



English Edition

Canon

AUTO ZOOM 512XL

ELECTRONIC



INSTRUCTIONS

AUTO ZOOM 512XL

ELECTRONIC



Technical Data

Type: SLR type Super 8 with XL mechanism.

Lens: Zoom lens 9.5 - 47.5mm 1:1.2 with wide-macro mechanism. Lens construction is 17 elements in 12 groups. **Zoom Ratio:** 1:5. **Coating:** Spectra Coating.

Distance Scale: ft 4 7 15 50
m 1.2 1.5 2 3 5 10 ∞

Focusing: Rotating front component. Angle of rotation 111°30' (∞ - 1.2m). **Zooming:** Electric, 6 - 10 seconds, angle of rotation 120°. Manual zooming possible.

Zooming Scale: 47.5 25 15 9.5mm. **Macro Mechanism:** Switch over to macro zone by rotating the zooming ring passing the wide zone. Shooting distance is 50mm from tip of lens. Covers picture angle of 38.6 x 53.1mm. In the macro zone, focusing is by rotating the angle of zooming ring. Angle of rotation 35°. **Front Frame Size:** Cap size 50mm, filter size 48mm. Tele converter C-8-2 and wide converter C-8 can be attached.

Viewfinder: SLR type split image rangefinder. **Viewfinder Information:** Illuminated, mobile f/stop values, over/under exposure warning marks. **Dioptic Adjustment:** -4 - +2 dpt. Built-in eyecup.

Shutter: Number of frames: 1, 9, 18 and slow motion (approximately 36 frames). **Single Frame Shooting:** Possible with remote switch. EE also possible. **Angle of Shutter Opening:** Fixed at 220°. **Release Mechanism:** Built-in magnetic release mechanism. **Running Lock:** Possible. **Safety Lock:** When OFF.

Exposure Meter: Through-the-lens EE with CdS. **Metering Range:** ASA250 f/1.2, 9 frames, angle of shutter opening 220° - ASA25 f/45, slow motion, angle of shutter opening 220°. **Film Speed:** Automatically set when cartridge is loaded. For artificial light 25 - 250, for daylight 16 - 160. **CCA Filter:** Built-in. When daylight

type magazine is inserted, it automatically removes this filter. Also, when CCA Filter Switch Adapter is attached to filter switch socket on the camera top, the CCA filter is removed from the light path. **Single Frame Shooting:** Set frame speed dial to "18" frames and the shutter switch to [1]. EE photography possible. **Power Source:** Used together with film drive. Built-in constant voltage circuit. **Manual Aperture:** Possible. Mechanical operation.

Closing Aperture: Aperture can be closed completely by manual operation. Fading possible.

