

Canon 514XL-S

We made it really small
For great sound movies.



Canon

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6 Main Features of the Canon 514XL-S

1 Superior Sound Quality

Spectacular innovations through Canon's advanced technology has at last enabled Super 8 Sound movies of superior quality. The 514XL-S features extremely quiet operation, a unique Automatic Level Control (ALC) with a versatile Audio Level Dial, a special Tone Select Switch, an auxiliary input and sound monitoring, plus two sound filming speeds.

2 A Truly Marvelous f/1.4 5X Power Zoom Lens

The 514XL-S offers you a fast f/1.4 lens that performs excellently under even the dimmest of illumination. It has, in addition, a 5X zoom that features both manual and power operation, plus a mechanism that permits macrocinematography in either of two different ranges.

3 XL Sound Filming Anytime, Any Place

Through-the-lens AE metering assures accurate exposure in almost any existing light condition. A highly sensitive CdS photocell having an extremely wide range is incorporated. And a wide 220° shutter opening angle enhances its XL performance with a longer effective exposure.

4 A Bright, Clear SLR Viewfinder

The 514XL-S uses the same sharp lens for its viewfinder system as it does for shooting. Split-image focusing is accurate and easy with such a bright, clear image. And complete filming information is included right in the viewfinder.

5 An Extremely Slim, Lightweight Body

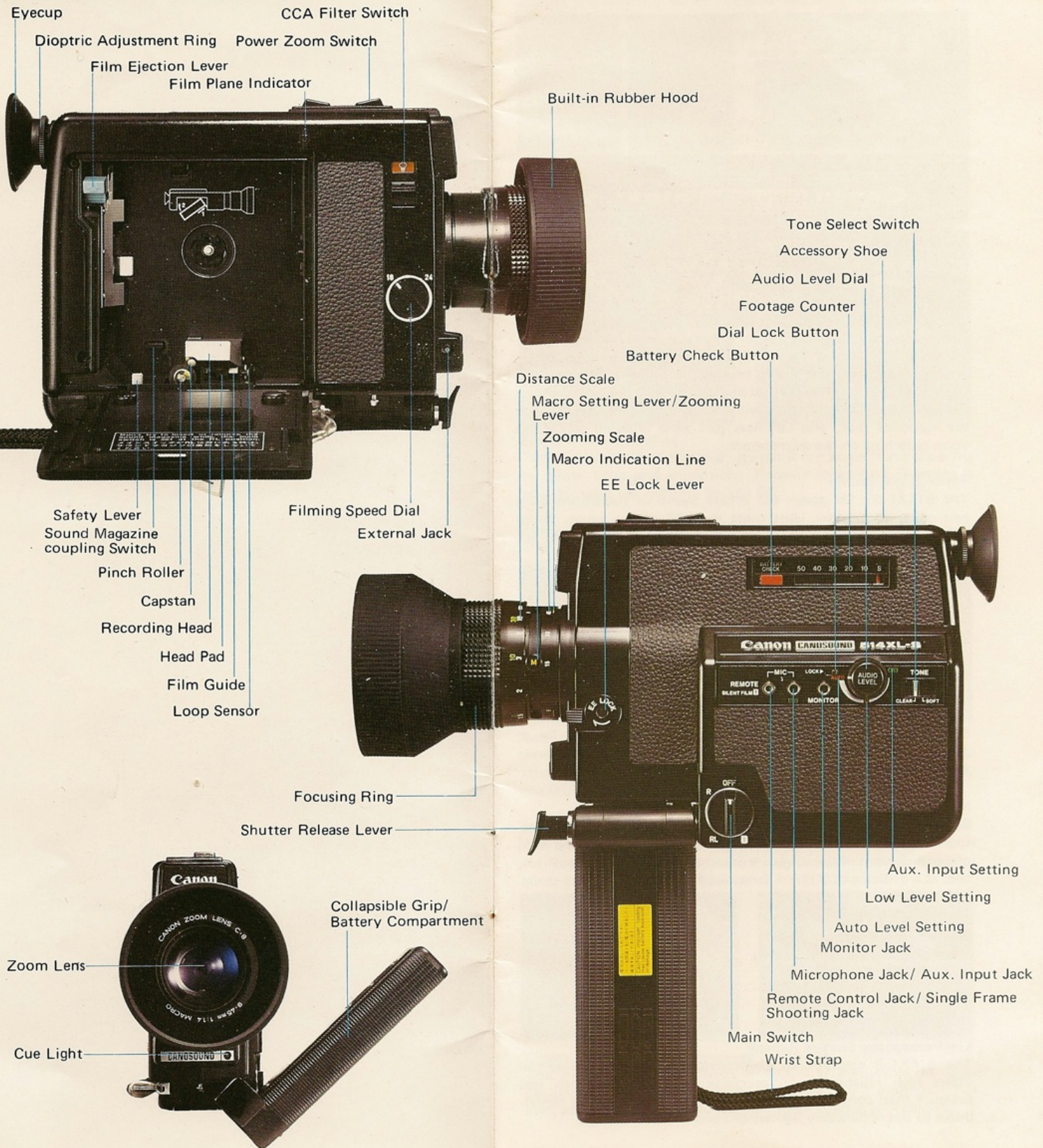
The 514XL-S features a fully collapsible grip and built-in rubber hood, while all sound controls are arranged together for simple, quick operation. Its slim, compact body represents truly the best design for Super 8 Sound movies.

