Canon 310XL

Go the Slim, Canon Way.



8 Main Features of the Canon 310XL

With a maximum aperture of f/1.0, the Canon 310XL features the fastest lens of any 8mm movie camera. Its quality design and construction assures sharp picture images without flare, and excellent color balance, even at full aperture.

The 3X zoom is activated by either power or mar operation. It is very effective for trimming the composition and for achieving subtle transitions. Power zooming offers the film maker a continuous effect, while manual zooming permits zooming at different speeds.

The built-in macrophotography mechanism of the 310XL enables you to accomplish close-up photography without the attachment of any other accessories. It focuses at a point 21.5cm from the film plane indicator by a simple adjustment of the zooming lever, making it especially appropriate for titling purposes.

A built-in high performance exposure meter automatically determines exposure. An IC within the metering circuit is designed to control the change in voltage, and insure the system's accuracy.

The bright viewfinder employs a total reflection spot mirror which, along with the large exit pupil of the viewfinder, insures that the image is always very bright. All the information that is needed for great movie making is included.

A very large shutter opening angle of 220 ° is another XL feature of the Canon 310XL. This shutter opening is especially suitable for filming under low-light conditions.



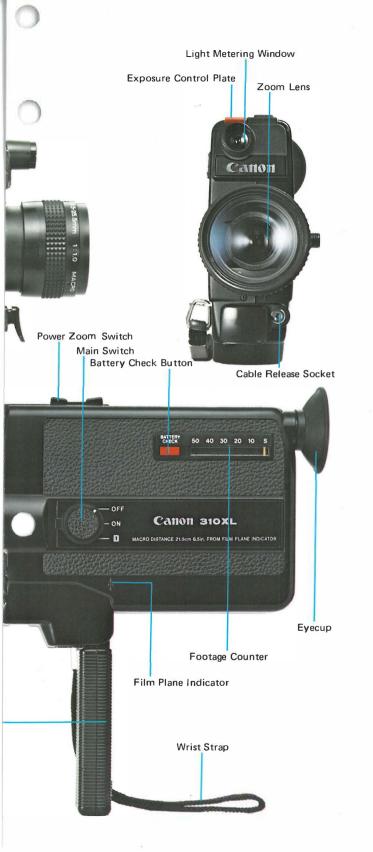
Automatic cancellation of the CCA filter from the light path is effected upon insertion of a daylight-type cartridge. Manual cancellation of the CCA filter is also possible. The CCA filter, when required, is positioned directly in front of the light suring CdS photocell in order to always assure correct exposure.

The size and design of the 310XL is slim and small, despite all its high performance features. The lens barrel has an outside diameter of just 47mm. Its power source, two 1.5V penlight batteries, is located in the upper part of the film compartment for even greater compactness.



Nomenclature Dioptric Adjustment Ring CCA Filter Switch Side Cover Opening Switch Film Type Indicator E160 Film Compartment Distance Scale -Manual Zooming Lever/ Macro Set Lever-Focusing Ring-Shutter Release Lever -

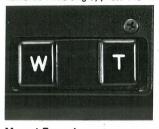
Folding Grip ___



Specific Features with Special Performance

Power Zoom Switch

To zoom, press the power zoom switch while pulling the shutter release lever. For the telephoto effect, press the "T"; to shift towards wide angle, press the "W".





Manual Zoom Lever

Just pull the manual zooming lever up or down for the greater sensitivity of manual zoom control. While power zooming produces a continuous effect, manual zooming permits zooming at different speeds.

Macro Set Lever

Simply rotate the manual zooming lever past wide-angle and into the macrophotography position for very close close-ups. It is easy to use and makes possible dramatic shorts of natural subjects and titles.





Main Switch

All circuits are connected or disconnected by turning the dial of the Main Switch to the corresponding positions of either "ON" or "OFF." A red mark is visible when the dial is in the "Ol position to let you see at a glance that the power is "ON."

CCA Filter Switch

Manual cancellation of the CCA filter is possible by simply sliding the switch located on the side of the camera body. Whenever a daylight film magazine, such as the G-type, is used, the CCA filter is automatically cancelled from the light path upon cartridge insertion.





Exposure Control Plate

When the Canon Filter ND-4 is attached to the lens for ASA 160 film, the exposure control plate located at the base part of the exposure metering window should be pulled out. The compensation of this exposure control plate is two f/stops.

