

CODE NO.  
C33-2301-221

ITEM  
Canon AF 514XL-S w/Lens  
C-8 9-45mm f/1.4, with  
Soft Case for AF 514XL-S,  
Lens Cap C-52, Finder  
Cover 6, Dynamic Mic  
DM30R, Earphone E,  
Remote Switch 60, Rubber  
Mat, Neck Strap 8

**Canon**  
**AF514XL-S**  
**CANOSOUND**

# Total Automation.



## Specifications

**Type:** Electronic/autofocus Super 8 for sound and silent XL filming. SST (Solid State Triangulation) system in the Canon Autofocus System (CAFS).

**Lens:** f/1.4, 9-45mm, 13 elements in 11 groups, Spectra-coated.

**Filter Thread Diameter:** 52mm

**Macro Filming Mechanism:** Close-up filming is possible by resetting the zooming ring to MACRO index mark. Camera-to-subject distance: 23cm (9") from film plane indicator. Picture area: 74 x 102mm (2-15/16" x 4").

**Distance Scale:** m 1.2 1.5 2 3 5 10 ∞

**Zooming:** Power zooming besides manual zooming.

**Viewfinder:** Single lens reflex viewfinder with autofocus section in the center, recording level indicator, aperture scale, over/under exposure warning marks, battery check/film end warning LED indicator, and film transport indicator.

**Dioptic Adjustment:** -4 to +2 diopters. With lockable eyecup.

**EE Mechanism:** Through-the-lens EE with CdS photocell.

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

**Film Speed:** Automatically set when cartridge is loaded. Artificial light: ASA 40 160 250. Daylight: ASA 25 100 160.

**Color Compensation Adjustment Filter:** Built-in for using artificial light type film in daylight; cancelled automatically by inserting daylight type film; manual cancellation possible.

**Manual Exposure Control:** EE lock lever for locking the meter reading.

**Shutter Release Mechanism:** Two-step, electromagnetic release system. Pressing halfway activates, auto-focusing, viewfinder information, readies camera. Pressing completely starts film drive. Remote control facility provided.

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

**Angle of Shutter Opening:** 220°.

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

**Power Source:** Six 1.5V penlight batteries.

**Battery Checker:** An 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 5 cartridges; one cartridge or more for single frame shooting.

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

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

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

**Autofocus Shooting Range:** 1.2m (4 ft.) to infinity (∞).

**Autofocus Mode Selection:** "N" for "normal" automatic focusing and its system continues to scan the scene and find focus as long as the shutter lever is kept depressed. "L" for automatic focus lock. Slightly depressing the shutter lever activates automatic focusing and at the first instance the subject is focused on, the camera stays locked at that distance during shooting.

**Instant Focus Lock:** At "N" setting of autofocus mode switch, locks the focusing movement of the lens to the subject focused on just before pressing the lock button. At "L" setting of the switch, the camera refocuses automatically on the new subject distance and remains locked on the new focus.

**Manual Focusing:** At "M" setting, focusing is completely manual.

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

**Recording Level:** Automatic Level Control (ALC); two settings, Auto and Low Level.

**Tone Select Switch:** Bass-cut type SOFT/CLEAR settings.

**Sound Fading:** Possible with Audio Level Dial.

**Input Monitor:** By the level indicator LED lamp in the viewfinder and with an earphone or headphones.

**Auxiliary Input:** Possible with connecting cord.

**Microphone Control:** Start/stop of camera possible with on/off switch on a standard microphone.

**Remote Control:** With switch on remote control accessory for silent filming and microphone switch for sound filming.

**Outputs:** 3.5mm mini-jack for 8-ohm earphone or headphones monitoring.

**Grip:** Collapsible, serves as battery compartment.

**Accessory Shoe:** For attaching the Boom Microphones or Lighting Adapter LA-1.

**External Power:** 5mm coaxial feed plug fitting for an external 9V D.C. supply with Power Pack 9V.

**Dimensions:** 234mm(L) x 136mm(H) x 64mm(D); 9-1/4"(L) x 5-3/8"(H) x 2-1/2"(D). Eyecup and extended grip not included in the measurement.