6 High Quality Accessories

Many high quality accessories are available to expand the 514XL-S's applications, such as a Boom Microphone BM70/BM50, Lighting Adaptor LA-1, Headphone HP-M, Selftimer E, Interval Timer E, C-8 Wide Attachment Lens 43, Remote Switch 60/3, Power Pack 9V, Connecting Cord C300L, Extension Cord E450L, plus various 43mm filters.



Nomenclature



Specific Features with Special Performance

Audio Level Dial

The versatile Audio Level Dial serves as a master control for the input level. There are two settings: Auto level setting, for normal recording and a Low level setting for loud volume conditions. It can also be used for sound fading effects and to switch to an auxiliary direct source input.

Tone Select Switch

This special Tone Select Switch has two positions: "Soft" for normal recording and "Clear" for sharper, more distinct results.

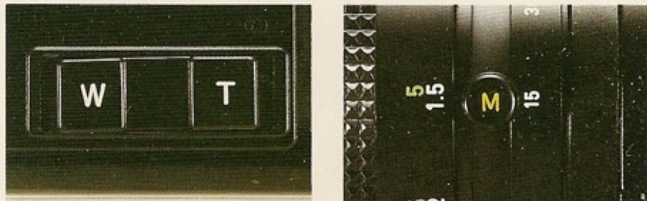


Remote Control, Auxiliary Input and Earphone Jacks

With the main switch in its "RL" setting, the microphone or a remote control switch can be used to activate filming. An auxiliary input jack enables direct recording from audio sources, such as television, etc. And with the earphone connected into the earphone jack, you can hear just what is being picked up upon switching on the microphone.

Power Zoom Switch

The 514XL-S's 5X zoom can create beautiful transitions from one scene to another. Just press the "T" of the power zoom switch on top of the camera for telephoto or press the "W" for wide-angle. The power zoom functions only while filming.



Manual Zooming Lever

By turning this lever, you can control zooming manually at different speeds, as opposed to the fixed speed of power zooming.

Macro-Setting Lever

By rotating the macro-setting lever for telephoto macrocinematography, the lens focuses at a point 600mm from the film plane indicator. Wide-angle macrocinematography is possible, too, at a distance of 227mm from the film plane.



Electromagnetic Shutter Release

The 514XL-S employs an electromagnetic shutter release that offers high reliability and precision. It requires much less pressure than conventional shutter releases and it greatly contributes to the remarkably lightweight and compact design.

CCA Filter Switch

The CCA filter is automatically cancelled whenever a daylight-type film cartridge is used. But with Type A film cartridges, just set this switch to cancel the filter manually.

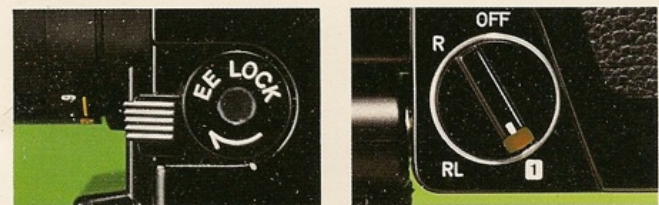


Cue Light

The LED Cue Light illuminates upon release of the shutter as a clear visual indication that filming is now under way.