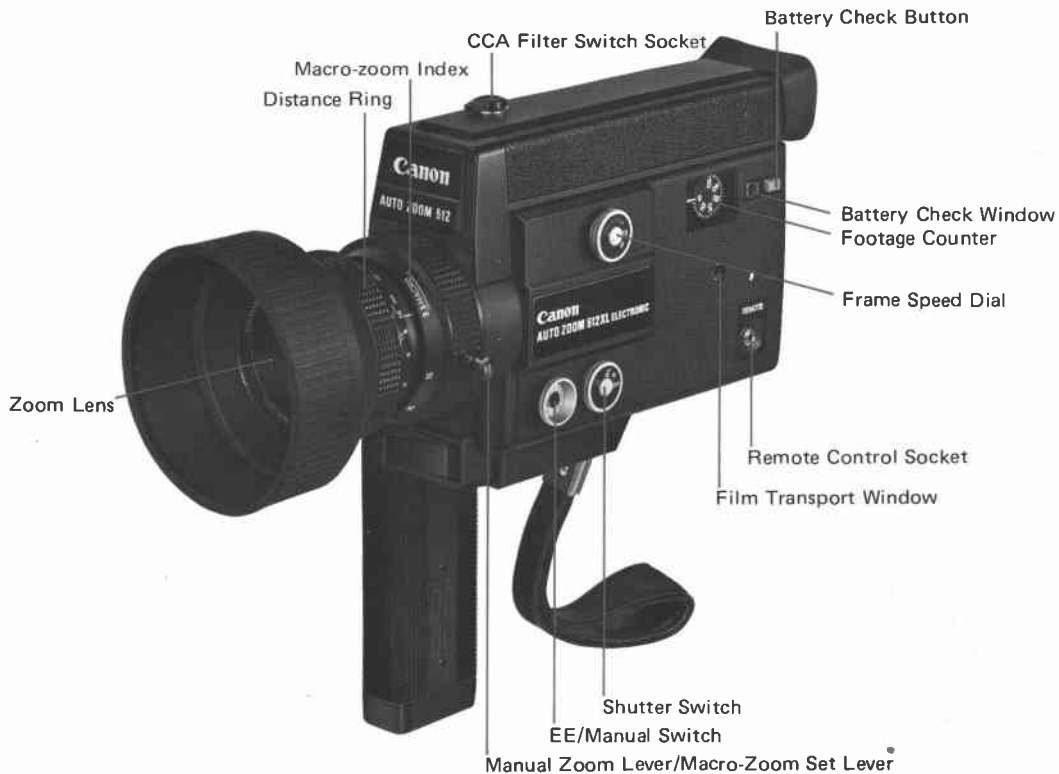
Motor: Electric motor to drive film. **Power Source:** 4 penlight batteries (6V) loaded inside grip. **Number of Films:** Runs more than 10 cartridges. **Battery Check:** Meter type with check button and check window. **Remote Control:** Possible.

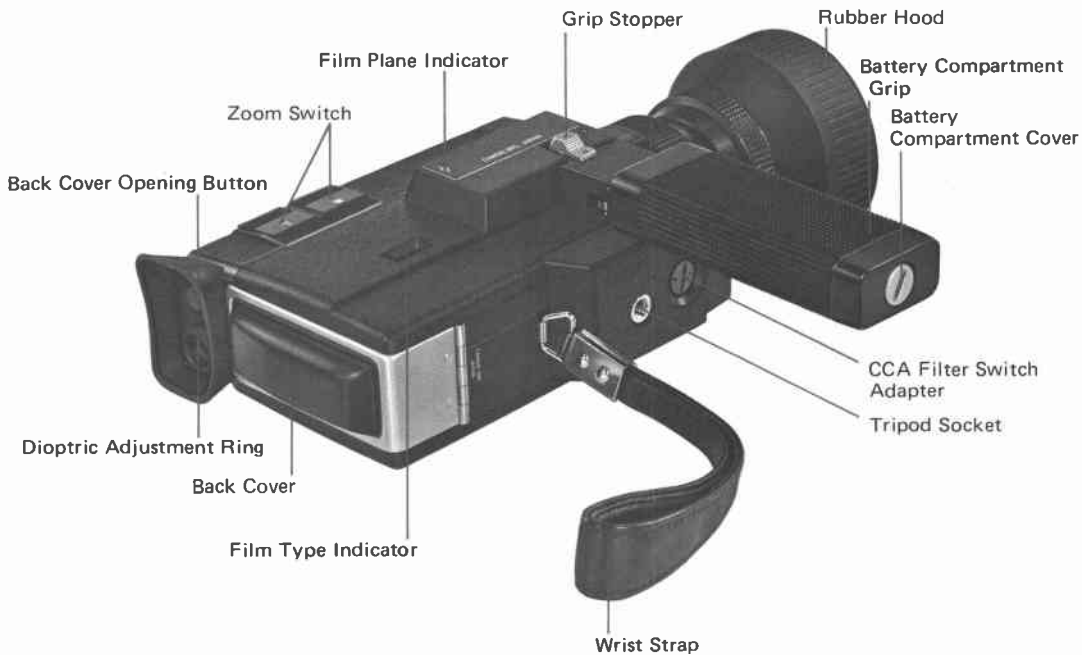
Body: Grip: Collapsible. Contains the batteries. **Wrist Strap:** Built in the body. **Footage Counter:** Couples to removing operation of cartridge. Automatically returns to 0 and counts footage of exposed film. **Film Loading:** Drop-in cartridge inserted from the back of body. **Attaching Movie Light:** Use screw type socket on the camera top. CCA filter is automatically removed when lighting unit is attached. **Tripod Screw:** Small CU 1/4 screw.