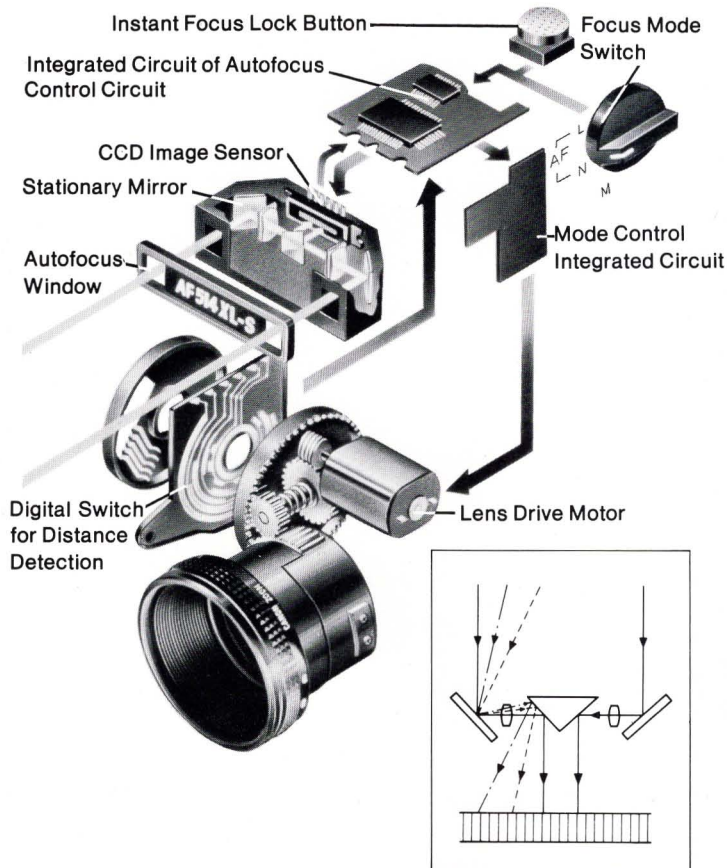
**Weight:** 1660g (3 lb. 10 ozs.) including batteries.

Subject to change without notice.

# SELLING POINTS

## The Canon Autofocus System: A Product of Canon's Original Technology

One of the main drawbacks to Super 8 filmmaking has long been focusing. To keep a moving subject in focus, one has to constantly be turning the focusing ring, leaving no hand free for other operations. With the introduction of this movie camera, the AF 514XL-S, however, Canon has beat this problem.



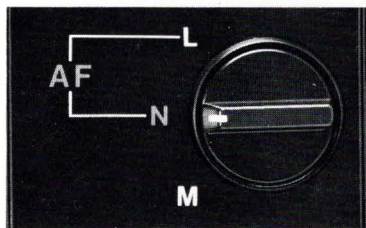
Actually, this camera is almost exactly like the best-selling 514XL-S, except for one important addition: an autofocus system. Though other makers have come out with their versions of autofocus Super 8, Canon's is different in that it is not based on already existing technology but is entirely new.

The first unique thing is its utilization of a system called SST. Though this abbreviation usually denotes speed in the aviation industry, it here stands for Solid-State Triangulation and refers to rapidity in the light-ray sense. As you can see from the illustration at the left, this system receives light from the subject at two windows. All of these rays strike mirrors on both sides and are deflected to another unique device called a CCD (Charge Coupled Device) where they appear as two images. The place on the CCD where one image falls changes in accordance with the camera-to-subject distance. Out of all the images on the left sides, the image portion that corresponds to the other portion of the image on the right is taken into consideration. A CCD is composed of many micro segments, and each segment generates tiny signal depending upon the brightness of the subject image on each segment. These signals then are electronically and sequentially sent to a microprocessor to find out image's separation causing the lens movement accordingly for exact focus.

Of course, all this happens in an instant so that the cameraman doesn't even have to pause in filming. And it's totally reliable as it represents Canon's state-of-the-art technology. For example, employment of the CCD is the first time ever in a camera. Not only does it play a role in the autofocus, but its couple of hundred micro-eyes enhance the camera's light measuring ability, facilitating existing light filming.

