a plane slightly behind that of ordinary visible light. It is necessary, therefore, to slightly adjust the focus of the lens when using black-and-white infrared film. The infrared index mark engraved on the lens is used for this purpose. After focusing in the usual way, note the small red dot engraved on the lens barrel to the right of the distance index, and turn the focusing ring to align the focused distance with this dot. For instance, if the focus is at 10m on the distance scale, turn the focusing ring to align the 10m mark with the red dot. After making this correc-



tion, you can release the shutter.

When using black-and-white infrared film, visible light must be kept out by means of a deep red filter, such as an R1 or Kodak Wratten 87. The position of the infrared index mark has been computed for the use of infrared film with peak sensitivity at 800nm, such as Kodak IR 135.

For further details, refer to the film manufacturer's instructions.

Shooting with Close-up Accessories



With few exceptions (noted in the instructions for the accessory), stopped-down metering is necessary whenever you insert an accessory between the camera and lens for close-up photography.

1. If you insert an accessory designed for **AUTOMATIC** diaphragm control, such as the Auto Bellows or Bellows FL, between the camera and **ANY** lens, follow the steps for stopped-down metering.
2. If you insert an accessory designed for **MANUAL** diaphragm control, such as M Extension Tubes or Bellows M, between the camera and a **NON-FD** lens, follow the steps for stopped-down metering. Turn the A-M ring of an FL lens to "M" for taking the shot (not necessary if Canon Macro Auto Ring and Double Cable Release are used).
3. If you insert an accessory designed for **MANUAL** diaphragm control between the camera and an **FD** lens, unless you use the Canon Macro Auto Ring and Double Cable Release, first set the lens for manual diaphragm control before mounting it on the accessory. Then follow the steps for stopped-down metering.

Note

The instructions with the accessory will tell you whether or not manual diaphragm control is necessary. The procedure differs according to the type of lens. See pp. 78—79.



Manual Diaphragm Control

FD Lenses without Chrome Mount Ring except for FD Macro Lenses

1. Insert the slot of the accessory manual diaphragm adapter over the tip of the automatic aperture lever at the rear of the lens. Push the lever counterclockwise and lower the adapter into the groove.



2. Mount the lens on the accessory. The diaphragm blades will now open or close as you turn the aperture ring. When the manual diaphragm adapter is attached, never mount the lens directly on the camera or on an accessory designed for automatic diaphragm control, such as the Auto Bellows or Bellows FL.



FD Lenses with Chrome Mount Ring and FD Macro Lenses (except for FD 200mm f/4 Macro Lens)

1. Push the automatic aperture lever at the rear of the lens counterclockwise until it automatically locks.
2. Mount the lens on the accessory.

Note

Some of these lenses have an additional lock lever. With these lenses, push the automatic aperture lever fully counterclockwise, then push the lock lever to "L."

Be sure to reset the automatic aperture lever to its normal position before mounting the lens

directly on the camera. In the case of a lens with a lock lever, switch it back to the position of the white dot.

Film Plane Indicator

This mark, engraved on top of the camera body, indicates the exact position of the film plane. It is useful for measuring the exact shooting distance from film to subject in close-up photography. Distances on the lens' distance scale are calibrated from this mark. It is not used in general photography.

Note

The aperture ring of an FD lens must be removed from "A" before you mount the lens on any of these close-up accessories except for FD-U Extension Tubes and Extenders FD 2x and FD 1.4x, which are designed for normal full-aperture metering.



System Accessories



1. Canon AE Motor Drive FN

The AE Motor Drive FN is designed as an integral part of the New Canon F-1 system. Attached to the camera, this accessory redefines the meaning of automatic in motorized SLR photography by providing you with automatic film winding and power rewinding as well as shutter-priority AE, the ideal exposure mode for sports, action and candid photography. Three separate power sources, the Battery Pack FN, Ni-Cd Pack FN, and the High Power Ni-Cd Pack FN, are available to suit your preference and the shooting situation. With Battery Pack FN or High Power Ni-Cd Pack FN,

sequential shooting at up to five frames per second is possible; Ni-Cd Pack FN enables film advance at 4.5 frames per second. The motor drive is equipped with two shutter buttons for maximum ease of operation when shooting in either the horizontal or vertical format, and a remote control socket.