Dimensions and Weight: 255 x 118.5 x 69.5mm, 1350 g (with batteries).

Accessories: Soft Case, Remote Switch 3, Remote Switch 60, Filter 48mm, Close-up Lens C-8 240 and 450, Lens Cap, Chestpod, Self-Timer E, Wide Converter C-8, Tele Converter C-8-2, Interval Timer E, Time Lapse Programmer.

Subject to alterations.







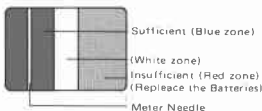
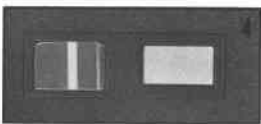
Instructions for Canon Auto Zoom 512 XL

1 Unfold the grip

2 Load the battery

3 Switch shutter lock dial to "R"

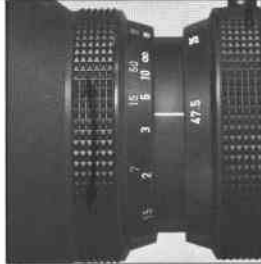
4 Check battery capacity (If meter needle is in the blue, the battery has sufficient power.)



5 Perform dioptric adjustment, i.e. viewfinder focus.
(Please see page 9, No. 4.)

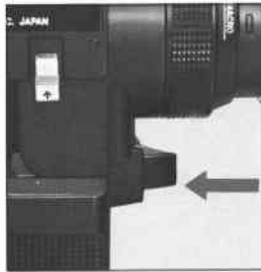
6 Open the back cover





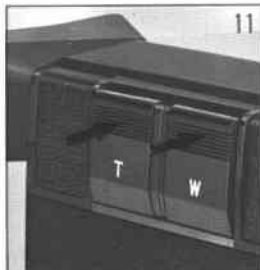
7 Insert the film

8 Focus (Focus at the maximum telephoto position.)



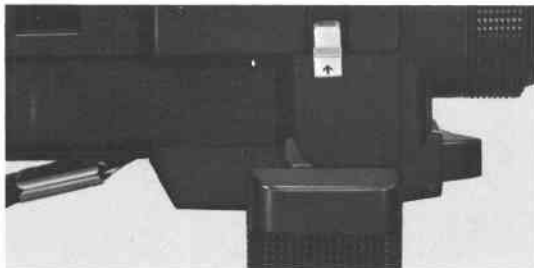
9 Set frame speed at 18

10 Pull the shutter lever



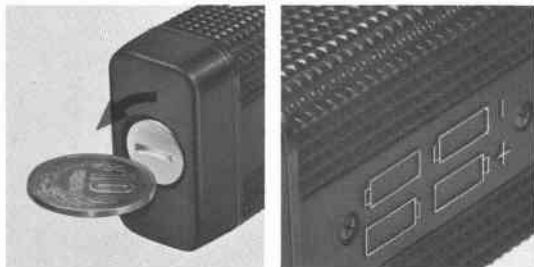
11 Zoom as desired

12 Remove the film after shooting



Preparatory Steps

1 Unfold the Grip

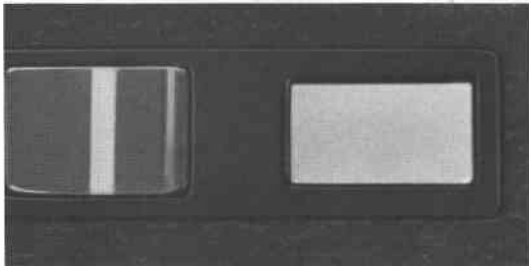


2 Load the Battery.

Remove battery compartment cover as shown by the arrow to load the battery. Follow the diagram on the side of the grip when loading the battery. (*Improper insertion may cause explosion.)

Note: Cold temperature (below freezing) affects the performance of the batteries. Please keep them warm by holding them close to your body until using.