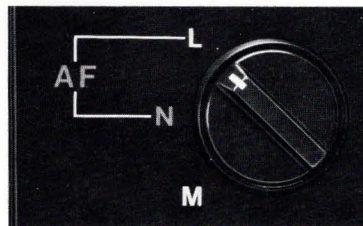
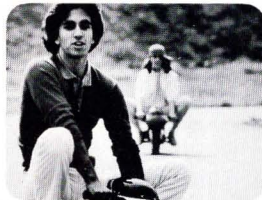
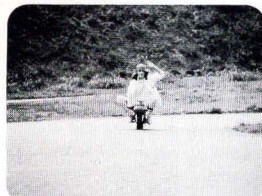
There are other merits to Canon's system as well. Since the mirrors are fixed, no motor is needed as in other such cameras. Therefore, a total absence of mechanical noise when focusing is guaranteed. And the three-mode autofocus dial, plus the instant focus lock button, give the moviemaker a wide variety of possibilities for complete versatility.

Let your customers compare the AF 514XL-S with other autofocus Super 8 cameras. They'll soon realize they can't go wrong with Canon.



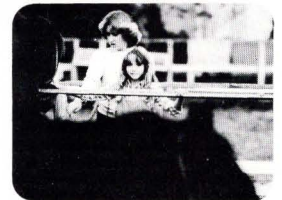
### NORMAL

The AF 514XL-S's autofocus can be manipulated by this simple dial. Leave it on N for "normal" in most regular situations. The subject in the center of the viewfinder will always be kept in focus automatically, so long as nothing gets in between the camera and subject.



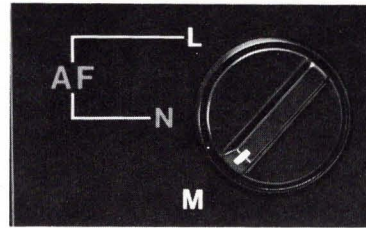
### LOCK

If the filmmaker is filming at a place where he suspects things may get in the way, however, he can use the L, or Lock position. Filming will be carried on as usual except that, if an intruder moves in front of the subject, focus will not change, remaining locked on the original subject.



# SELLING POINTS

The Lock position on the dial can be used to keep the main subject in focus, no matter what may interfere. But what if something enters the picture suddenly, before the photographer can turn the dial to L? In that case, he can use the Instant Focus Lock Button. Pressing it will immediately lock focus when the Focus Selector Dial is on N. If this dial is set at the L position, however, pushing the button will cancel the lock. The camera refocuses automatically on the subject once and locks itself on the new distance.



## MANUAL

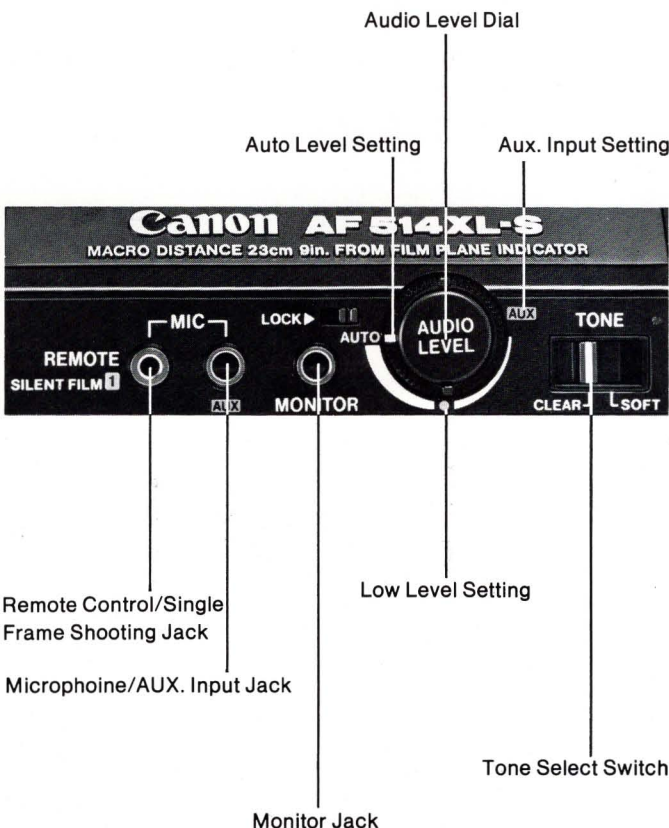
Although all autofocus cameras have difficulties in some situations (i.e. when there is little contrast, with tiny repeating patterns or two subjects are within the autofocus circle at the same time), the M for manual position of this dial eliminates those problems. On this setting, the filmmaker uses the focusing ring on the lens, enabling full coverage of every photographic situation and creative possibility.



