CODE NO.	ITEM
1-20711-48	Canon F-1 w/lens FD 50mm f/1.8 S.C.
1-20711-39	Canon F-1 w/lens FD 50mm f/1.8 S.C. & hood in case
1-20711-46	Canon F-1 w/lens FD 50mm f/1.4 S.S.C.
1-20711-47	Canon F-1 w/lens FD 50mm f/1.4 S.S.C. & hood in case
1-20711-44	Canon F-1 w/lens FD 55mm f/1.2 S.S.C.
1-20711-45	Canon F-1 w/lens FD 55mm f/1.2 S.S.C. & hood in case
1-20711-41	Canon F-1 body only

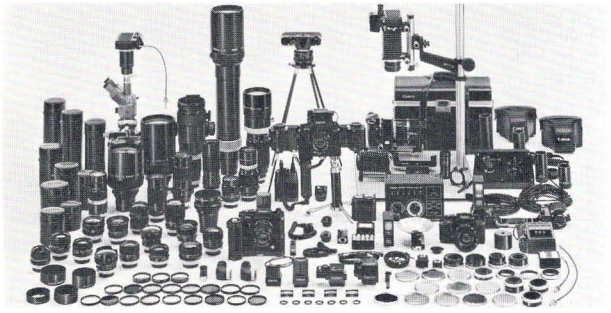
Canon F-1

The Ultimate System SLR

SPECIFICATIONS

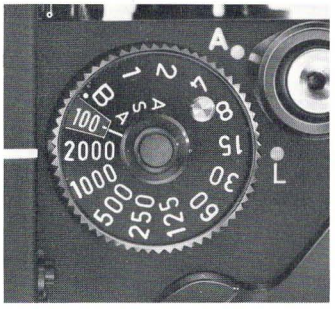
- **Type:** 35mm single-lens reflex camera with focal plane shutter
- **Picture Size:** 24x36mm
- **Standard Lenses:** Canon FD 55mm f/1.2 S.S.C., FD 50mm f/1.4 S.S.C. and FD 50mm f/1.8 S.C.
- **Interchangeable Lenses:** FD series for full aperture metering, FL series and R series lenses for stopped-down metering
- **Viewfinder:** removable pentagonal prism finder, interchangeable with Servo EE Finder, Booster T Finder, Speed Finder and Waist Level Finder
- **Focusing Screens:** Standard screen uses matte-fresnel field with central microprism. Eight additional screens available. All contain beam-splitting condenser for central area spot metering.
- **Field-of-View:** 97% of vertical picture area, 97% of horizontal picture area; 0.77x magnification with standard 50mm lens at infinity
- **Finder Information:** meter needle and aperture needle, outside coupling range warning red mark, stopped-down metering index mark and battery check mark, shutter speed indicator, under and over exposure warning marks
- **Lens Mount:** Canon breech-lock (FD) mount; FL and R series lenses mountable; diaphragm: AE function possible used with Servo EE Finder. FL lenses: stopped-down metering, coupled with automatic diaphragm. R lenses: stopped-down metering with manually operated diaphragm
- **Shutter Speeds:** B, 1-1/2,000 sec., X synch. at 1/60 sec.
- **Self-Timer:** built in
- **Film Speed Scale:** ASA 25-2000
- **Exposure Meter Coupling Range:** EV2.5 (f/1.2 at 1/4 sec.) to EV 18 (f/11 at 1/2000 sec.) with ASA 100 film; central area metering (12% of picture area)
- **Meter Battery:** one 1.3V M20 (#625) mercury battery used
- **Servo Electric Eye Metering:** exclusive Servo EE Finder system enables Variable Aperture (shutter preferred) automatic exposure control
- **Ultra-Low Illumination Metering:** exclusive Booster T Finder enables metering between EV1.5 (f/1.2 at 1/2 sec.) and EV-3.5 (f/1.2 at 15 sec.) with ASA 100 film.
- **Synchronized Flash:** FP and X contact, automatic time lag adjusting type
- **Canon Auto Tuning (CAT) System:** fully automatic flash control by recharging power level signal and focusing distance signal; proper aperture obtained by match needle system of meter in conjunction with Speedlite 133D, Flash Coupler L, Flash-Auto Ring A_2 or B_2; CAT used with these lenses: FD 50mm f/1.4 S.S.C., FD 50mm f/1.8 S.C., FD 35mm f/2 S.S.C. and FD 35mm f/3.5 S.C.
- **Flash Synchronizing Range:** FP class: 1/2,000-1/125 sec., and 1/30 sec. or under; Speedlite: 1/60 sec. or under; M, MF class: 1/30 sec. or under
- **Winding Lever:** single-stroke operation 180° with 15° standoff; ratchet winding possible
- **Size:** 98.7x146.7x43mm (3⅞″5¾″x1-11/16″)
- **Weight:** 820g (1-lb. 13-oz.) (body only) 1,125g (2-lbs. 7½ oz.) (with FD 50mm f/1.4 S.S.C. Lens)

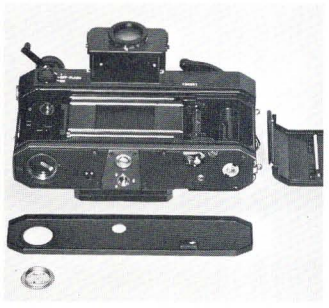
SELLING POINTS



A TRUE SYSTEM CAMERA

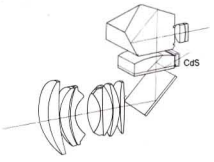
a. Photographers can accomplish any photographic task using the F-1 system, which is comprised of nearly 40 lenses, more than 200 accessories, motor drives, interchangeable viewfinders and focusing screens and automatic flash equipment.
b. Every component of the entire F-1 system works together with perfect precision, because it was conceived as a system at one time, with no "add on" afterthoughts.
c. The F-1 system is a true system in every sense of the word. Quite simply, its aim is to supply the photographer with every piece of equipment he could possibly need for any type of photography. It's the kind of system that can go as far as a photographer wants to take it.

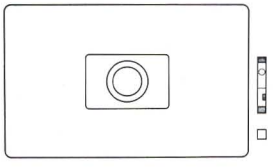




ULTRA-PRECISE MECHANICAL OPERATION

a. Any action can be stopped with the F-1's tough focal plane titanium foil shutter, which has a speed range of 1-1/2,000 sec. plus B.
b. The F-1 has an extra-rugged film advance mechanism, to withstand years of hard use. The film pressure plate is oversized, for superb film flatness and (as a result) greater image sharpness.
c. From freezing cold to the tropics, the F-1 works with perfection. It has been tested for vibration, shock and durability in temperatures from -22° to 140°F.
d. Wear between lens mount and camera body is all but completely eliminated, thanks to the famed, exclusive Canon breech-lock lens mount. Critical flange-to-film distance is the same for as long as the camera is in use.





SUPERBLY ACCURATE METERING SYSTEM

a. For bright viewing and focusing under any conditions, full aperture metering is possible with all FD series lenses.
b. The F-1's central area spot metering system is preferred by professionals. Since it measures only the central 12% of the viewfinder area, it is ideal for difficult lighting situations, such as backlighting or snow and beach scenes, where contrast is usually very high.
c. Stopped-down aperture metering is possible with Canon FL and R (with manual diaphragm operation) series lenses. No Canon lens is ever obsolete.