EE Lock Mechanism

The Canon 514XL-S has an EE lock lever to fix a local reading of the subject for correct exposure under backlit conditions.

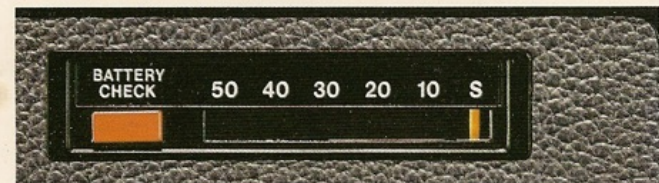


Single Frame Shooting

The "1" position of the main switch is for single frame shooting to create titles and animation. Remote control AE shooting is possible with the Remote Switch 60.

Footage Counter

The film footage counter indicates the amount of film which has been exposed. Upon removal of the film cartridge, it automatically resets to "S".



Battery Checker

The battery check button is located near the film footage counter. Press it and you can check the batteries charge by the red LED in the viewfinder.

Built-in Rubber Hood

The 514XL-S features a built-in rubber hood that fully collapses for carrying purposes. It contributes to eliminating flare and ghost caused by glaring side sources of light.



Dioptically Adjustable Eyepiece

The eyepiece of the Canon 514XL-S is adjustable to your particular vision within a range from -4 to +2 diopters. For even easier viewing, a comfortable rubber eyecup is provided.

Now! Superb Canon Quality in Sound and Image



Canon introduces the most compact, high-performance XL movie camera for Super 8 Sound, the Canon 514XL-S. Indeed only with Canon's vast experience and advanced technological know-how could such a marvelous, new camera have been developed. The 514XL-S is first remarkable for its extremely quiet operation. It uses a minimum of moving gears and parts having optimum precision and balance. Moreover, the cover of the film compartment has been insulated with a sound-proof material. The sound of it running is little more than a whisper, so that no mechanical noise is ever recorded.

The 514XL-S incorporates Canon's unique Automatic Level Control that assures excellent recording for all sorts of acoustical levels and conditions. The ALC quickly responds to all kinds of fast changing situations so that you can film wherever and however you like, since the audio level is always perfectly set. But most unlike other sound cameras available today, the 514XL-S sets the level according to both the volume of sound and the duration of sound. This gives quicker, better response for more natural sound reproduction. Not only does it assure proper audio level control, but it is sensitive to both close and distant sounds and voices so that background like background and the foreground like foreground, just as you would naturally hear it. Moreover, there is never any cancelling effect with changes between loud and quiet sounds at shooting locations such as airports, train stations, etc..

The versatile Audio Level Dial serves as a master control for the input sensitivity of the ALC. The maximum setting "Auto", is the best level for normal recording purposes. However, under certain high-decibel level conditions, such as a jet take off, etc., the low level setting is advisable in order to avoid distortion. Both settings are provided with slight click-stops for easy reference and the dial can be locked in either of these positions with the lock button. With the Audio Level Dial, you also perform sound fading effects. It masterfully controls the sound in the same way that a zoom varies the image. Just turn it counter-clockwise and the sound gradually decreases and fades out; turn it clockwise and the sound fades in. This dial also serves as a switch for an auxiliary input from direct sources.