## Superior Sound is Simple, too

Many people seem to have the impression that sound filming is an incredibly complex affair. It can be, with some cameras that necessitate always setting the sound level, tone, etc. The AF

514XL-S, however, is different. Just like the focus, this operation is completely automatic. Enabling this is the Automatic Level Control circuit which quickly responds to any change in sound intensity. The photographer can be filming a quiet park one minute, a busy street the next and the resulting difference in sound will be compensated. When the results are projected, a completely natural sound track will accompany the high-quality image. And because this system sets the sound level according to both intensity and duration of sound, it makes sure the desired sounds are distinguished from background noises, giving a feeling of distance and, again, more naturalness.



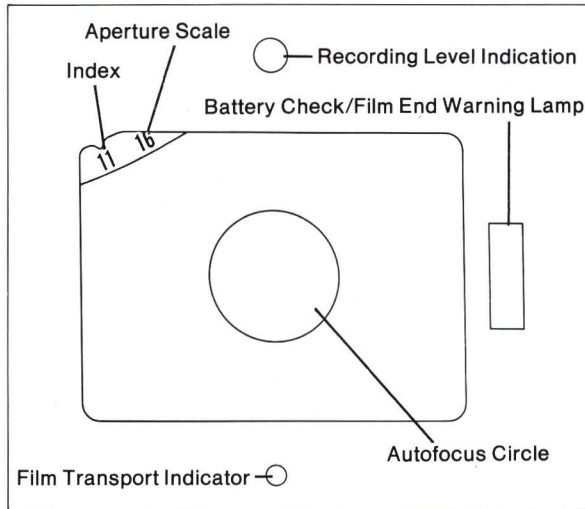
This sound system is easily controlled by a dial called the Audio Level Control. No matter what the sound source, the three positions of this dial offer enough flexibility to cover it. Leaving the dial on the Auto setting is perfect for most situations. However, if the photographer runs into really high-decibel situations that even the ALC can't handle, he can use the Audio Level Control's low-level setting to avoid distortion. In either case, the dial can be locked into position by the Dial Lock Button.

In addition, for really creative sound movies, this control can be used for special effects. For instance, sound fade-in and fade-out between scenes is possible by just gradually turning the dial toward the high-level or low-level respectively. And of course, since the camera is provided with an AUX jack and corresponding AUX position on the Audio Level Dial, recording from external sources is also possible to enhance the sound track.

The filmmaker will be able to tell that the sound track is to his liking as it is being recorded. All that is necessary is pressing the shutter release half-way with an earphone in his ear. The sound quality can then be changed by using, in addition to the above controls, the Tone Select Switch. The SOFT position is best for most situations; CLEAR is used when the microphone is too close to the speaker's mouth and other such times.

With a combination of automation and complete flexibility, the Canosound system is perfect for any filmmaker.

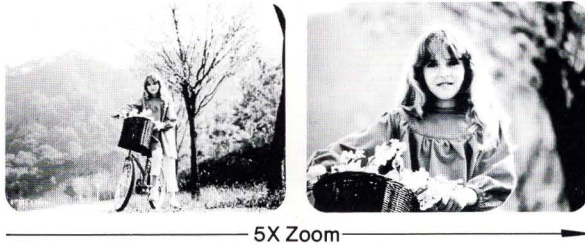
# SELLING POINTS



## All-knowing, All-seeing SLR Viewfinder

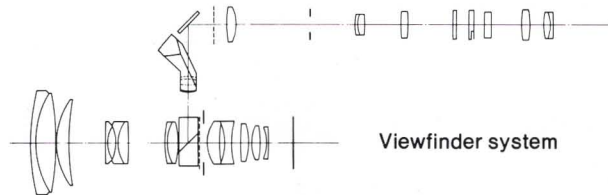
The first thing you may notice about the AF 514XL-S's viewfinder is the circle in the middle. This is used in place of the former split-image circle; as long as the photographer keeps his subject in the center, focus will be O.K. The subject will be perfectly sharp, too, as the same lens that an SLR viewfinder uses is employed. And, since the exit pupil is exceptionally large, the images seen in the viewfinder will be quite bright.