2. Canon AE Power Winder FN

Designed to increase the versatility of the New Canon F-1, the AE Power Winder FN advances the film automatically in single-frame or continuous shooting at a maximum two frames per second. In addition, it converts the camera to shutter-priority AE. The power winder has two shutter buttons for horizontal or vertical shots. A socket is provided for any of the various remote control devices.



3. Canon Film Chamber FN-100

The Film Chamber FN-100 is one of the system accessories designed for the New Canon F-1. Used in conjunction, the AE Motor Drive FN and film chamber provide continuous or single-frame shooting capability of up to 100 frames, as well as shutter-priority AE. Yet it is sufficiently light and compact to afford hand-held shooting, making it ideal for sports, documentary and action photography where utmost mobility is desired. A special grip and shutter button on the film chamber ensure maximum ease of handling.



4. Canon Data Back FN

The Canon Data Back FN is a data-recording accessory designed for use with the New Canon F-1. In addition to the year, month, and day, the letters A to G in both upper and lower case and Roman numerals I to X may be imprinted in up to six characters on the film. Not only can this accessory be used for recording the data on photographs, it may also be used to code them for scientific and other purposes. The data back's special direct contact enables data recording in perfect synchronization with exposure.



5. Canon Wireless Controller LC-1

This remote control device uses infrared light to control cameras from a distance. The LC-1 is particularly useful in sports and wildlife photography, news coverage and numerous other fields. The Wireless Controller consists of a transmitter and a receiver. Up to three cameras can be operated on three different channels.

Specifications

Type: 35mm single-lens reflex (SLR) camera

Format: 24 x 36mm

Interchangeable Lenses: Canon FD (for full-aperture metering) and Canon FL, R and non-FD (for stopped-down metering) series lenses.

Standard Lenses: FD 50mm f/1.2L, FD 50mm f/1.2, FD 50mm f/1.4 and FD 50mm f/1.8

Lens Mount: Canon breech-lock mount.

Exposure Modes: Match-needle and stopped-down manual exposure. Shutter-priority AE possible by attaching AE Power Winder FN or AE Motor Drive FN and setting lens' aperture ring to "A." Aperture-priority AE and stopped-down AE possible by attaching AE Finder FN and setting shutter dial to "A." AE flash possible with specified Canon Speedlites.

Viewfinder: Interchangeable eye-level pentaprism as standard. 97% vertical and horizontal coverage of actual picture area with 0.8x magnification at infinity with a

standard lens. Aperture scale with f/stops from f/1.2 to f/32, overexposure and underexposure warning marks, meter needle, aperture needle and battery check/stopped-down metering index are displayed to the right of the field of view. Shutter speed displayed below aperture scale. Speeds include 1/2000 to 1 sec, "½" and "B" in green; full seconds of 2, 4 and 8 are in orange.

Viewfinder Illuminator: Provided; illuminates aperture scale and shutter speed for 16 seconds when meter mode selector is set to "LIGHT" and shutter button pressed half-way.

Eye-piece Shutter: Built-in. Keeps out extraneous light during self-timer and remote control operation.

Dioptric Adjustment: Built-in eyepiece adjusted to standard -1 diopter.

Focusing Screen: Standard split-image/microprism rangefinder. Twelve other types of interchangeable screens are optionally available.

Light Metering System: Through-the-lens (TTL) metering by silicon photocell (SPC). Metering area is determined by special optical element incorporated in each focusing screen. Center-weighted average, selective-area and spot metering are optionally available by changing the focusing screen.