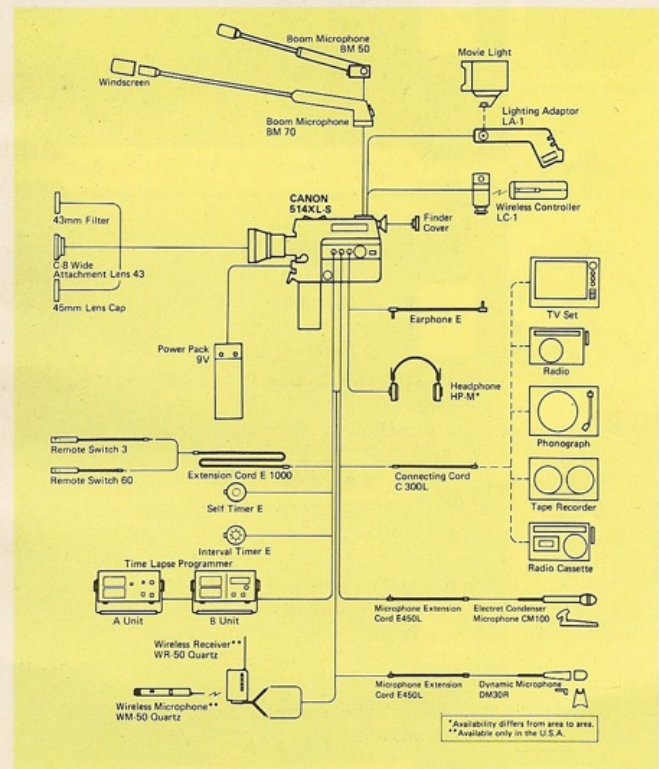
The special Tone Select Switch has two positions to adapt the tone characteristic to different sounds and acoustical conditions. The "Soft" position permits a natural effect with a normal frequency response. This is useful when recording a person's voice, music in studio conditions, etc. The "Clear" position causes a low frequency cut of about -10 dB at 100 Hz for sharper, more distinct results when recording with the microphone at close proximity to the subject or to eliminate a low background noise, etc..

The 514XL-S also features an auxiliary input for recording from sources such as a television, radio, record player, taperecorder, etc., connected directly by means of the optional Connecting Cord C300L. Extraneous sounds and background noise can be eliminated in this way for higher fidelity.

Sound monitoring is also possible with the earphone connected to the earphone jack. Everything can be heard just as it is recorded on film by the camera as soon as you press the shutter release lever at the first step. The earphone is extremely small and light to fit comfortably into your ear.

The 514XL-S is exceptional in that features two different speeds for direct sound filming. In addition to the normal filming speed of 18 fps, a faster speed of 24 fps is available with the mere flip of a switch. Both speeds are completely adequate for sound filming. The faster filming speed of 24 fps enables a smoother, higher quality moving image and better sound quality. The film drive of the 514XL-S employs two electric motors controlled by tacho generators. And like quality taperecorders, a capstan system is used for sound film transport. No other Super 8 Sound camera around offers so much performance for wonderful sound movies.

Canon 514XL-S Sound System



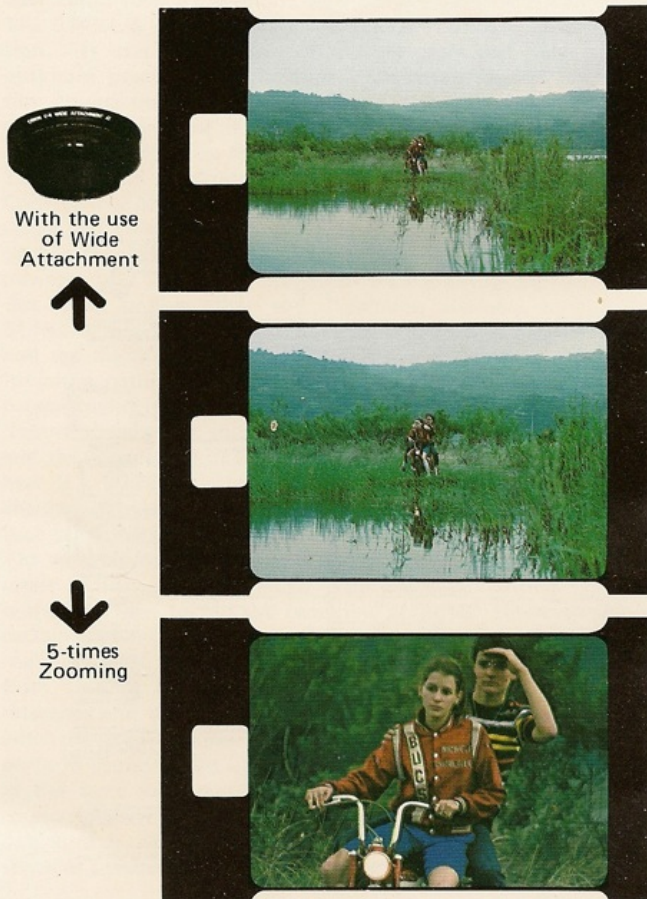
*Availability differs from area to area.
**Available only in the U.S.A.