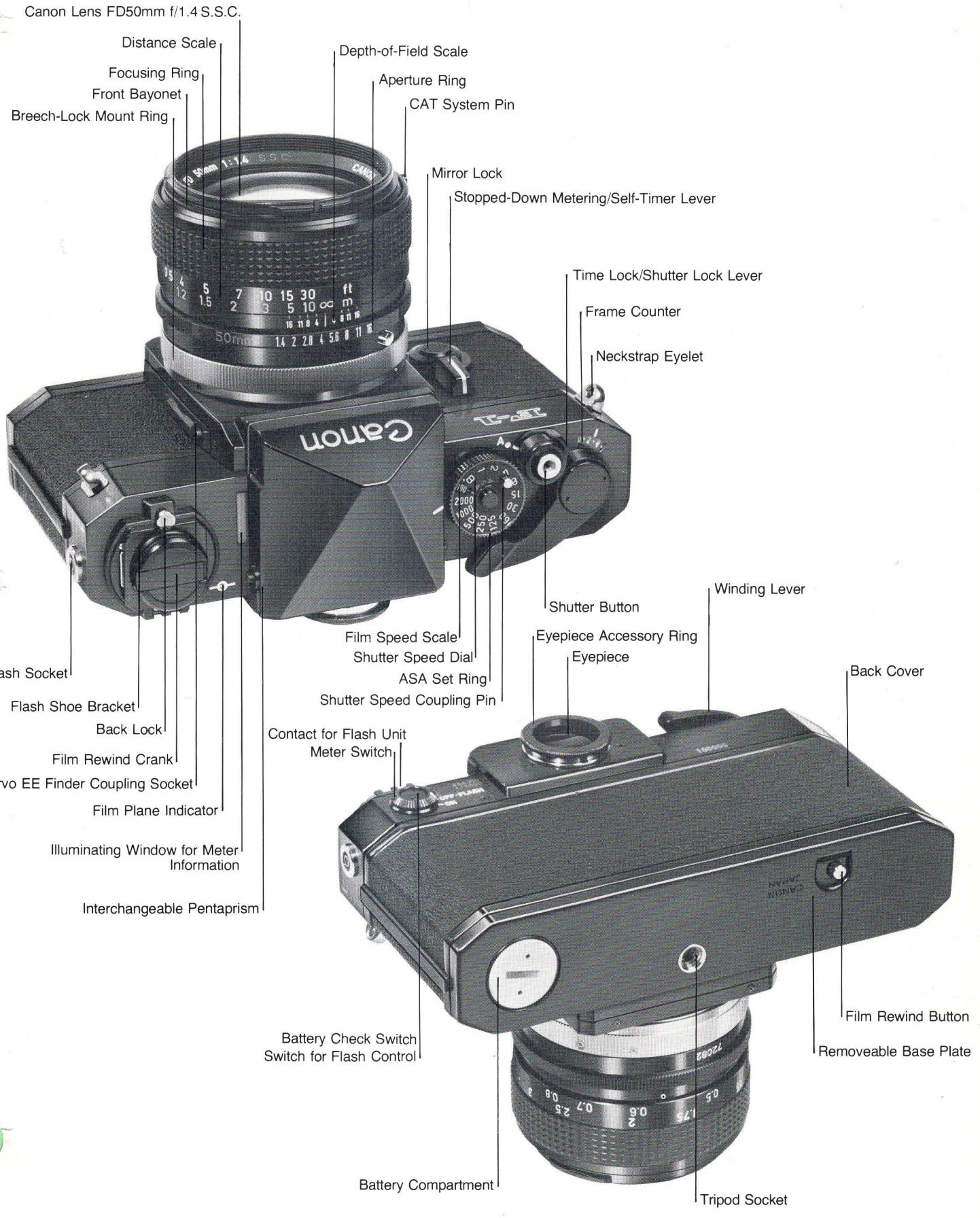
UNSURPASSED SERIES OF CANON LENSES

a. A photographer can shoot almost anything with the range of nearly 40 Canon interchangeable lenses, from 7.5mm Fish Eye to 1,200mm Super Telephoto. Their definition and performance are unsurpassed.
b. Exclusive Canon Spectra and Super Spectra (multiple) Coatings insure maximum freedom from flare, top color correction and improved contrast.
c. Thanks to the Canon Floating System, FD lenses are as well corrected at near distances as when used for general work.
d. All Canon lenses are as compact as possible, for added convenience in traveling and handling.

UNLIMITED RANGE OF SPECIALIZED APPLICATIONS

a. The F-1's full line of interchangeable viewfinders includes the Speed Finder, Servo EE Finder (for automatic exposure operation), Booster T Finder (for extreme metering sensitivity), Waist Level Finder and standard Eye Level Prism Finder.
b. Two Motor Drive Units (MF and MD) are available, for action, copying and scientific applications. When used with the Film Chamber 250 they allow continuous exposure of up to 250 frames of film.
c. Nine focusing screens are provided, for a wide range of preferences in viewing and shooting conditions.
d. For close-up photography, macrophotography and photomicrography, there are bellows units, extension tubes, close-up lenses, copy stands and a host of other fine equipment.
e. Perfect flash photography is almost mistake-proof with the Canon Auto Tuning (CAT) System for electronic flash.
The CAT system is designed for the following Flash-Auto Rings and designated lenses:
Flash-Auto Ring A_2: FD 50mm f/1.8, FD 35mm f/3.5, FD 35mm f/2
Flash-Auto Ring B_2: FD 50mm f/1.4. FD 35mm f/3.5, FD 35mm f/2
f. Since the F-1's metering system is built *into* the camera, such accessories as the Speed Finder can be used without loss of metering functions.

NOMENCLATURE



ACCESSORIES

EQUIPMENT FOR MOTORIZED PHOTOGRAPHY

CODE NO.	DESCRIPTION
5-19141-21	Motor Drive MD Set (consists of Motor Drive Unit, Battery Case, Two Battery Magazines, Battery Connector MD, Battery Checker MD, Remote Switch MD, Extension Cord MD10)
5-19191-01	Battery Case (with 2 pcs. of Battery Magazine 15V) for MD
5-19251-01	Battery Case D (cordless direct contact) w/15V Magazine for MD
X62-7906	Battery Magazine 15V
5-19211-00	Battery Connector MD
5-19261-00	Battery Checker MD
5-19171-00	Remote Switch MD
5-81041-00	Extension Cord MD10
5-19281-21	Motor Drive MF Set (includes Grip MF)
5-85391-00	Grip MF
5-81101-00	Cord MF for Grip MF
5-81071-00	Extension Cord E1000
5-19172-00	Remote Switch 60MF
5-64041-00	Interval Timer L
5-19151-21	Film Chamber 250 Set (consists of Film Chamber 250 and 2 Film Magazines 250)
5-19201-00	Film Magazine 250
5-19181-00	Film Loader 250

VIEWFINDERS AND ACCESSORIES

5-60101-21	Servo EE Finder Set (includes power cord 12V2E)
5-19191-02	Battery Case (w/1 battery magazine 12V)
38-0250	Battery Magazine 12V
5-81081-00	Connecting Cord MF for Servo EE Finder
48-0097	Power Cord 12V2E for Servo EE Finder
5-60091-21	Booster T Finder Set (includes 6-volt silver oxide battery)
48-0098	Power Cord 6-volt 2B
5-40801-00	Speed Finder in case
5-40902-00	Waist Level Finder
5-40712-00	Angle Finder A-2
5-40711-00	Angle Finder B
5-40701-21	Magnifier R
5-41051-00	Magnifier Adaptor R
5-59211-00	Eye Cup 3R (included with F-1 Camera)

FOCUSING SCREENS

5-19249-00	Focusing Screen A (Microprism)
5-19241-00	Focusing Screen B (Split Image)
5-19242-00	Focusing Screen C (Matte Surface)
5-19243-00	Focusing Screen D (Matte Surface with Grid)
5-19244-00	Focusing Screen E (Split Image/Microprism)
5-19245-00	Focusing Screen F (Microprism/Large Aperture lenses)
5-19246-00	Focusing Screen G (Microprism/Small Aperture lenses)
5-19247-00	Focusing Screen H (Matte/Scale)
5-19301-00	Focusing Screen I (Double Cross Hair Reticle)

DIOPTRIC ADJUSTMENT LENSES

5-05061-00	Dioptric Adjustment Lens R (+3)
5-05062-00	Dioptric Adjustment Lens R (+2)
5-05063-00	Dioptric Adjustment Lens R (+1)
5-05064-00	Dioptric Adjustment Lens R (0)
5-05065-00	Dioptric Adjustment Lens R (−2)
5-05066-00	Dioptric Adjustment Lens R (−3)
5-05067-00	Dioptric Adjustment Lens R (−4)

FLASH ACCESSORIES

5-00271-31	Speedlite 133D w/Flash Auto Ring A2 (for 50mm f1.8, 35mm f3.5, 35mm f2.0)
5-00271-32	Speedlite 133D w/Flash Auto Ring B2 (for 50mm f1.4, 35mm f3.5, 35mm f2.0)
5-02124-00	Flash Auto Ring A2
5-02125-00	Flash Auto Ring B2
5-02131-01	Flash Coupler L
5-02111-00	Flash Coupler D

GADGET BAGS

4-80024-00	Gadget Bag 4
4-80025-00	Gadget Bag G-1

MISCELLANEOUS ACCESSORIES

CODE NO.	DESCRIPTION
5-03111-00	Camera Holder F
5-63061-00	Release 30
5-63062-00	Release 50
9-00505-N5	Introduction to Canon F-1 (F-1 Guide Book)