. Jotage Counter

The slide-type film footage counter has markings every ten feet that are very easy to read. It indicates the approximate amount of film remaining to be exposed. Upon removal of the film cartridge, the indicator of the footage counter automatically returns to "S."



Battery Check

The level of the batteries' charge can be easily verified with the red lamp in the viewfinder by simply pressing the battery check button.

Dioptrically Adjustable Eyepiece

The eyepiece of the Canon 310XL can be adjusted to your vision, eliminating the need for prescription eyeglasses, if you normally wear them, to correctly focus and accurately scan the field of the view. Simply turn the eyecup while looking through the viewfinder. It is adjustable from -4 to +2 diopters.





Single Frame Shooting

Turn the main switch to its "1" position and single frame shooting becomes possible with the 310XL. A single frame is moosed each time the shutter release is pulled. This feature libles titling and animation, which can be effectively used to add more interest and enjoyment to great movies.

Cable Release Socket

A socket is provided near the shutter release on the camera body for a cable release. This is particularly handy when using a tripod and performing single frame shooting.





Folding Hand Grip

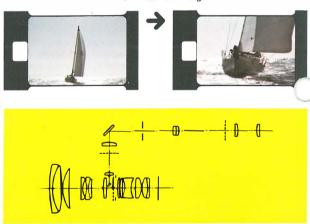
The collapsible hand grip easily extends and folds up for optimum convenience and compactness. With the 310XL's comfortably contoured shutter release lever, it provides a firm, steady grip and easy manual control.

The World's Fastest Lens

The Canon 310XL features the fastest lens of any 8mm movie camera. It is perhaps the most unique camera in the world, due to its incredible lens speed of f/1.0. This gives the 310XL a terrific advantage over all other cameras for shooting under low level illumination. With truly ample brightness to spare, it can cle catch even very dimly lit subjects. And with ASA 160 film. affords practically unmatched versatility so that you may make use of available light for much more spontaneous and enjoyable movies, without all those hot, glaring lights. Yet the speed of f/1.0 is by no means the only advantageous quality. This lens has been designed for greater compactness and smoother operation than any other lenses of the same class. Its newly designed lens construction of 13 elements in 11 groups obtains sharp picture images without flare, and excellent color balance at full aperture. A 3X zoom that features either manual or power operation lends the Canon 310XL a considerable depth of field within a variable focal length of 8.5mm-25.5mm.

Either power or manual zoom can be used very effectively for trimming the composition and facilitating transitions from one point of view to another. It enables the cinematographer to follow his subject easily. Press the telephoto "T" button and the subject is enlarged; press the wide-angle "W" button and the subject recedes into the composition. The power zoom is operable only while the shutter is being released. While power zooming produces a continuous effect, manual zooming permits zooming at different speeds. Just pull the manual zooming lever, which doubles as the macro zooming set lever, up or down. This lens lets you take great home movies, providing both superior contrast and high image quality in either night or daytime photography.

3-times Zooming



The Wonderful Dimension of Macrophotography

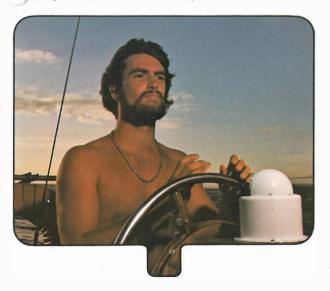
A macrophotography mechanism is incorporated into the Canon 310XL. This feature adds still one more bonus to its remarkable lens since it enables close-up photography without the attachment of any other accessories. This is very useful for dramatic effects with whatever subject that may catch your interest. It is especially appropriate for photography of nature, while it is also convenient for titling purposes since it can focus at a point 21.5cm from the film plane indicator with the simple adjustment

the macro set lever. Macrophotography is performed by first turning the zoom ring away from wide-angle and toward macrophotography as far as possible. At the shooting distance of 12.7cm from the lens, the field size is 84.4 x 118mm (148mm diagonally). A measure of the correct distance for macrophotography is provided by the wrist strap when it is pulled forward tautly away from the camera body.