2 A Truly Marvelous f/1.4 5X Power Zoom Lens

The Canon 514XL-S features an extremely fast lens with a large maximum aperture opening of f/1.4. This gives you great advantages for shooting under all XL conditions. And with the use of today's high-speed films, extra lighting equipment is never necessary, even when shooting the most dimly lit subjects, so that you can use existing light for much more spontaneous movies. This remarkable lens is one of the smallest and most compact lenses around. It consists of 13 elements in 11 groups that assure sharp picture images without flare and excellent color balance at full aperture.

In addition, it offers you a 5X zoom with either manual or power operation. There is a wide range within the lens' variable focal length of 9mm - 45mm. With such versatility, you can really be creative, arranging interesting compositions and adding beautiful transitions to your filming. A zoom also allows you to follow your subject smoothly without ever changing your stance and avoids unnecessary camera movement. The rocker switch located on top of the camera controls both telephoto and wide-angle zooming when the shutter is released. Manual zoom can also lend many different degrees of variation. Just move the manual zooming lever, which doubles as the macro-setting lever, up or down for the rate and amount of zoom you want.

There is a special attachment lens, the Canon C-8 Wide Attachment Lens 43, to further expand its wide-angle applications.



Wide-angle Telephoto Macrocinematography

One of the most unique and remarkable performance features of the Canon 514XL-S is its macrocinematography mechanism at both wide-angle and telephoto. Exciting close-up photography is possible at either of these two different ranges without attachment of any other accessories. The macrocinematography feature is operated by turning the macro-setting lever to its wide-angle or telephoto setting. In telephoto, the lens focuses at a point 600mm from the film plane indicator which is perfect for nature shooting. Wide-angle macrocinematography is performed at a distance of 227mm from the film plane and is ideal for making titles or animations.



Wide-angle
Macrocinematography



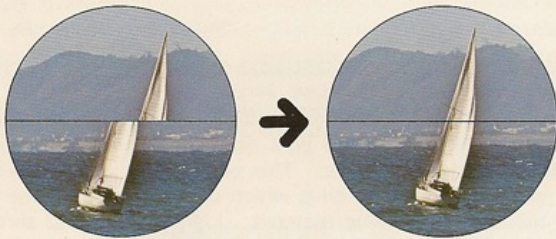
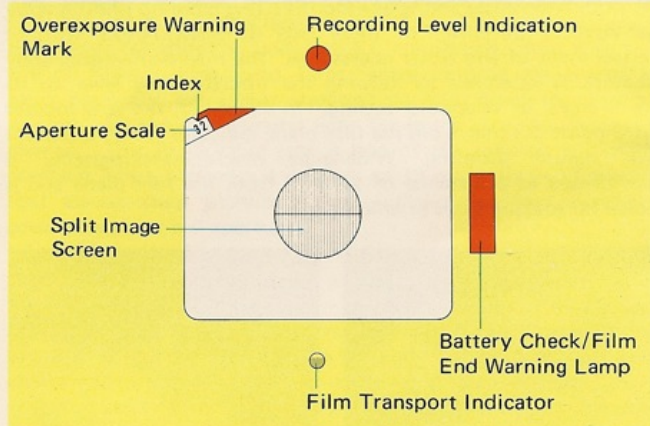
Telephoto
Macrocinematography

3 XL Sound Filming Anytime, Any Place

The Canon 514XL-S meters light right through the lens, exactly like the finest SLR camera. This system lets you see exactly what you are actually filming, which coincides at the same time with that which is being metered. Light transmitted through the lens is read by a highly sensitive CdS photocell that accurately determines the proper exposure. It has an extremely wide range - from f/1.4 at 18 fps with ASA 250 to f/32 at 24 fps with ASA 25. And the 514XL-S accepts five different film speeds: ASA 25, 40, 100, 160 and 250, which are automatically set upon loading the cartridge into the camera. The 220° shutter opening angle of the Canon 514XL-S is another one of its outstanding XL features. This shutter opening arrangement greatly enhances its performance and enables the 514XL-S to film any subject in just about any illumination. An effective exposure of 1/30 of a second at 18 fps is ideal for general filming. And especially for filming from video sources or under low-light conditions, it gives you considerable advantages.