MACROPHOTO & CLOSE-UP ACCESSORIES

4-20601-20	Copy Stand 4
4-25901-03	Handy Stand F55 set
4-26201-20	Photo Micro Unit F
4-25117-00	Macro Hood
4-25501-00	Microphoto Hood
4-25301-01	Extension Tube ABC Set
4-25301-00	Extension Tube A
4-25302-00	Extension Tube B
4-25303-00	Extension Tube C
4-25304-00	Extension Tube 25
4-25305-00	Extension Tube 50
4-25311-00	Extension Tube 75
4-25312-00	Extension Tube 100
4-25313-00	Extension Tube 150
4-25314-00	Extension Tube 200
4-25315-00	Extension Tube FL15
4-25321-00	Extension Tube FL25
4-25316-01	Extension Tube M Set
4-25316-00	Extension Tube M5
4-25317-00	Extension Tube M10
4-25322-00	Extension Tube M20
4-25403-00	55 Macrophoto Coupler
4-25404-00	58 Macrophoto Coupler
4-25405-00	48 Macrophoto Coupler
4-25701-00	FL48 Macrophoto Coupler
4-25711-00	FL58 Macrophoto Coupler
4-25721-00	FL55 Macrophoto Coupler
5-42011-00	Lens Mount Converter A
5-42021-00	Lens Mount Converter B
5-42031-00	Lens Mount Converter E
5-42071-00	Lens Mount Converter P
5-43231-01	58 Close-Up 450
5-43241-01	58 Close Up 240
5-43251-01	48 Close-Up 450
5-43331-01	48 Close-Up 240
5-43571-00	55 Close-Up 450
5-43561-00	55 Close-Up 240
5-59042-20	Bellows FL
5-59043-00	Bellows M
5-59181-00	Slide Duplicator 48
5-59181-01	Slide Duplicator 55
43-6370	Attachment Ring 48 for Slide Duplicator
43-6371	Attachment Ring 55 for Slide Duplicator
43-6372	Attachment Ring 58 for Slide Duplicator

CASES

4-60801-00	Leather Case S for Canon F-1 (for 50mm f1.4, 50mm f1.8 lens)
4-60802-00	Leather Case L for Canon F-1 (for 55mm f1.2 lens)
48-0113	Case for Servo EE Finder
48-0129	Case for Booster T Finder
48-0130	Case for Speed Finder

DUST CAP

43-5796	Finder Dust Cover

BODY COVER

4-52021-00	Camera Cover R-F

STRAP

5-61131-00	Neck Strap 6 with pad

PLEASE NOTE: For further information on accessories please see the sections as follows:
Sect. 2: Canon Interchangeable Lenses
Sect. 3: Canon F-1 System and SLR Accessories
Sect. 9: Miscellaneous Accessories Cross-Referenced (including Canon Filters, Cases, etc.)

Inside the Canon F-1 System. Part I:

When Canon set out to build the F-1 system, they had one goal in mind—making it the finest professional single-lens reflex system in existence: in fit, finish, durability and performance.

But it isn't enough just to say you're the finest. We can prove it. This is part one of a series intended to show you why the F-1 system is the finest by showing you what went into its design and construction—starting with the heart of the system, the F-1 body itself.

THE SHUTTER

Made from titanium foils 14 microns (.014 mm) thick, the shutter curtains can withstand a minimum of 100,000 exposures under a wide spectrum of climatic conditions. Titanium was the only choice for the F-1's shutter curtains because it is capable of high strength even in such thin layers, has low metal fatigue and isn't subject to pinholes, as are cloth shutter curtains.

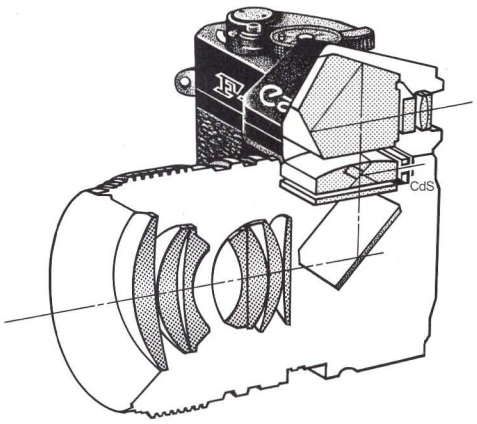
The rest of the shutter mechanism is capable of at least 200,000 exposures—more than 5,555 36-exposure rolls of film. The high-speed revolving shutter shaft is made of a special alloy for strength, and judiciously lightened for balance and to reduce weight. It rotates on ball bearings. Because of these bearings, the shutter curtain can travel its distance faster than usual for focal plane shutter. This permits a top speed of 1/2,000 second, and electronic flash synchronization at 1/60 second. All gear teeth have been painstakingly ground to a perfect finish, and the shutter gear's socket has been varnished for added smoothness of operation. Canon even did exhaustive research into the best type of lubrication to use—lubrication that would allow the best performance over the widest temperature range.

The result of this elegant shutter treatment is a shutter that is utterly dependable, year after year.

THE METERING SYSTEM

The design of the F-1's through-the-lens metering system is unique, and consequently offers some unique advantages. First and foremost, it's built into the body, not into a finder. The camera is more compact as a result, and metering functions aren't lost when different viewfinders are employed.

Second, the system is basically simple,



yet highly effective. Incoming light strikes a small beam splitter mirror in the focusing screen which directs 15% of this light into a CdS cell located at the rear of the screen, just below the viewfinder window. Because each of the four F-1 focusing screens (microprism, split-image, full matte and matte with etched vertical and horizontal lines) directs the same 15% of light to the meter cell, no exposure compensation must be made for the particular screen in use.

The size of the metering field was carefully chosen. It is the central 11% of the focusing screen—small enough to allow selective, semi-spot exposure readings of the subject (vital in backlighting) but large enough to permit integrating the luminance of several portions of the scene at once. Because of this dual nature, the meter can be used in difficult lighting situations for precise exposure measurement or for grab shots with equal accuracy. Metering may be performed either at full aperture (FD series lenses) or via the stop-down method.

The meter requires no manual compensation to accommodate lenses of varying maximum apertures. All lens-to-body couplings are internal, a decided advantage when working quickly.

Exposure measurements are made by centering the meter needle in the circle of the mechanical follower arm, both highly visible in the finder due to an exceptionally bright meter illuminating window at the left side of the pentaprism. Since the diameter of the follower indicator is equal to one F-stop, it can be used as a precise scale for bracketing exposures by 1/2 stop, over or under. When the coupling range of the meter is exceeded, the metering field window automatically turns red. The window also incorporates a reference mark for stop-down metering and battery check.

The F-1 Body

FILM TRANSPORT

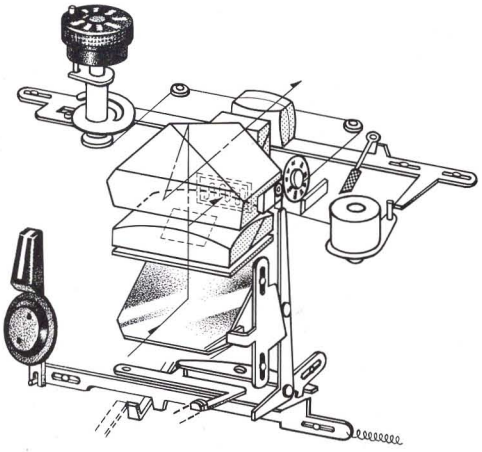
Canon engineers devoted an unprecedented amount of time and effort to the F-1's film transport system—an area often slighted in camera design.

The reason for this is quite straightforward. Not even the finest lenses in the world will yield sharp results unless the film is held flat. To accomplish this, the F-1 uses the largest film pressure plate in the industry. But a large pressure plate alone won't keep film flat, so further design innovations were employed to help it do its job.

Starting with the cartridge end, there is a stabilizer and supporting spring, to prevent the cartridge from moving once the camera back is closed. At the take-up end, film is wound to preserve its original curl. This not only promotes film flatness, but also makes for smoother film transport, especially in cold weather where film may be prone to cracking. After the film passes over the take-up sprockets, it is put under pressure by a film roller and auxiliary spring—both of which further ensure smooth, secure film advancement. The multi-slotted take-up spool makes loading fast and easy. In short, Canon's engineers' effort in designing the F-1's film transport system was well spent—giving the photographer a body that will protect the film and move it smoothly through the camera under almost any conditions.