A Bright Viewfinder with Filming Information

The Canon 310XL uses the TTL single lens concept within its viewfinder system. Since light is transmitted to the viewfinder by a total reflection spot mirror and the exit pupil of the viewfinder is large, the image is always very bright. Obscure lighting conditions make this particularly necessary with XL photography. It allows you to view exactly what the exposed image will be, enabling uncanny accuracy in your filming technique. Furthermore, all the information that is needed for sure and precise movie making, such as battery check, macro indication, underexposure warning mark, and film transport indicator, are notained in the viewfinder. You never need to take your eye off ir subject for even a moment with the Canon 310XL.



Large Shutter Opening

Another very pertinent factor in a camera's ability to shoot dimly lit subjects is the angle of the shutter opening. The 220° angle of the Canon 310XL's shutter opening is exceptionally large. This is another great XL feature of this camera's new and sophisticated optical system. The resultant exposure is effectly 1/30 of a second, a shutter opening arrangement that is in all respects adequate for general filming. It is particularly suited for filming from video sources and under low-light conditions. The large shutter opening affords yet greater flexibility in the range of conditions suitable for movie making.

Slim, Compact Design

The size and design of the Canon 310XL is small and compact despite the incredible abundance of high performance features which it offers the amateur film maker. Its compactness begins with the lens barrel. The f/1.0 3X zoom lens has an outside diameter of just 47mm and it accepts 43mm filters and accessories. The camera body itself is just 39mm wide. Greater compactness is afforded by the clever location of its power source, two 1.5V penlight batteries, in the upper part of the film magazine compartment. It features a collapsible grip and wrist strap for great convenience and simple operation.



Type: SLR type Super 8 with XL mechanism

Size of Picture Frame: 5.8 x 4.2mm.

Lens: Focal Length 8.5-25.5mm (Zoom Ratio 3) f/1.0

Construction: 13 elements in 11 groups, Spectra

oating; filter thread size: 43mm; lens cap size: 45mm.

ro Shooting Mechanism: The macro shooting mechanism is activated by switching the macro set lever. With the focus set at infinity (∞); close-up shooting at 21.5cm from the film plane indicator is possible.

The field size is then 84.4 x 118mm.

Viewfinder: Single reflex aerial image system

(Viewfinder Information): Underexposure warning mark; Film transport indicator; Battery check lamp; Macro indica-tion; Dioptric adjustment from -4 to +2 dpt. with eyecup.

EE Mechanism: Automatic exposure mechanism coupled to film speed and filming speed.

(Electric Eye System): Light measurement by a CdS photocell through the light metering window above the main lens. Exposure Control Plate is built-in.

EE Metering Range: ASA 250 f/1.0 18fps; ASA 25 f/45 18fps, single frame.

Film Speed: (Artificial light) ASA 40 160 250 (Day light) ASA 25 100 160 (Day light)

Film Speed Setting: Automatically set when cartridge is loaded. Color Temperature Adjustment CCA Filter: Built-in CCA filter for correct color balance with tungsten film under daylight and switch on camera body for quick cancellation of filter under artificial light. Filter is automatically cancelled when daylight type film cartridge is inserted.

Filming Speeds: 18fps, single frame Angle of Shutter Opening: 220°

Drive System: Film drive with high-performance electric micromotor and power zooming.

Power Source: 2 penlight batteries (3V)

Film drive; power zooming; exposure metering. Sufficient for 5 cartridges under normal temperatures: One cartridge with new batteries when shooting single frames.

Footage Counter: Automatically returns to S and counts footage of exposed film. Coupled to the removal of the cartridge. Battery Check: A lamp in the viewfinder activated by the check

button.

Grip: Collapsible

Socket: Cable release socket

tch: "ON-OFF" single frame switch used also as safety switch.

Safety Mechanism: Switch to prevent unnecessary battery

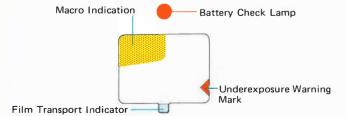
consumption or shooting inadvertently.

Dimensions and Weight: 176 x 112 x 39mm; (6-15/16" x 4-7/16" x 1-1/2"); 580g (1 lb. 4 ozs.) (including batteries)

Accessories: Carrying Case, Filter 43mm; Lens Cap 45mm, Wide Attachment Lens 43.

Subject to change without notice,

Viewfinder Information



Panon

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