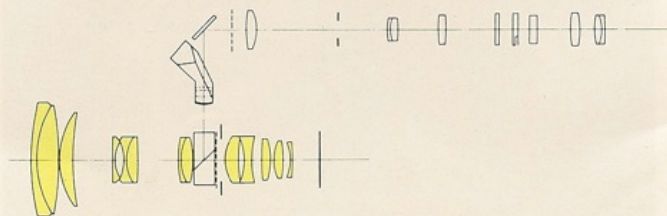
4 A Bright, Clear SLR Viewfinder



out of focus

in focus

The Canon 514XL-S offers you a single lens reflex viewfinder using the same spectacular lens that it does for shooting. Not only is the lens aperture large but the exit pupil of the viewfinder is exceptionally large, too, in order to deliver an image of the very brightest and sharpest quality. Under dim light conditions in which XL cameras excel this is imperative, since viewing becomes extremely critical. And perfect focus is easy by simply matching the two halves of the image in the viewfinder. With a viewfinder image that is always crystal clear, the 514XL-S's split-image focus is amazingly accurate. And its viewfinder displays everything you need to know right before your very eyes in an easy-to-read format. Complete filming information for recording level, aperture scale, battery check/film end warning lamp, film transport indicator, overexposure and underexposure warning marks are found in the viewfinder. The indication of the aperture opening which has been automatically set by the CdS photocell is very unique and convenient. And the recording indicator lights to show when sound filming begins so you can join in the filming fun.



Viewfinder System

5 An Extremely Slim, Lightweight Body

The Canon 514XL-S is unique as a Super 8 Sound movie camera in that it features a slim, lightweight body and fully collapsible grip. The grip swings out on a sturdy double hinge and locks securely into its extended position. To fold it away, simply press the lock button on the right side of the grip and it tucks neatly away against the camera body. The grip itself is wide and comfortable to hold for firm, steady camera support. It includes a comfortably molded shutter release lever and contains the six penlight-size batteries that power all the camera's great electronic features. The 514XL-S is truly the pinnacle of integrated optical design with its small, slim camera body. Its compact zoom lens features a built-in collapsible rubber hood and uses small diameter 43mm filters and accessories. All sound controls are arranged on a single panel for fast, easy adjustment and a rubber mat is included for extra comfort. Every feature of the 514XL-S is really packed with performance for great Super 8 Sound movies.

6 High Quality Accessories

To expand your photographic horizons, a whole assortment of accessories is available for the 514XL-S. Sound-wise, there is no situation for which you will be unprepared if you have either the Boom Microphone BM70 or BM50, both unidirectional, along with the standard Dynamic Microphone DM30R in your possession. The Headphone HP-M is available for monitoring the sound at the same time of recording.

Photographically, the convenient Lighting Adaptor LA-1 lets you attach both a movie light and boom microphone to the camera so you don't have to carry them separately. There are also the C-8 Wide Attachment Lens 43, Self-timer E, Interval Timer E, Remote Switch 60/3 and a complete line of filters for special image effects. And the Power Pack (9V) enables you to do extended filming or film in cold places. Whatever your filming interest, Canon makes an accessory to cover it.



*Available only in certain areas.

SPECIFICATIONS

Type: SLR type for Super 8 Sound and silent XL filming.

Size of Picture Frame: 5.8 x 4.2mm

Lens: f/1.4 9mm–45mm focal length, 5X zoom ratio.

Lens Construction: 13 elements in 11 groups, Spectra Coating; filter thread size: 43mm; lens cap size: 45mm; rubber hood: built-in.

Macrocinematography Mechanism: It can be switched to wide-angle or telephoto macrocinematography by the macro setting lever.

When the distance scale is set to ∞ , close-up shooting distance and field size are:

227mm, 74 x 102mm for wide-angle macrocinematography

600mm, 44 x 61mm for telephoto macrocinematography

Focusing Adjustment: Rotating front component

Distance Scale:

ft	4	5	10	30	∞	
m	1.2	1.5	2	3	5	10

Zooming: Power zooming by electric motor, besides manual zooming. Power zooming speed is about 8 seconds. (18 fps)

Viewfinder: Single lens reflex viewfinder with split-image focusing.