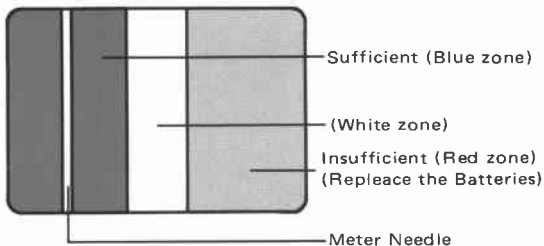
3 Battery Check
Press battery check button to check battery capacity.

Blue: Shooting at all frame speeds possible.

White: Shooting at 18 and 9 frames per second possible.

Red: Change to a complete set of new batteries. All four batteries at a time.

*Remove the battery from the camera and keep it separate when not using the camera for a length of time.



4 Dioptic Adjustment

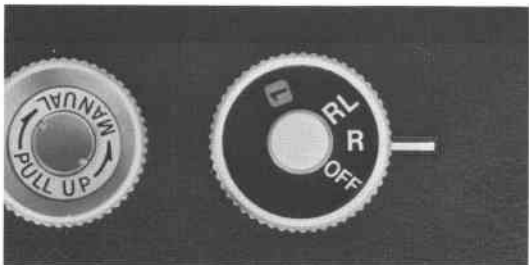
First, turn the focusing distance ring to infinity. Then turn the dioptic adjustment (viewfinder focus) ring while viewing the sky until the fine lines in the center circle appear clear and sharp.



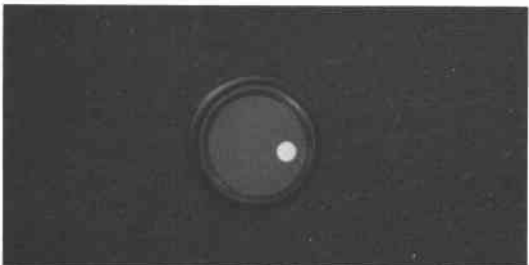
Shooting No. 1

EE Shooting

- 1 Opening and Closing the Back Cover**
The back cover opens by pressing the button. To close, press shut.
- 2 Film Loading**
Insert the film with the label facing the film type indicator window.
- 3 Set Switch to "R".**
* Turn the switch to "OFF" when not using the camera.



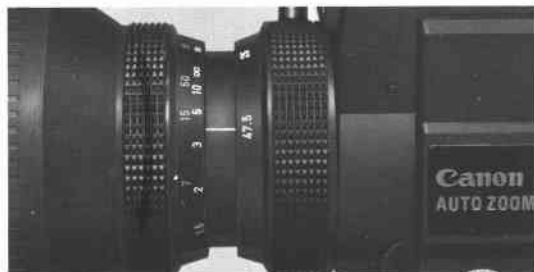
- 4 Check Film Transport**
Pull the shutter lever to check the film transport. If white dot in the film transport window rotates, the film is advancing properly.





5 Frame Speed Setting

Set the frame speed dial to the standard speed of 18 frames per second. If taken at 9 frames per second, the subject will appear to move very quickly when the film is projected. If shot at SLOW MOTION (approximately 36 frames per second), the movement will appear slow.



6 Focusing

Turn the zoom ring to 47.5mm to focus and then return to the picture size you wish to shoot with.

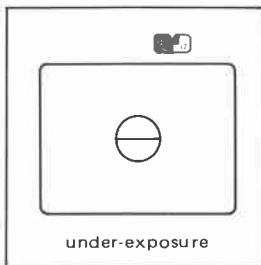
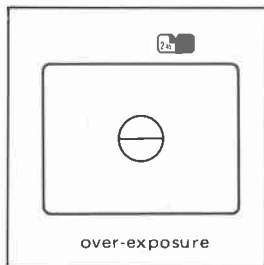
6 8 1



not in focus



in focus



7 Check Exposure

Pull the shutter lever lightly to check exposure.

- Exposure Warning Mark

When focusing under abnormal lighting conditions, if the red curtain slides across the exposure indicator window, so that one-half (or more) of the window is entirely covered by the red curtain, then the picture will be either over or under-exposed. If the red curtain appears but the window is less than half covered, a well exposed picture can still be taken.

