Canon EOS Elan news release

FOR RELEASE SEPT. 4, 1991

NEW CANON EOS ELAN SLR FEATURES SUPER QUIET BELT DRIVEN FILM TRANSPORT AND BUILT-IN ZOOMING FLASH

Wide Range of Features Including Improved Bar Coding and Custom Functions Aimed at Advanced Amateurs

NEW YORK, N.Y., September 4, 1991 - Canon U.S.A., Inc. today introduced the EOS Elan 35mm SLR (single lens reflex) camera, the quietest EOS camera ever and the first autofocusing SLR with a built-in red-eye reduction zoom flash. The latest in second generation EOS single lens reflex cameras aimed at advanced amateurs, the EOS Elan offers improved performance and a multitude of features usually found on professional-level EOS cameras.

The EOS Elan features a newly developed Whisper Drive film transport mechanism that reduces noise from 1/2 to 1/8 that of previous models. An exclusive belt-transport system and other design improvements account for the noise reduction, which enables the camera to be used in shooting situations that require extreme quietness, such as wildlife and wedding photography.

The built-in auto zoom flash is equipped with a red eye reduction mode for improved picture quality and other advanced functions such as flash exposure compensation and second curtain sync flash firing. The flash automatically adjusts the angle of coverage for Canon EF lenses from 28mm wide-angle to 80mm telephoto, with twice as much output at the 80mm position compared to the 28mm setting.

The Elan is equipped with a new EF 28 to 80mm f/3.5-5.6 zoom lens with an Ultrasonic focusing motor (USM). Canon USM lenses provide quick, accurate AF operation and are virtually silent, making them a perfect companion to the EOS Elan.

Other advanced features designed to attract the amateur photographer include:

- Canon's exclusive Cross-type BASIS autofocusing sensor for rangefinding on both vertical and horizontal lines at the same time.
- An improved "Green Zone" fully automatic exposure mode that detects camera shake and subject movement.
- A Quick Control Dial feature for quick setting of exposure compensation values and aperture values in manual exposure mode, inherited from the professional EOS-1.

- Custom Function Control, including mirror lock and depth-of-field preview.
- Expanded use of Canon's unique Bar Code Programming System with a Command Dial that can store and select five different bar code programs.

For improved operability, the EOS Elan allows photographers to change modes on the Command Dial with single switch operation, making it easier for the first time EOS user to operate the camera. Plus, the Bar Code Program input terminal is positioned on the side of the grip for easy connection to the Bar Code Reader.

A replacement for the EOS 630, positioned between the EOS 10s and the EOS Rebel/Rebel S, the Elan offers advanced amateurs the ability to step up to an SLR with many of the features of professional level EOS cameras at a significantly lower price.

Newly Developed Quiet Film Transport

The EOS Elan is the first EOS camera to incorporate comprehensive noise reduction measures for quiet, more pleasant shooting. Six different noise prevention techniques have been implemented in 12 camera body locations. Chief among these is a Canon-developed belt-drive film transport mechanism that maintains high performance while reducing noise during film winding and rewinding and shutter/mirror operation. Noise prevention techniques employed in the Elan include:

- Belt drives at the output section of the film transport motor and for transmitting drive power to the rewind fork.
- Rubber supports placed between the camera body and film transport mechanism in three locations to provide a floating support for the motor to prevent vibrations from generating resonance noise in the camera body.
- Acrylic foam supports placed between the front plate unit and the shutter/mirror charge motor in three locations to provide a floating support for the motor to prevent vibrations from generating resonance noise in the camera body.
- A coreless two-motor zoom system for film transport (winding and rewinding), charging the shutter and quick return mechanisms and carrying out the flash pop-up and zooming functions.
- A sprocketless film transport mechanism.

The belts used in the EOS Elan are formed from urethane rubber material possessing superior durability against environmental factors, such as temperature. A primary feature of this material is its resistance to hardening in low temperatures. The belt core contains aramid fiber cords which can withstand high tension levels for increased durability. Despite these noise reduction measures, high performance is maintained. Continuous shooting speed is approximately 3.0 frames per second in One Shot AF and manual focus modes and approximately 2.5 frames per second in AI Servo Predictive AF mode. The diaphragm opens to maximum aperture after each shot.