Meter Coupling Range: EV -1 (4 sec. at f/1.4) to EV 20 (1/2000 sec. at f/22) with ISO 100 film and FD 50mm f/1.4 lens.

Exposure Preview: By pressing shutter button halfway.

Meter Mode: At "NORMAL," meter activated as long as shutter button is pressed halfway. At "HOLD," meter, once activated, stays on for 16 sec. At "LIGHT," meter, once activated, stays on for 16 secs. and viewfinder information is illuminated. Cancellation possible.

Exposure Compensation Dial: ± 2 f/stop range in 1/3 f/stop increments: 1/4 .. 1/2 .. 1 .. 2 .. 4

Shutter: Horizontal-travel, titanium focal-plane shutter with four spindles. Electromechanical hybrid control. Mechanically controlled at speeds from 1/2000 to 1/125 sec., "Z" (1/90 sec.) and B. Electronically controlled at speeds from 1/60 to 8 secs.

Mechanical Shutter Operation: By removing battery from battery chamber. Only mechanically controlled speeds can be used.

Mirror: Instant-return type with shock-absorbing mechanism.

ISO (ASA) Film Speed Scale: ISO 6-6400.

Shutter Dial: 1/2000 to 8 sec., "A" (for aperture-priority AE or stopped-down AE with AE Finder FN), "B" (bulb) and "Z" (1/90 sec.). Shutter speeds from 1/2000 to 1 sec., "Z" and "B" are in white, 2 to 8 secs. in yellow and "A" is in red.

Shutter Button: Two-step button with electromagnetic release. Mechanical release when battery is removed from the camera. Pressing it halfway activates meter circuit, pressing it fully releases the shutter. Can be locked by setting self-timer/lock lever to

"L." With cable release socket.

Self-timer/Lock Lever: Three positions: "A," "L," and "S." At "L," the shutter button is locked as a safety feature. "S" position is for self-timer operation.

Self-timer: Electronically controlled. Self-timer/lock lever set to "S." Activated by pressing shutter button. Ten-second delay with electronic "beep-beep" sound. Number of beeps emitted per second increases two seconds before shutter release. Cancellation possible.

Stop-down Slide: For depth-of-field preview or stopped-down metering.

Power Source: One 6V lithium (Duracell PX 28L), alkaline-manganese (Eveready [UCAR] No. A544), or silver oxide (Eveready [UCAR] No. 544) battery. Battery lasts about one year under normal use.

Battery Check: By pressing battery check button. Battery power is sufficient if the meter needle registers above the battery check

index.

Cancellation of Camera Circuit: By pressing battery check button. Cancels shutter operation, self-timer operation, meter reading and viewfinder illumination.

Multiple Exposure: Possible by engaging rewind lever before winding film advance lever to recock the shutter. Cancelled by lightly pressing shutter button.

Flash Synchronization: Speeds up to 1/90 sec. with electronic flash; FP- and M-sync at 1/30 sec. or slower. Direct contact at accessory shoe for hot-shoe flash. Threaded PC socket (JIS-B type) for cord-type flash or multiple flash photography. Accessory shoe has contact for normal automatic flash and special contact for AE flash with specified Canon Speedlites.

Automatic Flash: New Canon Auto Tuning System (New CATS) with specified Canon Speedlites. Shutter speed is automatically set to 1/90 sec. with shutter dial at any setting except B. Meter needle indicates auto

working aperture in the viewfinder as soon as Speedlite's pilot lamp glows. Aperture controlled automatically when AE Power Winder FN or AE Motor Drive FN is attached and lens' aperture ring set to "A" mark.

Slow-Sync Flash Photography: Possible with Speedlites 199A, 533G and 577G. Flash synchronizes with shutter speed set at slow settings from 1/60 to 8 secs. Camera switches automatically to 1/90 sec. when shutter dial is set from 1/2000 to 1/125 sec. or "f."

Camera Back: Opened by pressing safety stopper while pulling up rewind knob. Removable for attaching Data Back FN or Film Chamber FN-100. With memo holder.