8 Pull the shutter lever to shoot

9 Zoom as desired while shooting

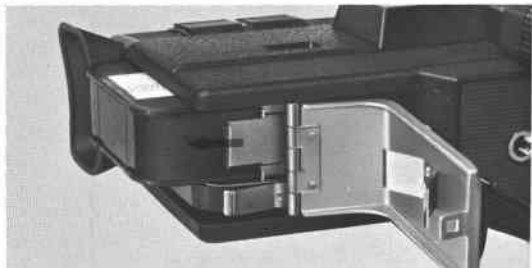
- Electric zoom

When T on zoom switch is pressed, the camera zooms towards telephoto. When W is pressed, the camera zooms towards wide-angle.



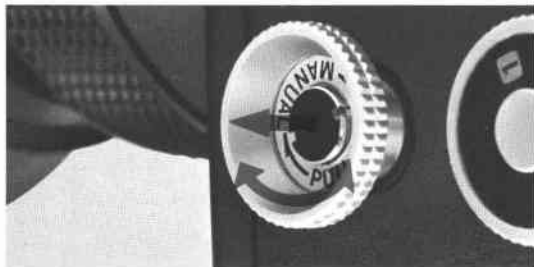
- Manual Zoom

Rotate the zooming ring which also serves to set the camera for macro-photography. To prevent accidentally setting the ring to macro-photography position while zooming in the direction of wide angle, grip the entire "M" knob firmly instead of holding the tip of the knob.



10 Shooting Completion and Film Removal

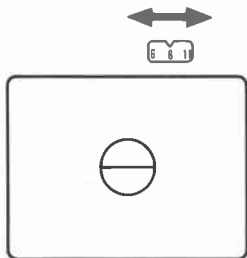
Check the footage counter to see that 50ft. has been exposed and then pull the film removal lever to remove the film.



Shooting No. 2 Manual Aperture Control Shooting

1 EE will be released when EE/manual aperture switch ring is pulled. Rotate the ring for the desired f/stop value to read off in the f/stop scale inside the viewfinder. Manual shooting will start when the shutter lever is pulled.

- For shooting titles, increase the illumination so that an aperture smaller than $f/5.6$ can be used.



Fading

1 When EE/manual aperture switch ring is rotated past $f/45$, the F.O. mark appears in the aperture indicator in the viewfinder. The aperture is completely closed then. Therefore, a fade-out effect in which the film gradually darkens or a fade-in of the opposite effect may be performed with this ring.

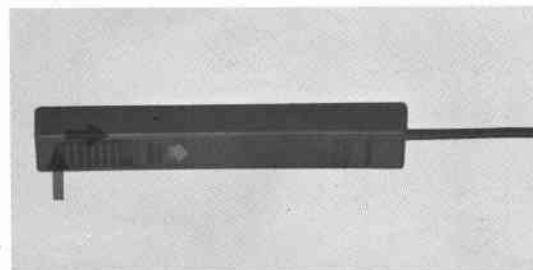
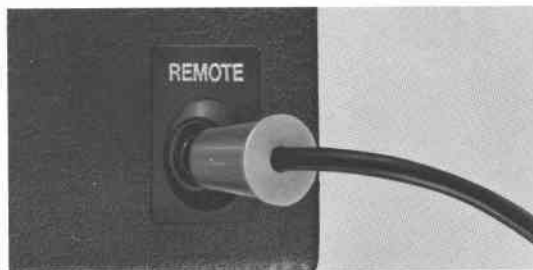
- In bright outdoors, the aperture closes down to the very small opening of $f/16$ or 22 . Since this aperture opening is almost similar to that of a completely closed aperture, fade-out or fade-in would be performed too quickly. Use the Canon ND filter for smoother fading effects.



FADE-OUT



FADE-IN



Shooting No. 3

Remote Control Shooting

Remote control shooting using Canon Remote Switch 60 or Canon Remote Switch 3 is very effective for recording animals and plants at a distance.

- 1 Set the main switch to "RL" shutter lock position.
- 2 Insert the head of the Remote Switch into remote control socket.
- 3 Pull the shutter lever until it locks to a position.