Multi-Function Autozoom Flash with Red-Eye Reduction

The EOS Elan features a high performance built-in retractable TTL (through the lens) flash with a red eye reduction function and an auto zoom mechanism, the first in an autofocus SLR camera. The flash zooms in and out to match the focal length of the lens. It is sufficient to cover the widest angle of view when using the EF 28-80mm f3.5-5.6 USM zoom lens and includes such functions as flash exposure compensation and second curtain sync flash firing for creative flash photography. With the EF 28-80mm USM lens, flash shooting distance is 12.2 feet (3.7 m) at the 28mm setting and 10.6 feet (3.2 m) at the 80mm setting (using ISO 100 color negative film). With lenses brighter than f2.8, effective shooting distance is $3.3 \sim 15.2 \text{ feet } (1 \sim 4.6 \text{ m})$ at the 28mm setting and $3.3 \sim 21.1 \text{ feet } (1 \sim 6.4 \text{ m})$ at the 80mm setting.

The flash can be switched on or off in Intelligent Program, Shutter Priority AE, Aperture Priority AE and Manual exposure modes. A warning light in the camera's viewfinder indicates if the flash should be used in Green Zone and portrait or close-up PIC modes. The flash recycling time is approximately 2 seconds.

Based on the lens focal length data, the flash is automatically set to one of three positions providing coverage angles equivalent to lens focal lengths of 28mm, 50mm and 80mm. The zoom moves internally at a speed of 0.1 seconds per step.

The red eye reduction function effectively minimizes red eye for high quality pictures by illuminating the subject with a lamp before the flash fires. The red eye reduction lamp is positioned to the left of the flash head. The function is activated by pressing the flash switch when the flash is in the popped-up position. To effectively minimize the occurrence of red eye, the red eye reduction lamp lights up a minimum of 1.5 seconds before the flash fires. When the self-timer or remote control function is used, the red eye reduction lamp illuminates the subject for 2 seconds before the shutter releases to synchronize with the operation of the timer.

The Elan's flash exposure compensation feature allows the photographer to control the illumination of the flash, up to ~ 2 steps in 1/2 step increments, independent of the existing light exposure. The second curtain sync flash function, a combination of flash illumination and existing light exposure, fires the flash at the end of the exposure. This feature, activated by setting the corresponding custom function, is helpful for shooting action and moving subjects to achieve a creative effect.

EF 28-80mm f/3.5-5.6 Zoom Lens

The newly designed zoom lens consists of ten elements in nine groups, including one aspherical lens for superior image quality. Autofocusing is quick and quiet with Canon's exclusive Ultrasonic focusing motor. Manual focusing is possible at all times, even in the AF

mode. The normal focusing range is from 2.6 ft. to infinity. However, continuous macro shooting from 1.6 ft is available at all focal lengths without adjustment. The new EF 28-80mm f3.5-5.6 USM zoom lens replaces the previous EF 28-70mm f3.5-4.5 zoom lens and may be used with all EOS cameras.

Exclusive Cross-Type BASIS Autofocus Sensor

Canon's exclusive Cross-Type BASIS (Base Stored Image Sensor) in the EOS Elan's automatic focusing system improves the camera's focusing ability. The sensor is designed to minimize the number of hard-to-focus subjects by recognizing horizontal and vertical lines, compared to other cameras which only recognize vertical lines. For maximum flexibility, the system works with all Canon EF lenses.

The camera's predictive AF delivers a sharp image of a subject moving toward or away from the camera in a straight line by predicting the position of the subject at the time of exposure. The EOS Elan's AF performance is effective for subjects with contrast ratios as low as 90:80, and at light levels as low as EV 0. The Elan is also equipped with a built-in AF auxiliary light that projects (when needed) a patterned image on subjects between 3 and 23 feet from the camera, thus permitting the camera to focus automatically even in complete darkness.

Improved "Green Zone" Fully Automatic Exposure

The Green Zone in the EOS Elan is an improved version of the fully automatic exposure mode found on most Canon EOS SLRs. As with other EOS models, Green Zone on the Elan automatically shifts the camera into six-zone evaluative metering, single frame motorized film advance, and an intelligent program exposure mode that responds to the focal length of the EF lens in use. However, Green Zone on the EOS Elan also automatically switches from One Shot to AI Servo Predictive AF when subject movement is detected, matching the AF mode to suit the subject. To help minimize the possibility of unwanted blur, the Elan can automatically shift to a higher shutter speed when camera shake is detected.