Information: Recording level indication, aperture scale, over/underexposure warning marks, battery check/film end warning lamp and film transport indicator.

Dioptric Adjustment: Dioptrically adjustable from -4 to +2 dpt.; with lockable eyecup.

AE Mechanism: Automatic exposure mechanism coupled to ASA film speed and filming speed. Through-the-lens AE with CdS photocell.

Light Metering Range: ASA 250, f/1.4, 18 fps. to ASA 25, f/32, 24 fps.

Film Speed: Artificial light: ASA 40 160 250
Daylight: ASA 25 100 160

Film ASA Setting: Automatically set when cartridge is loaded.

Color Temperature Adjustment Filter: Built-in. Automatic cancellation when daylight-type film cartridge is inserted. Manual removal is also possible by switch located on the outer camera body.

Manual Exposure Control: For manual exposure control, the aperture value can be fixed with the EE lock lever.

Shutter Release Mechanism: Electromagnetic release system; remote control is also possible.

Filming Speeds: 18 and 24 fps. (with both silent and sound cartridges), besides single frame (for silent cartridge only).

Angle of Shutter Opening: 220°.

Drive System: High-performance electric micromotor for film drive and power zooming.

Main Switch: Positions for "OFF", "R" (Running), "RL" (Running Lock) and "1" (single frame shooting). A red mark confirms that power is on.

Power Source: The power source that is used for the film drive system, power zooming, exposure metering and recording consists of six 1.5V penlight batteries which are loaded into the grip.

Battery Checker: A LED lamp lights in the viewfinder to confirm battery power when the battery check button is pressed.

Battery Life: Under normal temperature conditions, batteries are serviceable for more than 10 cartridges, or one cartridge or more for single frame shooting.

Footage Counter: Counts exposed film footage and automatically returns to S upon cartridge removing.

Cue Light: A red LED lamp lights on the lower right front of the camera while filming.

Film End Warning: The film end warning lamp lights in the viewfinder about 2 ft. before the end of film.

Sound Recording System: Magnetic stripe recording with Super 8 sound cartridge (continuous film transport via capstan).

Capstan Motor: With AC tacho generator.

Recording Level: Automatic Level Control (ALC), Two settings, Auto/Low Level.

Tone Select Switch: Two settings, Soft/Clear.

Sound Fading: Possible with Audio Level Dial.

Input Monitor: By the earphone and the recording level indication.

Microphone Input: Impedance about 3 K Ω , 3.5mm ϕ mini jack. Minimum Input sensitivity; -80 dB (0 dB = 1V).

Microphone: Impedance 500 Ω (Dynamic Microphone), Sensitivity -78 dB (0 dB = 1V/ μ bar 1 kHz).

Aux Input: Impedance more 50 K Ω , 3.5mm ϕ mini jack. Minimum input sensitivity; -20 dB (0 dB = 1V).

Earphone Output: Impedance 8 Ω .

Remote Control: With remote control switch or microphone remote switch (mini jack 2.5mm ϕ).

Film Compartment: Accepts sound and silent cartridges. Opened by film compartment opening knob.

Grip: Collapsible; serves as battery compartment.

Accessory Shoe: For attaching the Boom Microphone BM70/BM50 and Lighting Adaptor LA-1.

External Power: 9V D.C. with External Power Pack.

Dimensions and Weight: 210 x 136 x 64mm (8-1/4" x 5-3/8" x 2-1/2") (less grip, hood and eyecup); 1495g (3 lbs. 4 ozs.) (including batteries.)

Accessories: Included; Soft Case, 45mm Lens Cap, Dynamic Microphone DM30R (with windscreen, stand and clip) Earphone E, Remote Switch 60, Finder Cover, Optional; Boom Microphone BM70/BM50, Lighting Adaptor LA-1, Headphone HP-M, 43mm Filter, C-8 Wide Attachment Lens 43, Power Pack 9V, Self-timer E, Interval Timer E, Connecting Cord C300L, Microphone Extension Cord E450L, Remote Switch 3. Subject to change without notice