4 Upon pressing the button on the head of the Remote Switch, shooting begins. Press the button further towards the arrow for running lock. Shooting will continue automatically.

- Place accessory cap on the eyepiece to prevent the light entering from behind during the remote control shooting.

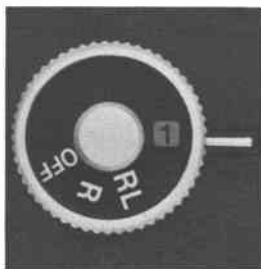
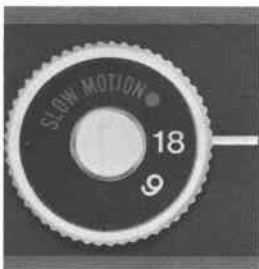


5 To stop remote control shooting, always switch over to "R" or to "OFF" before removing the Remote Switch.

• Extension Cord E1000 (10m) may be linked one after another when Remote Switch is used.

Single Frame Shooting

Single frame EE shooting is possible for animation and other purposes such as recording separate stages of movement at spaced intervals.



1 Set frame speed dial to "18".

2 First, set the shutter switch to "RL", pull the shutter lever slightly to see the f/stop values inside the viewfinder, and then set the shutter switch to **1**.

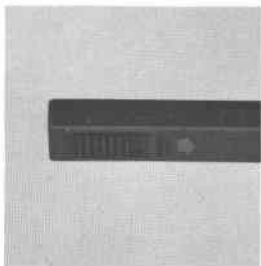
3 Insert the Remote Switch into remote control socket.

• Place accessory cap on the eyepiece to prevent the light entering from behind.

4 Pull the shutter lever, until it locks to a position.

5 Every time the button on the head of the Remote Switch is pressed, a single frame is exposed.

Note: During single-frame-shooting, a lamp which lights the exposure indicator inside the view finder to show the aperture opening numeral/s goes off. If you wish to see the f/stop values, set the shutter switch to "RL" and pull the shutter lever slightly.





Film Types and CCA Filter

Since color films for artificial light are usually used with Super 8 type cameras, color will vary considerably depending on the light sources. Canon Auto Zoom 512XL is equipped with a built-in CCA filter to yield beautiful color photography. However, cancel the CCA filter depending on the type of the film used and the light source.

Film Types and CCA Filter

Light Source Film Type	Daylight	Artificial Light
Tungsten type film (for artificial light)	Use built-in CCA filter	Cancel built-in CCA filter
Daylight type film (for daylight)	Cancel built-in CCA filter	Cancel built-in CCA filter and attach Canon CCB filter to the lens

*For black and white photography, the built-in CCA filter may be left as it is or cancelled at option.



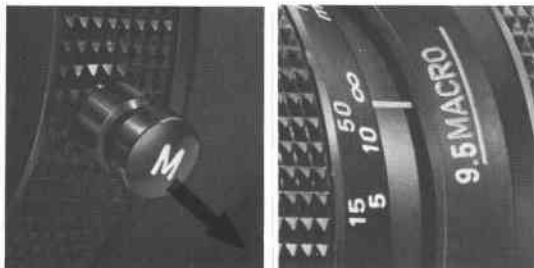
Cancellation of the CCA Filter . . . 1

The CCA filter switch adapter on bottom of the camera can be screwed off. Attach this adapter to CCA filter switch socket on the camera top.

Also, a lighting unit with a tripod socket may be placed to the CCA filter switch socket in place of the cancellation adapter.

When attaching the lighting unit to the CCA filter switch socket, insert non-skid rubber mat between the unit and the socket. Be sure that the unit is attached securely. Since the lighting unit becomes extremely hot with heat, always position the camera more than one meter (three ft.) away from the subject to avoid burns.





Macrophotography

This camera is equipped with a mechanism to allow you to take macrophotography without any accessory attachment. Use macrophotography for shooting small animals and plants, observing insects and for shooting titles.

1 The zoom ring will stop when it comes to focal length of 9.5mm. Pull out the "M" knob to release the stop mechanism and the ring will rotate further to macro zone.