VIEWFINDER SYSTEMS

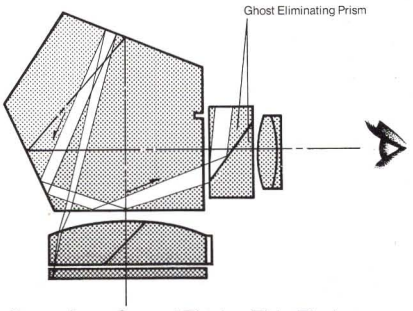
The F-1's viewfinders slide on and off on polished rails. Not only does this treatment result in better finder alignment and the elimination of "finder wobble," but it also keeps annoying focusing screen cleanups to a minimum, because it's harder for dust to enter the viewing area.



Canon made the most of the F-1's interchangeable viewfinder capability, by designing some exceptionally useful and versatile viewfinders. The Booster Finder permits accurate exposure metering in extremely low light, or with long extension tube or bellows extensions. This finder has a built-in electronic timer and light that blinks at one-second intervals during time exposures. A tiny lamp illuminates viewfinder data when the existing light is too dim to do so.

The Servo EE Finder allows the F-1 user the option of fully automatic exposure control, with shutter speed priority. This type of automation is preferred by professionals because it ensures freedom from camera shake when using the camera hand-held. When the F-1 is equipped with the Servo EE Finder and motor drives MD or MF, automatic, unmanned photography is possible.

One of the handiest of the F-1 finders is



the unique Speed Finder. This Finder permits full-frame viewing and focusing up to 60mm from the eyepiece, for fatigue-free viewing under any circumstances. It's especially useful for sports or aerial photography, or for close-up work and copying, since it swivels 360° for eye- or chest-level operation.

At the rear of each viewfinder (except Speed Finder and Waist Level Finder) there's a ghost-eliminating prism that ensures ghost-free viewing and focusing—a common fault of many SLR viewfinder systems.

HUMAN ENGINEERING

The F-1's handling was intended to make the photographer forget he's using a camera and concentrate instead only on his subject. The amount of time spent "getting acquainted" with the camera is minimal, thanks to Canon's attention to the preferences and working habits of photographers all over the world.

The film advance lever, critical for fast operation, is well offset from the camera body for good, positive contact with the thumb. The shutter release is positioned towards the front of the body, where the index finger falls into place naturally. The shutter speed dial is large and well knurled for sure selection of shutter speeds without taking the eye from the finder window. A comfortable eyecup is provided which shields the meter cell from extraneous light entering through the viewfinder window and the eye from distracting peripheral light.

The Canon F-1 system IS the finest available, because it's built on the best camera body available. But don't take our word for it. See and handle it at your Canon dealer's.

A System of Precision. Canon® F-1

Inside the Canon F-1 System. Part 2:

A camera system is a unified collection of working parts, all aimed towards the goal of creating photographs that are as near perfect as possible. Just as the camera body itself has certain roles to play in achieving this goal, the lenses made for it complement it, and enhance its performance.

The Canon F-1 camera body is a remarkable accomplishment, but it would be nothing without optics capable of allowing it to fulfill its performance promise. Canon's optical prowess has been acknowledged for nearly forty years, and today's more than 40 Canon FD and FL series lenses represent the state-of-the-art in lens design and construction. You'll see why this is true as you read further.

DESIGN CRITERIA

What does it take to make a great photographic lens? Basically, Canon's engineers had the following design criteria in mind when they set out to build the FD lens family. These lenses had to be unsurpassed in resolution, contrast, freedom from distortion and aberrations, and high in functional quality and durability. And they also had to minimize differences in the size and color of out-of-focus highlights due to uncorrected chromatic aberration.

Canon lenses have traditionally been noted for their fine performance in meeting the above criteria. Optically, they're even better now due to Canon's development of Spectra and Super Spectra Coating techniques. These special lens coatings minimize flare by maximizing transmission through the elements. The result is higher contrast, sharpness, and better color correction. Unlike many lensmakers, Canon does *not* give every lens a Super Spectra Coating indiscriminately, simply because it sounds like a good sales ploy. The truth is that not all lenses require this type of treatment. The reduction in cost thus obtained is passed on to the consumer.

COMPATABILITY WITH THE F-1 BODY

Since Canon lenses and the F-1 body, as well as the FTb, TLb and the EF, must work as a unit, there must be the utmost compatibility between lens mount and camera. For years, the Canon breech-lock lens mount has been praised by experts for its sureness and strength. The mount itself never turns against the camera body--it's placed against it, and brought up snug by a locking ring. Because of this, perfect (and highly critical) flange-to-film distance is maintained. And since the mount utilizes no springs, it will never loosen.

Each Canon lens is externally "clean." That is, there are no external couplings. There is no fumbling to match up aperture prongs when changing lenses. There are no broken pieces lying at the bottom of your camera bag. Everything is internal. Metering is at full aperture (with all FD lenses) and because these lenses have a diaphragm that can float "free," completely automatic operation (with the Servo EE Finder) is simple and reliable—making for less "down time" for the pro.

WIDE ANGLE LENSES

If any one group of Canon lenses could be said to represent the most modern thinking in lens design—it would have to be the Canon wide angles. All of them are retrofocus in design. Because of this "inverted telephoto" type of configuration, through-the-lens viewing and focusing is maintained throughout the series, from the 7.5mm Fisheye up. This gives the photographer more creative control in his work, since he can see exactly what he's shooting, without the slightest danger of parallax error.

Another recent optical/mechanical development Canon lenses employ is the use of a Floating System at the rear of several lenses. The Floating System is a group of elements that move independently of the rest of the elements, for vastly improved performance at close focusing distances. Normally, a particular lens is at its best used within a certain reproduction ratio.

In the case of a photographic lens, the closer the focus in relation to infinity, the poorer the optical quality, until the advent of the Floating System.

In the Canon wide-angle lens group, there are some truly unusual lenses to be found. Such as the smallest 180° Fisheye available. And a phenomenally sharp 15mm full-frame semi-fisheye. Both lenses have a complement of built-in filters.

For special wide-angle problems, the TS 35mm F2.8 lens is unique. Not only does it shift on the optical axis to correct for converging parallels (or shoot around objects) but it tilts on axis as well, making full use of Scheimflug Principle to increase depth of field at any aperture.

The Lenses.

NORMAL LENSES

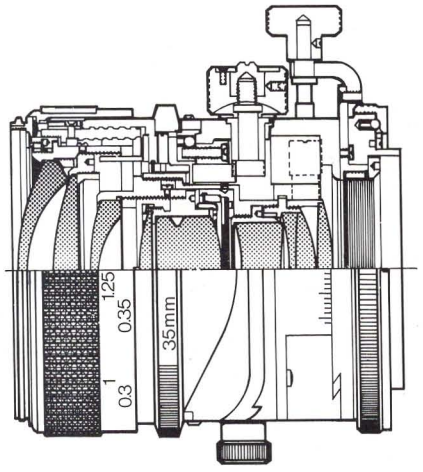
"Normal" is a term that hardly describes the performance of which this group of FD lenses is capable. The group encompasses no fewer than five lenses: FD 50mm F1.8, FD 50mm F1.4, FD 55mm F1.2, FD 55mm F1.2 AL, and 50mm F3.5 Macro.

Because of Canon's superior technological abilities, the production of the AL 55mm F1.2 lens was made possible. This lens contains an aspherical lens element, which requires the production of special measuring devices and polishing techniques for its manufacture. Yet the performance of this lens is so good, the effort expended was well worth the end result. Canon considers it their "perfect" lens.

The 50mm Macro leads a dual existence. On the one hand, it is a specialized tool for critical close up photography. Because of its fine edge-to-edge flatness of field, it is perfect for any application where high image magnification of small objects is a requirement. On the other hand, it is a super sharp lens for general photography. Because of the steep pitch of its helical focusing mount, it "snaps" into focus with an ease that belies its F3.5 maximum aperture.