Of course, this viewfinder shows more than the image as well. There is a recording level indication reminding the photographer that sound filming is under way. A film transport indicator located underneath the viewfinder tells him the film is being transported safely. Then there is a convenient lamp that doubles as a battery check and film end warning. One can also tell whether there is too much or too little light by the over- and underexposure warning marks in the upper left-hand corner, which is where the aperture value that the camera has selected can also be found. Such complete information makes sure the cameraman never misses a second of filming.



## 5X Zoom

Another way your customers can add life and interesting effects to their home movies is by the AF 514XL-S's zoom mechanism. For a rapid zoom in on or away from the subject, the zooming ring can be manipulated manually with the left hand that has been set free thanks to the autofocus. Or, if a more gradual zoom is desired, this hand can shift to the top of the camera and the power zoom switch. And being a 5X zoom, variable focal lengths of from 9mm to 45mm are possible. This, plus the power and manual control, give a great amount of composition leeway.

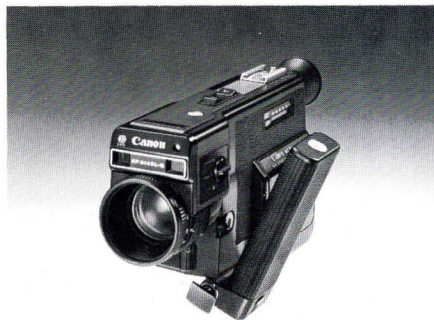


## Catching the Available Light

To enable filming under existing light, the AF514XL-S incorporates several devices. One is its lens that has f/1.4 as its speed, which makes this lens one of the fastest available for Super 8 cameras. In addition, an exceptionally large shutter opening angle of 220° is provided, giving an effective exposure of 1/30 at 18 fps which is necessary for dim-light situations. The light that is captured is measured by a highly sensitive CdS photocell, increasing the metering range of the camera.