2 To focus, adjust the zoom ring within the range of macrophotography (yellow line).

- Camera shake is often conspicuous with macrophotography. Use of Canon Copy Stand 4 is recommended. Cover the eyepiece to shut off light when your eye is not against the eyepiece for viewing.

Shortest Shooting Distance and Field-of-View of Macrophotography.

Distance scale (m)	Distance between film plane indicator and subject (mm)	Field-of-view (mm)
∞	179	38.6 x 53.1



Range of Focus in Macrophotography

Compose picture and focus. The range of focus will lie between the distance scale set on the focusing ring and the shortest macro-zoom distance.

For example, if the distance scale is adjusted at 3 meters and the zoom ring is rotated, the focus will shift from the shortest macro-zoom distance to 3 meters. If zoomed further, the macro-zoom mechanism is released and a subject 3 meters away will be in focus. If zooming is continued, the subject 3 meters away will become close-up. Such unique method can be employed to obtain an interesting effect different from ordinary zooming.

Depth-of-Field from Film Plane Indicator to 179mm

F	Depth (mm)	F	Depth (mm)
1.2	178 - 182	11	168 - 195
2	177 - 182	16	164 - 203
2.8	176 - 183	22	159 - 217
4	175 - 184	32	153 - 244
5.6	173 - 186	45	146 - 311
8	171 - 190		



Main Accessories

Accessories are available for Canon Auto Zoom 512XL Electronic technique and photographic effects.

Wide Converter and Tele Converter Lenses

These are converter lenses for attachment to the filter thread of the camera's front lens. The Wide Converter will change the focal length to 6.2mm - 31mm and Tele Converter to 15.6mm - 78mm.



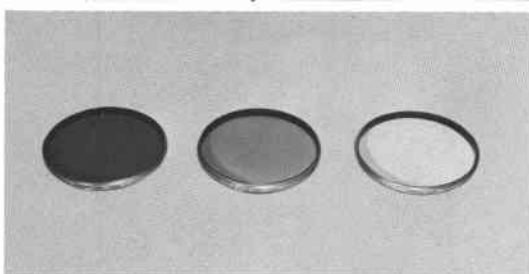
Interval Timer E

Interval Timer E is an electronic timer for single frame shooting at fixed intervals. It is inserted to the remote control socket on the side of the camera. The time interval can be adjusted from one to 60 seconds with a dial on the center of the timer. (Before using the Interval Timer E, set the shutter switch to **1**.)



Self Timer E

With Self Timer E a photographer himself can join the picture. Self Timer E is attached to the camera's remote control socket. When the starter at the center of this accessory is pressed, the camera will film for 10 seconds after a delay of approximately 10 seconds. By pressing the button, self-timed shooting can be repeated as many times as desired. (Before using the Self Timer E, set the shutter switch to "RL".)



Filter

Use a filter of 48mm diameter. There are filters for color films, black and white films, and those that can be used for both. Filters produce desirable effect in shooting. Choose the filter most appropriate for different shooting purposes.

Type	Filter Characteristics
○ ● UV	Absorbs only ultra-violet rays. Especially effective at seaside and high mountains. Recommended for color film.
○ Y1 Y3	Increases contrast of monochrome film. Enhances clouds, darkening the blue sky. Brightens red and yellow.
○ 01	Darkens blue, emphasizes yellow and red perceptibly. Good for contrasts, especially in distant landscapes.
○ R1	Creates strong contrasts. May also be used with infrared film.
○ G1	Prevents red from turning radically into white. Brightens faces and the sky appropriately, and reflects the luster of fresh greenery.
○ ● ND4 ND8	ND4 reduces light volume by 1/4, ND8 by 1/8. No effects on colors.
● SKY-LIGHT	Acts to harmonize the blue sky and the shade.
● CCA4	For use with daylight type film under a cloudy sky.
● CCA8	For use with tungsten type film in the twilight.
● CCB4	For use with daylight type film in the twilight.
● CCB	For use with daylight type film under tungsten light. (12 equiv.)
○ For black and white film.	● For color film.

Copy Stand 4

Copy Stand 4 is convenient for macrophotography, title shooting and for copy works.

Canon

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PUB. IE1017

1274B11

PRINTED IN JAPAN