MODERATE TELEPHOTO LENSES

Canon has fielded, in its lenses from 85-300mm, one of the best assortment of moderate telephoto lenses available for any 35mm SLR. In this group, particular



attention was paid to compact construction. As a result, all of the lenses have an unusually close telephoto ratio, most of them being physically shorter than their focal length. All but two—the FD 135mm F2.5 and FD 300mm F5.6 use the same sized 55mm filters. The FD 100mm F2.8 is particularly sharp and just about as small as a 50mm lens. One of the nicest features of the Canon moderate telephoto lens group is that color rendition is uniform throughout. This means that reproduction will stay the same in a series shot with different focal lengths.

LONG TELEPHOTO LENSES

Like the wide angles, the long lenses present special problems in design and construction that must be met and overcome with the most careful design and construction techniques.

One problem in particular that haunts long lenses is chromatic aberration. As light passes through glass, it is spread into the visible spectrum. The extent of this spreading in a lens determines the extent of that lenses' chromatic aberration. At the extreme end, this results in visible color fringing, and a great loss in sharpness in color and in black-and-white photography as well. Canon has—again through superior technology—created three long lenses with absolutely outstanding color correction. By utilizing artificially grown elements of calcium fluoride, Canon made the 300mm F2.8, 300mm F5.6 and 500mm F5.6 lenses industry standards for sharpness and color correction. An additional bonus derived from the use of this material is the extreme reduction in size and weight obtained when compared with lenses made from all-glass elements.

All of the conventional Canon long lenses are also superbly corrected for chromatic aberrations, as well as being extremely sharp. The lenses from 400mm —1200mm (excluding the FL-F 500mm) all accept a universal focusing mount, for greater economy when several long lenses are required. Also in the interest of economy, each of these lenses provides a filter slot, utilizing inexpensive filters in the light path, rather than large, costly filters at the front element.

ZOOM LENSES

Canon's expertise in the production of zoom lenses extends into the world of high-ratio, fast television optics. It's small wonder that their zooms for the F-1 system are some of the best available—even when compared with fixed focal lengths. The new 35-70mm F2.8-3.5 zoom has two major zooming groups of elements—a departure from traditional zoom construction which greatly enhances optical quality. In addition, it contains a macro switch for close up photography without attachments. It's truly a universal lens.

The FD 100-200mm F5.6 zoom is not only critically sharp, but super light and compact as well. Because it covers a reasonable zoom ratio at a conservative aperture, performance is on a par with many fixed focal length lenses in the same range. The new FD 85mm-300mm F4.5 Canon Zoom is perfect for sports or other applications where it isn't possible to change camera position—or lenses.

It is clear, when a careful examination is made, that not only has Canon produced a line of lenses befitting the F-1 system, but it has outdone itself in terms of optical ingenuity as well.

A System of Precision Canon® F-1

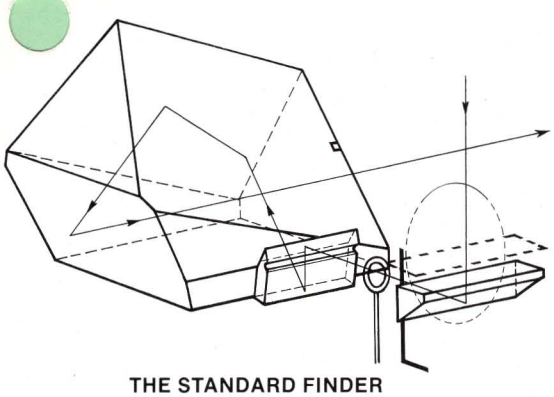
Inside the Canon F-1 System. Part 3:

A System of Precision

Seeing things the right way is the reason single-lens reflex photography was invented. The 35mm SLR offers the precision viewing and focusing of the view camera with the portability and speed of the small format.

A true system camera should have interchangeable viewfinders and associated components. Because a true system camera will be called on to do any number of things—and it must do them all well. Any compromise in the design of the system will result in compromised—and mediocre—performance.

The Canon F-1 has a superb assortment of viewfinders, focusing screens and viewfinder accessories. Some with specialized uses, others for general work. All with the fit and finish you expect from Canon.



THE STANDARD FINDER

This is a pentaprism finder of unusually compact design. Part of the reason for its compactness is that it slides into the F-1 body, thereby sitting in it rather than on top. The result is that the F-1 has a low profile, and is compact enough to fit almost anywhere.

Actually, the standard eye-level prism is made up of several prisms. One large pentaprism is for viewing. It's made from special glass with a very high transmission factor, and treated with vapor-deposited silver for the highest possible reflectance and corresponding image brightness.

At the rear of the main prism is a "ghost-eliminating" prism designed to remove unwanted secondary reflections from the viewfinder. At the side of the main prism is a small prism used to reflect meter information into the finder area.

Image magnification with the standard prism finder is 0.77x with the standard 50mm lens focused at infinity, and 97% of the subject is depicted in the finder—to allow for slide mounts and negative carriers.

Information visible with this finder is as follows: shutter speed, meter needle and follower, red exposure range warning signal, and stop-down metering/battery check index mark.

This basic prism/information arrangement is also used in the Servo EE and Booster T Finders.

WAIST LEVEL FINDER

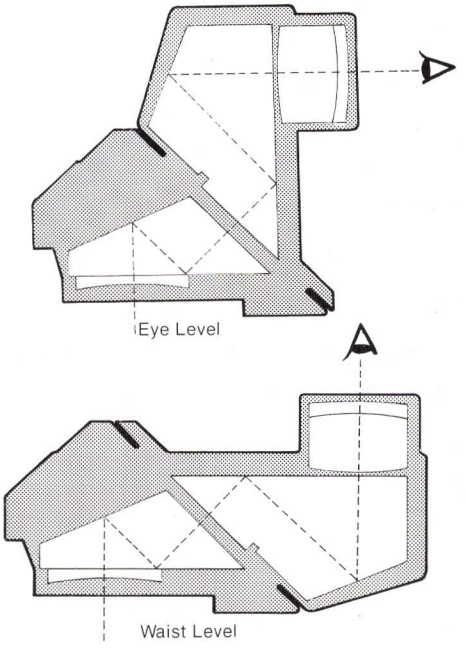
This is the F-1's simplest finder, consisting of a folding hood which replaces the standard finder, with a flip-up 5x magnifier for critical focusing. It's ideal for copying or any other application (macro, candid) where low-level or direct viewing is required. With the Waist Level Finder, the image is upright, but reversed right to left. Since no prisms are in this finder, metering must be done with the standard finder in place.

Waist Level Finder

SPEED FINDER

The Canon Speed Finder for the F-1 is unique. It slides right onto the camera, like all Canon finders, and permits full frame viewing and focusing with the eye up to 60mm (2.5") from the rear of the eyepiece.

Unlike other similar finders, the Canon Speed Finder rotates, for either eye- or chest-level viewing and focusing, with upright, unreversed images and full use of the camera's metering system. It has become widely popular for photography with underwater housing, aerial photography, sports photography, copying and macro work and other applications where its one-of-a-kind operation makes it a pleasure to use. Image magnification with the 50mm lens—focused at infinity is 0.54x.



The Viewing Systems

F-1 with Servo EE Finder

BOOSTER T FINDER

The Booster T Finder is another unique Canon offering for the F-1 system. Its function is to provide normal viewing and focusing, with extended metering potential for low-light situations, or where extensive bellows extensions may be used.

With the Booster T Finder in place, the F-1 actually has two light metering systems, one for EV 15-EV 3, the other (Booster) for EV 10-EV-3.5. To preserve the accuracy that the Booster T's super-sensitive CdS cell is capable of rendering, metering with the Booster is performed at shooting aperture, rather than at full aperture, as with the F-1's internal system. The sensitivity of the Booster T's meter is such that it permits exposure readings down to 15 sec. at F1.2 with ASA 100 film. Its ASA scale goes all the way to ASA 12,800.

Sensitivity alone, though, doesn't make the Booster T Finder what it is. It has several well-thought out operational features that clearly reflect its fine design. The eyepiece has a shutter to prevent extraneous light from interfering with accurate metering functions.

A built-in lamp illuminates meter data when the camera's meter is used, and for Booster T metering, a light atop the finder illuminates the Booster's information. During long exposures, a light blinks at one-second intervals to let you know your shutter's open. And there is a cold-weather, separate power source available.

SERVO EE FINDER

The basic function of the Servo EE Finder is to provide fully automatic, shutter-preferred exposure control. It performs this function with an unsurpassed precision and excellence.

Only a shutter-preferred automation system can be said to be truly professional, and befitting a genuine system camera, shutter-preferred operation means no blurred shots when the action gets fast, and it means that the camera can easily be motorized, since the shutter can't suddenly drop below a speed adequate for the motor to cycle.