## Macro

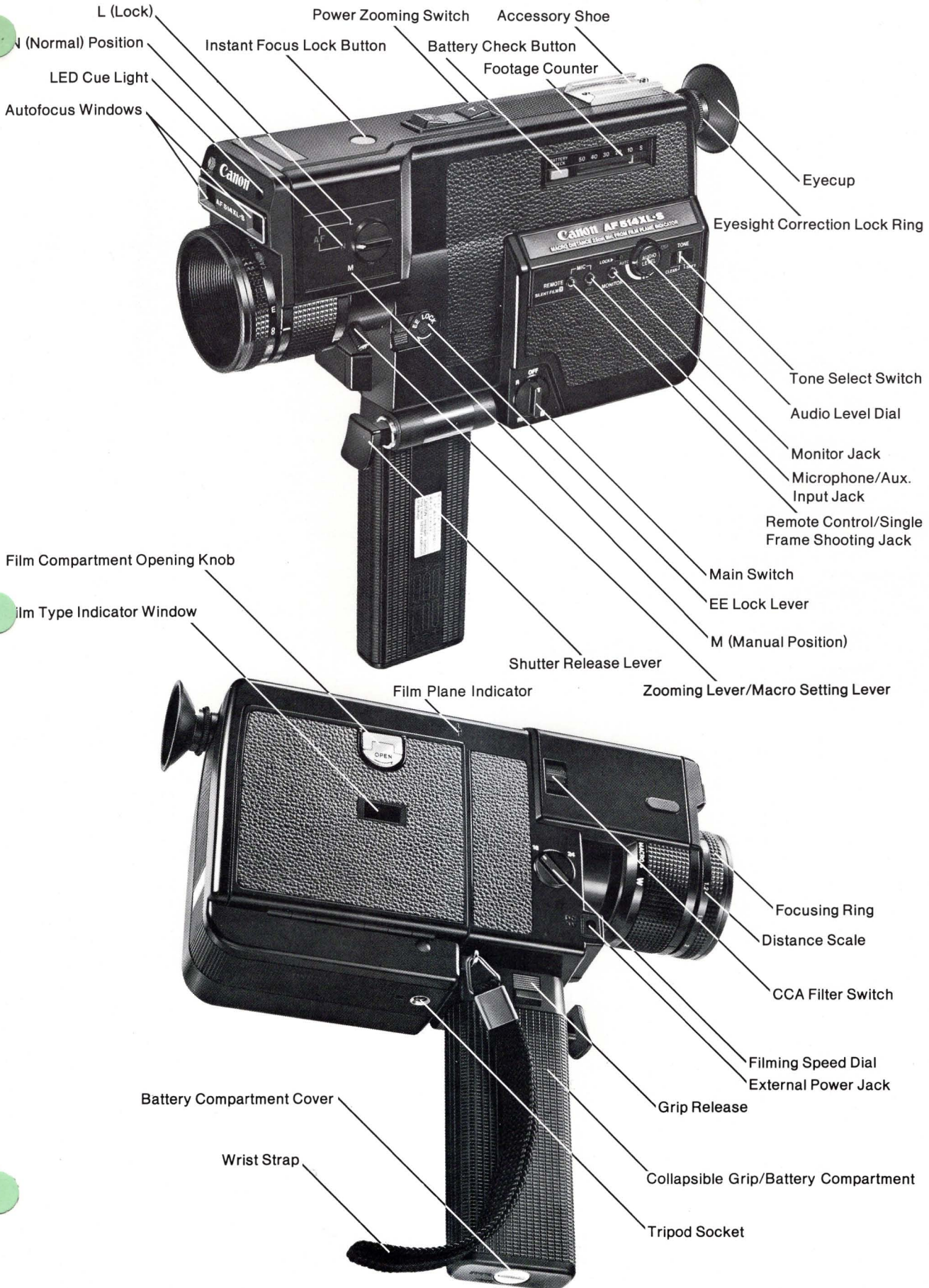
The world of macrophotography is stunningly beautiful, but it's one few people can explore. However, the AF 514XL-S has a macro mechanism that allows the filmmaker to take close-up, single-frame shots. Merely turning the zoom ring to the macro position and setting the camera so that there is a working distance of 12.7cm from the lens to the subject is all that is necessary. At this short working distance, you can now get the higher magnification of the subject to close up the subject within the field of view as small as 74 × 102mm.



## Beautifully Compact

On top of all its features, this camera is surprisingly compact. The 514XL-S has made friends around the world because of its compactness compared to other sound Super 8 cameras. The same is true of the AF 514XL-S and the addition of the autofocus unit does nothing to alter this reputation. Smaller than most such units on other cameras, it poses no problem when wanting to take the camera along on a trip. And its fold-up grip with rough, slip-proof exterior plus logical, easy-to-manipulate controls, provide the epitome of comfortable movie-making.

# NOMENCLATURE



# ACCESSORIES

## MICROPHONE ACCESSORIES

CODE NO.	DESCRIPTION
C53-9251-001	Dynamic Microphone DM30R
C53-9362	Electret Condenser Mike CM100
C53-9254	Boom Microphone BM70
C53-9255	Boom Microphone BM50
C53-9397-211	Wireless Microphone Set
C53-9397	Wireless Microphone WM-50 Quartz
C53-9277	Wireless Receiver WR-50 Quartz
C53-9261-001	Earphone E
C53-9291-001	Connecting Cord C300L

## REMOTE CONTROL ACCESSORIES

5-22051-00	Remote Switch 60
5-22041-01	Remote Switch 3
5-81071-00	Extension Cord E1000
C53-9302	Microphone Extension Cord E450Y

5-39241-00	Self Timer E
5-39211-00	Interval Timer E
C58-5351-211	Wireless Controller LC-1 Set

## POWER PACK ACCESSORIES

C53-9281-011	Power Pack 9V
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## MISCELLANEOUS ACCESSORIES

C46-1091	Soft Case w/Neck Strap 8 for AF 514XL-S
CG2-0070	Lens Cap C-52
5-61151	Neck Strap 8
CA3-0241	Rubber Mat
34-1351	Finder Cover 6

**Note:** Federal Communications Commission approval pending for Wireless Microphone WM-50 Quartz and Wireless Receiver WR-50 Quartz