Film Loading: Via multi-slot take-up spool.

Film Advance Lever: Single-stroke 139° throw with 30° stand-off. Ratchet winding possible.

Frame Counter: Additive type. Automatically resets to "S" upon opening camera back. Advances during multiple exposures.

Film Rewinding: By turning rewind lever clockwise and pressing it down and turning rewind crank. Rewind lever automatically resets when camera back is opened and when shutter button is lightly pressed.

Other Safety Devices: Camera will not function when power level is insufficient or when lens' aperture ring is set to "A" and the power winder or motor drive is not attached. Film winding impossible while shutter is in operation.

Dimensions: 146.7 x 48.3 x 96.6 mm (5-3/4" x 1-7/8" x 3-3/4") body only.

Weight: 795g (28 ozs) body only 1,030g (36-5/16 ozs) with FD 50mm f/1.4.

Subject to change without notice.

Caring for your Camera

As with any precision instrument, proper care and maintenance involve a few simple rules in addition to common sense. Observing these few rules will keep your New Canon F-1 in top condition at all times.

1. The best thing you can do for your camera is to use it regularly. In the event that you must store it for quite a while, first remove it from its case or camera bag. Remove the battery. Wrap the camera in a clean, soft cloth and place it in a cool, dry, dust-free place. If you store the body and lens separately, attach both the body and rear lens caps.

2. Keep the camera and lens out of direct sunlight and away from "hot spots," such as the trunk, rear window shelf or glove compartment of a car. Do not store the camera in a laboratory or other such area where chemicals may cause corrosion.

3. To keep the camera in top condition during prolonged storage, occasionally insert the battery and take several blank shots to "exercise" the mechanisms. Check the operation of each

part before you use the camera following storage.

4. Reliable under normal use, your camera can be damaged by water, excessive spray or humidity, sand and shock. Clean it especially well after you use it in an area with excessive dust or saltwater spray. If you accidentally drop it in water, it may be irreparable but take it immediately to an authorized Canon service facility for inspection.

5. To clean the exterior of the camera body, first blow off dust with a blower brush. Wipe off smudges with a silicone cloth or chamois leather. If smudges remain on the eyepiece after using a blower brush, wipe it lightly with lens-cleaning tissue which has been moistened with a couple of drops of lens cleaner.

6. If the lens surfaces are clean, yet the viewfinder appears dusty, the picture will not be affected by the dust in the viewfinder. If the mirror gets dirty, it will not affect pictures but it may make viewing difficult. Dust it very gently with a blower brush. If further cleaning is

necessary, take the camera to the nearest authorized Canon service facility.

7. The film chamber needs cleaning from time to time to remove film dust which may scratch the film. Gently dust it out with a blower brush, being careful not to press on the film rails, shutter curtain and pressure plate.

8. To clean the lens surfaces, use only a blower brush, cleaning fluid and tissue made specially for cleaning camera lenses. Carefully follow the lens' instructions.

Using the Camera at Very Low Temperatures

When you use the New F-1 in cold conditions, try to protect it from outside air and avoid extreme temperature changes. Condensation forming on a camera and lens taken from subzero outside temperatures into a warm room may cause corrosion. To avoid this, place the camera in a plastic bag while still outdoors. Then seal the bag and take it indoors, leaving the camera in the bag until it gradually reaches room temperature. Generally, this takes about

one-half hour.

Also, remember that at temperatures below 0°C (32°F), battery power may decrease or fail. Please see page 9 for tips on battery care when shooting in cold conditions.

If you are using the camera in conjunction with the motor drive, the High Power Ni-Cd Pack FN is the most reliable power source for uninterrupted shooting at low temperatures. It can be used as the sole power source for both the camera and the motor drive by attaching the Battery Cord C-FN.

Neckstrap

Thread the tips of the neckstrap through the corresponding rings on the camera so that the tips are on the inside. Then adjust the neckstrap to the length most comfortable for you.