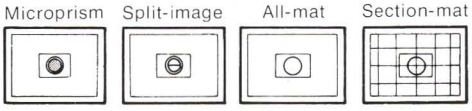
The metering system of the Servo EE is center weighted, because a spot-type system is impractical in an automatic mode. Like the Booster T, the Servo EE Finder has twin CdS cells, one on either side of the finder eyepiece.

Instant exposure changes are effected with the EE's servo motor—which automatically switches off when the light is too low for the metering system to read, thus preserving battery power. The circuit of the finder has built-in resistance to voltage fluctuations.

In conjunction with the Motor Drive MF and Film Chamber 250, totally unmanned photography is possible—such as at a missile launch, where exposure can't be predetermined, or for wildlife photography, under various lighting conditions.

VIEWFINDER ACCESSORIES

FOCUSING SCREENS for the F-1 system come in four styles—standard microprism/groundglass (type A), split-image/groundglass (type B), plain groundglass (type C), and groundglass/etched vertical/horizontal lines. Each screen contains a beam splitter that diverts 15% of the incoming light into the CdS cell at the rear of the screen. No matter *which* screen is used, there is no aperture compensation needed.



ANGLE FINDERS A2 and B are ideal for low-angle work and copying. They rotate for horizontal or vertical use. Angle Finder B's image is upright and unreversed, thanks to a prism incorporated in its design. Both have adjustable diopters.

MAGNIFIER R is for critical focusing, as in macro work and copying. It offers a 2.5x magnification of the central portion of the focusing screen. For viewing the complete screen, the Magnifier R flips up on hinges.

DIOPTRIC ADJUSTMENT LENSES are supplied in +3, +2, +1, 0, −2, −3 and −4 strengths. The standard strength of the prism eyepiece is −1.2 diopters. They are essential for people with corrective lenses who demand precise focusing and don't like to wear glasses while shooting, although the F-1's focusing screen is completely visible, even with glasses.

The Canon viewfinders are one of the most essential parts of the F-1 system. They are made solely to give you, the photographer, the most control of your subject and equipment under the widest variety of conditions.

A System of Precision Canon® F-1

Inside the Canon F-1 System. Part 4:

F-1 with Motor Drive MD, Servo EE and Film Chamber 250

One of the most important goals of the designers of the Canon F-1 system was something they dubbed TEM photography. TEM is short for through-the-lens metering with electric eye exposure automation and motorized film transport/shutter operation. In other words, totally unmanned photography.

Central to this goal was the development of accurate and reliable motor systems for the F-1 camera body. Indeed, since the F-1 was intended to be motorized from the outset, the job of producing excellent motor drives for it was eased considerably.

It's the straightforward design and ease of use of the F-1's motors that make TEM not only feasible, but very practical for almost any photographer. Even when, as is most often the case, a photographer's need for a motor drive doesn't extend into total TEM photography, the F-1 motors and accessories are an invaluable asset—in fashion, sports, science and news photography. In any application, even general photography, there is a place for a motor drive.

The main components of the Canon TEM system are: Motor Drive MF; Motor Drive MD; High Speed Motor Drive Camera; Film Chamber 250; and Interval Timer L. The Servo EE Finder also plays a key role in this type of photography, but it is more precisely classed with the Canon F-1 Finders.

MOTOR DRIVE MF

The basic motor drive set for the F-1 is the Motor Drive MF. It was created with simplicity and versatility of operation in mind.

The Motor Drive MF is physically divided into two parts—the motor section and the grip section. The motor attaches directly to the bottom of the F-1 with the base plate removed. Installation is as simple as taking off the plate and screwing the motor on. The camera back stays closed during this simple operation.

The grip contains ten AA penlight batteries. These batteries (either manganese or alkaline) are enough to power more than 80 36-exposure rolls of film through the camera. Since this type of battery is common, it's easy to find replacements almost anywhere.

The motor unit is made up of two small motors—one for winding the shutter and advancing the film, the other for tripping the shutter after it's wound. This approach insures very stable performance, and great durability as well, since the amount of work expended by each motor is well below its maximum output.

Top speed of the Motor Drive MF is 3.5 frames per second, at speeds from 1/60 second to 1/2,000 second. When used in the single frame mode, pressing the shutter button releases the shutter only. When the button is released, film winding and shutter cocking take place.

For use with the Film Chamber 250, the grip section of the MF is detachable from the motor itself. This feature is also highly desirable in cold weather, where the batteries can be kept inside a coat to stay warm and insure enough power to run the motors.

The Motor Drive MF's versatility is greatly enhanced by the use of the Interval Timer L, Remote Switch 60 MF and Extension Cord E 1000.

F-1 with Motor Drive MF, Servo EE Finder

TEM Photography

The Interval Timer L is an accessory intervalometer which permits exposures to be made automatically at intervals down to one frame every three minutes. With the Film Chamber 250, this amounts to 12.5 hours of continuous shooting.

Remote Switch 60 MF can be used to trip the MF at a distance up to 60cm from the camera. To let you know it's working, a small light-emitting diode blinks to verify shutter trip/motor run. Either the Interval Timer L or the Remote Switch 60MF can be used in conjunction with the Extension Cord E 1000. This cord can be used to operate the motorized F-1 from a distance of 10 meters.

F-1 with Motor Drive MF, Interval Timer L and Extension Cord E

MOTOR DRIVE MD

In many ways, the Motor Drive MD's operation is similar to that of the Motor Drive MF. In addition, it offers somewhat more versatility in the basic package than the MF, for those who need it.

The MD, like the MF, is easily attached to any F-1 body. It also contains two motors for extra durability and performance stability. The greatest difference between the two motor drives is the inclusion of a built in intervalometer into the MD. This interval timer operates in seven steps, from rates of 3 frames per second to one frame per minute. With the Motor Drive MD, no additional accessories are necessary to perform unmanned photography with the Servo EE Finder. With the Film Chamber 250, photographs can be taken for up to four hours uninterrupted.

The Motor Drive MD's power source is external—ideal for cold weather or high altitude use, where battery power must be kept at peak levels for peak performance. On fresh power cells, the MD will run either 50 36-exposure rolls (manganese batteries) or 80 36-exposure rolls (alkaline batteries) with no decrease in operating efficiency over the life of the batteries.

FILM CHAMBER 250

The Film Chamber 250 is easily mounted on the F-1 simply by removing the F-1's standard back.
It is designed to accept 10 meters (33') of bulk film, pre-loaded into special magazines via the Film Loader 250. Not only does the Film Chamber 250 greatly extend the performance of the Motor Drive units thanks to its extended shooting capacity, but it also serves as a handy accessory when copying large numbers of documents, or for recording experiments, or for surveillance (unmanned TEM) photography of any sort, from weather watching to police work. It isn't necessary to use the Film Chamber 250 with a motor drive, either, since the conventional wind lever can be used as well as motorized wind. The Film Chamber 250 automatically stops when all the film has been used up.

HIGH SPEED MOTOR DRIVE CAMERA

The Canon High Speed Motor Drive Camera is a specially modified F-1 coupled to a high speed motor, for photography at cyclic rates of up to nine frames per second.

Thanks to a pellicle mirror which is semi-reflective/semi-transparent, there is no mirror movement at all during the operation of the High Speed camera. Perfect tracking of all subjects is easy with this type of arrangement.

The camera itself is similar to the conventional F-1—accepting FD and FL series lenses & interchangeable viewfinders (without metering functions). However, some mechanical components have been changed in the interest of high performance under the great stress of nine frames per second operation. Shutter speeds range from 1/60—1/1,000 seconds.

A TRUE SYSTEM

It can't be overemphasized that the Canon F-1 was designed as a complete system. Proof of this is the fact that not one, but THREE motorized options, with complete accessories, are offered to photographers—and *no* F-1 requires any modification to accept any of the accessories mentioned here. It's the kind of system that will handle any application: from snapshots to TEM photography.

A System of Precision Canon® F-1

Inside the Canon F-1 System. Part 6:

It seems as if, over the past few years, photographers have "discovered" wide-angle lenses. Only a short while ago, photographers would invariably select moderate telephoto length lenses as their first accessory lenses. Now, more often than not, their first choice is a wide-angle optic. And many of these lenses are wider than 35mm.

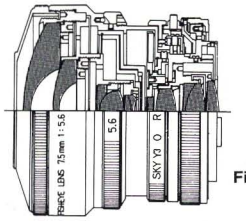
One of the reasons for this upsurge in the popularity of wide angle optics is the demand for increased visual excitement in images and the resulting acceptance of the alterations in familiar perspectives which they usually give.

Canon has studied the market for wide-angle lenses exceptionally well, and has consequently produced one of the most comprehensive, versatile and high-performance lines of wide-angle lenses in the world.

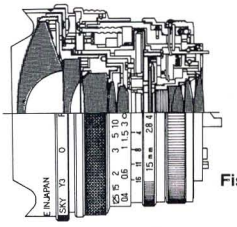
Canon's wide-angle offerings can be broken down into groups consisting of the Fisheyes, the Super-wide-angles, the Wide-angles and one Special category which includes the TS (Tilt & Shift) 35mm F2.8. The total number of Canon wide angles from which the F-1 user has to choose is nine! All of them offer superior optical and mechanical performance, as befits lenses designed for the unmatched Canon F-1.

THE FISHEYE LENSES

Canon's two fisheye lenses, the 7.5mm F5.6 and the 15mm F2.8 are gaining a following among photographers that borders on fanaticism. Besides being critically sharp all the way to the edges of the image, both are exceptionally compact for their capabilities. Each has a complement of filters for most black-and-white and color applications, and each is Super Spectra Coated. This coating is especially important with Fisheye lenses, since due to their extreme angles of view, they can't be equipped with conventional lenshoods. While the 7.5mm Fisheye gives a 180° circular image on the film plane, the 15mm Fisheye's image fills the frame, and is more or less curvilinear depending on the subject matter. Often, it can be called upon to make extreme-wide angle images that don't seem to have been done with a Fisheye at all. This makes it useful for a great variety of applications, and greatly enhances its value as a photographic tool. This versatility is one reason why the Fisheyes, especially the 15mm, are finding a permanent place as all-purpose, rather than special-purpose optics.



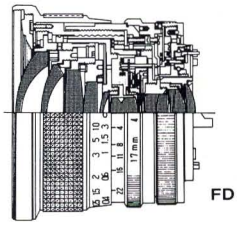
Fisheye 7.5mm F5.6 S.S.C



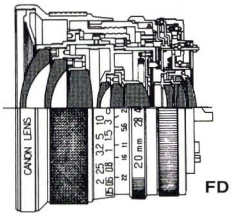
Fisheye FD15mm F2.8 S.S.C

THE SUPER-WIDE LENSES

Canon's Super-wide-angle lenses span focal lengths from 17-28mm, and from the nucleus of one of the best ranges of very wide angle lenses available today. The FD 17mm F4 lens has earned its sterling reputation. Not only does it boast a 104° angle of view, but its freedom from barrel and pincushion distortions is exceptional. For this reason, it's a tool for the serious architectural photographer as well as the photographer who couldn't care less about maintaining correct depiction of parallel lines in his photographs.

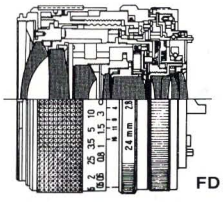


FD 17mm F4 S.S.C



FD 20mm F2.8 S.S.C

Similar in appearance to the FD 17mm lens, the FD 20mm F2.8 offers slightly less coverage with the added bonus of a full stop in speed. For color users, this lens opens up new horizons in available-light photography. Like the 17mm, it offers outstanding freedom form image distortion—a traditional hallmark of Canon wide angles. This, coupled with its fast maximum aperture, makes it ideal for low-light interior work. Both the 17 and 20 have Canon's Super Spectra Coating to keep flare low and contrast high. The design of the lens mounts is such that when the lens cap is removed, the filter retaining ring, coupled with baffling around the front elements serves as an effective lens hood.

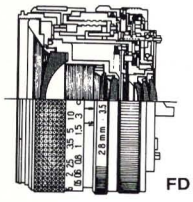


FD 24mm F2.8 S.S.C

The FD 24mm F2.8 lens has become one of the all-time favorites of the Canon FD series. Naturally, the prime reason for this is image quality. It is virtually a state-of-the-art lens, with minimal aberrations, negligible distortion, fast maximum aperture and extremely compact dimensions. Its popularity also stems from its angle of view. Now that photographers have become accustomed to seeing extremely wide angle photographs, the coverage of the 24 doesn't

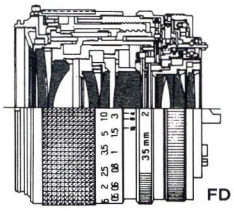
The Wide Angle Lenses.

seem quite so extreme—and it's therefore used quite a bit as a more-or-less "standard" wide angle focal length: the next step down from a "normal" lens, for example.



FD 28mm F3.5 S.C

The FD 28mm F3.5 SC Canon lens is an optic with impeccable manners in any situation. For many photographers, this is the "classic" wide-angle focal length, combining good coverage with almost no perspective distortion. Needless to say, it is as free (or more so) from distortion as the other members of the Canon Super-Wide family. It is interesting to note that when Canon designed this lens, one of their chief goals was in giving it nearly-perfect illumination, from corner to corner. Because of this, it is particularly useful for critical work such as panoramic photography, where images may be butted and joined and matching image densities must be preserved on the negatives.



FD 35mm F2.0 S.S.C

WIDE ANGLES

Of all the lenses in use in photography today, perhaps none deserves the term "workhorse" as much as the 35mm lens. This focal length is in heavy use as a "normal" lens for many photographers, especially photographers involved with news or documentary photography, where their generous depth-of-field, ease of handling and "safe" (in insuring that the shot is captured) angle of view are relied upon, day in and day out.

The FD 35mm F2 Canon lens is an outstanding achievement. In image quality, even at maximum aperture, it is virtually perfect. To preserve this image quality, it is Super Spectra Coated.

The FD 35mm F3.5 lens is an excellent addition to any F-1 system, for a variety of reasons. First, it is extremely compact. Second, it (and the 35mm F2) offers a stud which couples to the CAT (Canon Auto Tuning) System for automatic electronic flash with the F-1.

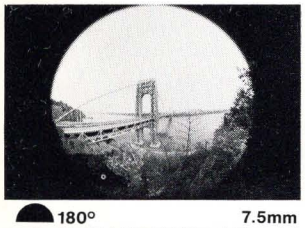
TS 35mm F2.8

This lens is unique in the Canon wide-angle lens lineup. Because it has excess covering power, it can be shifted off-axis to aid in correcting perspective distortion of converging parallels—which is acceptable to the naked eye, but not when viewed in a photograph. Not only does the TS (Tilt & Shift) 35mm lens shift off-axis, but it tilts on-axis as well. This feature permits increased depth-of-field when photographing objects which are not parallel to the film plane. These uses are merely the most basic applications for this lens' unique talents. It is a lens that can find a welcome place in almost any photographic field, bringing a nice portion of view-camera versatility to the F-1 system.

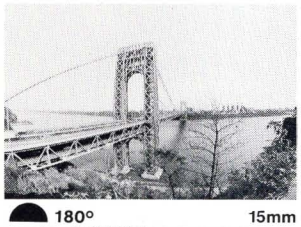
AN OVERVIEW

The Canon Wide Angles share the Canon Floating System. This is a group which moves forward within the lens independently of the other groups as the lens is focused towards its minimum focusing distance. It goes far in eliminating spherical aberration at close up distances and consequently keeps the performance of these lenses near maximum throughout their entire focusing range.

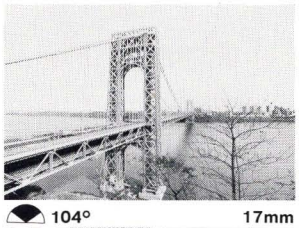
Canon has gone to exceptional lengths to offer photographers maximum performance in wide-angle optics. We think that if you own or are considering the F-1 System, one of the best things it has to offer you is the remarkable line of wide angles discussed here.



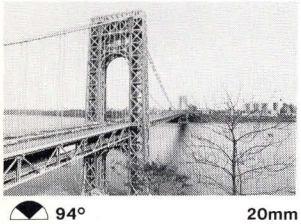
180° 7.5mm



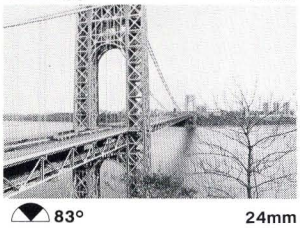
180° 15mm



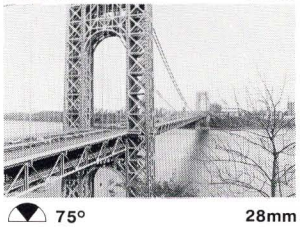
104° 17mm



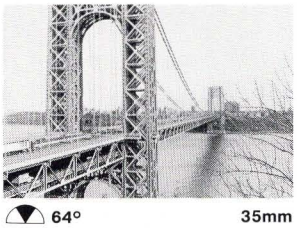
94° 20mm



83° 24mm



75° 28mm



64° 35mm

A System of Precision. Canon® F-1

Inside the Canon F-1 System.

DEFINING THE NORM

The term standard (or normal) as it applies to the focal length of a lens has several definitions, none of which defines the lens as the real general-purpose tool that it is.

Usually, a standard lens is one that has a focal length equal to the diagonal dimension of the film format, or one which when focused at infinity gives an image ratio of approximately 1x: equal to what the eye sees at the same distance.

Canon has recognized standard lenses for what they are—the workhorses of almost every photographer, because of their compactness, ease of use, high speed, good depth of field, sharpness and moderately wide angle of view.

UNCOMPROMISING DESIGN

In theory, and in the past, the design of truly all-purpose lenses was quite difficult due to some mutually exclusive design problems.

For example, in a lens of 50mm focal length with maximum aperture of F1.4, speed and close-up image quality are often arch-enemies, due to spherical aberration. At close distances and with large apertures, spherical aberration is a big problem, because there is little depth of field to hide it. And, as is the case with all high-speed lenses, other optical aberrations such as coma, flare and chromatic aberrations present special problems in the design of a high quality standard lens.

Canon took a long hard look at the difficulties involved in the construction of the FD series of standard lenses, and decided that since this was one of the most-used ranges of focal lengths, the extra effort expended in designing them *right* would certainly be worthwhile.

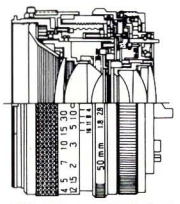
SOLUTIONS

One of the most difficult problems Canon's engineers faced was in the reduction of spherical aberration at close-up distances where depth of field is minimal even when the lens is stopped down to moderate apertures. Their solution was to incorporate a rear group of elements called the Floating System, which moves independently of the rest of the groups as the lens is brought into the close-focusing range. This type of design brings renegade off-axis light rays into better focus at the film plane, for immensely improved overall sharpness up close.

To combat flare and its attendant image degradation, Canon developed the unique Spectra and Super Spectra Coatings. These measurably increase on-axis light transmission, thereby cutting down internal "bouncing" reflections and improving contrast and sharpness, and also keep off-axis flare to a state-of-the-art minimum. All this results in high-speed standard lenses which can be used to their fullest—at maximum aperture—without the usual fear of poor image quality.

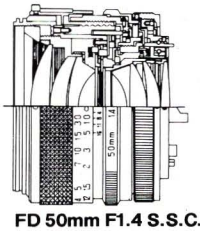
THE SELECTION

For an incredibly good standard lens, the FD 50mm F1.8 is difficult to match. Since its maximum aperture is moderate, it is *inherently* free from common aberrations. Not only is it extremely compact, but since the front element is recessed into the mount, it can do full service without a lens-hood. When used in conjunction with the Canon Macrophoto Coupler, reversed for close-up work, its image quality is excellent. It is a lens that does everything well.



FD 50mm F1.8 S.C.

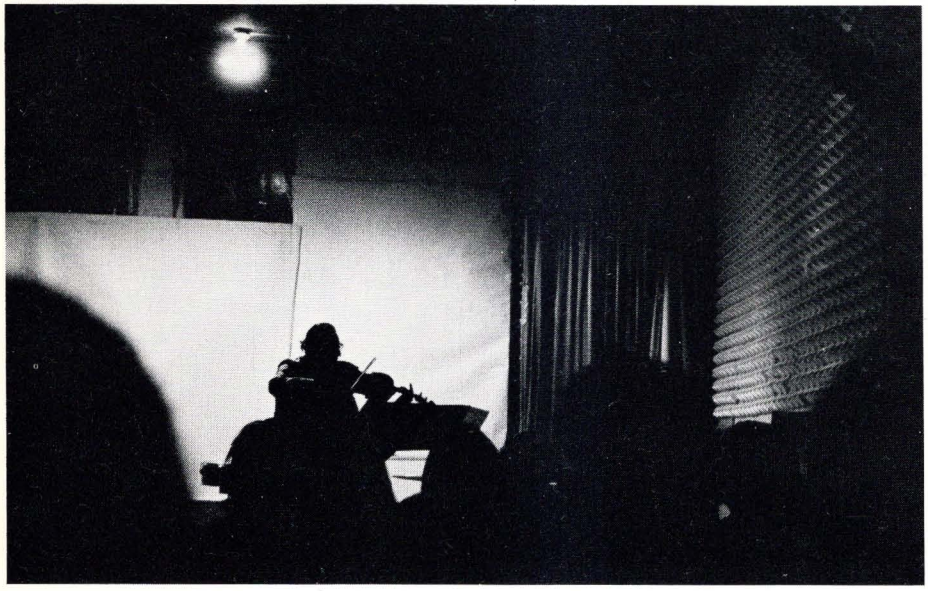
Perhaps more than any other Canon FD lens, the FD 50mm F1.4 deserves the name "standard". It offers uncompromising image quality under all conditions. Photographic experts who have tested this lens have termed it one of the very best available in its focal length. (thanks in part to its Super Spectra Coating). Like the FD 50mm F1.8, it can give very fine results with the Macrophoto Coupler. Its large aperture of F1.4 gives it the ability to expose today's fine-grain, low-speed color emulsions with splendid results.



FD 50mm F1.4 S.S.C.

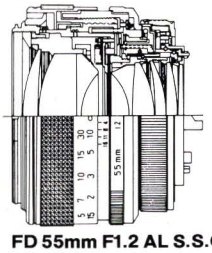
Part 7: The Standard Lenses

Taken with Canon F-1 and FD 55mm F1.2 S.S.C. lens. F1.2, 1/15 Sec.



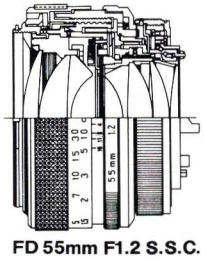
Where the last available photon of light must reach the film plane, yet a high level of image quality must be preserved, the Canon F1.2 lenses reign supreme. One is of conventional design, using spherical elements. The other incorporates an aspherical surface, for maximum image quality, near or far, wide-open or stopped down.

The image quality (in nearly all applications) of the FD 55mm F1.2 AL SSC is so outstanding, Canon has nicknamed it the "perfect" lens. The Super Spectra Coating works with the aspheric surface to keep image quality uniformly high at all apertures, and the incorporation of the Floating System insures the same level of sharpness at all distances as well. For the color or low-light photographer, there is no finer lens.



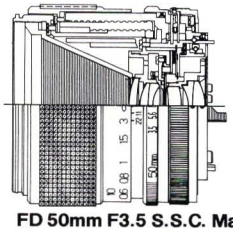
FD 55mm F1.2 AL S.S.C.

The FD 55mm F1.2 SSC lens of conventional construction is one of the best lenses of this speed around. Besides offering its great light transmission capabilities, it offers image quality to match.



FD 55mm F1.2 S.S.C.

More and more photographers are discovering the advantages of using a Macro lens as their standard optic. Because top speed is kept to a reasonable F3.5 in the FD 50mm F3.5 SSC Macro lens, fewer elements can be employed. And because fewer elements are employed, aberrations can be brought to negligible minimums. The result is a lens of amazing sharpness, at near or far distances. It focuses to 1:2 without accessories, and with the Life Size Adapter (supplied) to 1:1, while maintaining full diaphragm automation. When used with the Adapter, the lens barrel is rotated 180°, and a scale appears which shows the actual aperture in use.



FD 50mm F3.5 S.S.C. Macro

A SYSTEM OF PRECISION

There's nothing run-of-the-mill about Canon's FD standard lenses. Each was planned and constructed with the same goal—to give the ultimate in performance, NOT to fill a gap between wide angles and telephotos. If you've been used to a system where your standard lenses found more use inside your camera bag than on your camera, you'll find things a lot different with the F-1 system.

A System of Precision. Canon® F-1