New Command Dial

The large, easy-to-use Command Dial located on top of the EOS Elan is designed for foolproof automatic photography tailored to a specific situation. The Command Dial on the EOS Elan significantly reduces the number of combined button and dial operations compared to previous models.

In addition to acting as the main switch that turns the camera on and off, the improved Command Dial enables the photographer to select any one of eleven automatic exposure modes, metered manual, or several advanced exposure control options. The automatic exposure modes include Green Zone plus four fully automatic Programmed Image Control (PIC) modes for portrait, close-up, landscape, and sports; the Bar Code mode; Intelligent Program; Depth of Field AE; and Shutter and Aperture Priority. Other Command Dial functions include an ISO film speed override setting, automatic exposure bracketing (AEB), multiple exposure, and custom function control.

Quick Control Dial

The Quick Control Dial found on the back of the Elan has two main functions. It is used to control exposure compensation in half step increments up to ~ 2 steps in standard AE modes, and also to change aperture settings in manual mode. A third function for the Quick Control Dial is exposure compensation for the camera's built-in flash, which can be set while pressing the metering mode button on top of the camera. The Quick Control Dial can also be turned off by a small switch on the camera back to prevent inadvertent operation.

Custom Function Control

To enhance the Elan's operability, built-in Custom Function Control permits the photographer to tailor the camera's operation to his or her personal preference or a particular situation. Any or all of seven options are available. These include: cancellation of automatic rewind, which is useful in situations where silence is important; second curtain sync for the built-in flash; cancellation of automatic film speed setting by DX code, so the photographer can lock in any desired ISO setting; cancellation of the AF auxiliary light for situations when the projected light pattern might interfere with photos being taken by others of the same subject; depth-of-field preview; cancellation of audible signals for AF infocus indication and selftimer operation; and mirror lock.

Mirror lock is used in conjunction with the camera's selftimer or optional wireless remote control. It is particularly useful when using slow shutter speeds with telephoto lenses or during close-up photography. The EOS Elan is one of only a few AF SLRs to provide this valuable capability.

Expanded Bar Code Programming Capability

Bar code programming, introduced on the EOS 10s, is a unique feature that makes it possible to instantly program the camera for a variety of effects. The photographer simply selects a sample photo from a small booklet, scans the bar code beneath the picture with an optional Bar Code Reader and inputs the information directly into a built-in data port on the camera body.

The EOS Elan can be input with up to five bar code programs for an extensive variety of shooting situations. The Bar Code setting on the Elan's Command Dial will accept one program, plus any or all PIC modes can be overridden with bar codes. (Original PIC modes are restored by inputting a "clear" bar code.) For more creative options, Canon is also introducing an inexpensive sample photo booklet called "EOS Bar Codes 101," which contains over one hundred new sample photos and bar codes.

Other Features

The EOS Elan features three metering patterns: Canon's exclusive six-zone evaluative metering, partial metering that measures the central 6.5% of the picture area, and center-weighted average metering. Any metering pattern can be selected in the standard AE modes or manual mode. AE lock may also be selected at any time in the standard AE modes.

In addition to single frame advance, the EOS Elan offers continuous advance up to three frames per second during One Shot AF or manual focus. Shooting speeds up to 2.5 frames per second are possible in AI Servo Predictive AF.

Shutter speeds range from 1/4000 second to 30 seconds plus bulb and can be set by the photographer in one half step increments during shutter priority and manual operation.

Wireless remote control of the EOS Elan is possible with the optional RC-1 transmitter. This inexpensive accessory has a working distance of up to 16 feet from the camera. Two release modes, immediate and 2-second delay, are helpful in a variety of shooting situations.

As with all other EOS cameras, particular attention has been paid to the Elan's body design and control layout. A large, rubberized grip makes the body easy to hold, and simple controls are easy to access. An optional Grip Extension (GR-70) enlarges the grip for photographers with big hands, and is particularly useful with telephoto lenses.

Film handling is totally automatic for maximum ease of use. The EOS Elan employs a sprocketless spool drive system for easy automatic film loading and rapid film advance. Rewind is automatic at the end of the roll, or may be operated at any time with the mid-roll rewind button located on the side of the handgrip.

In addition to the powerful built-in flash, the EOS Elan also accepts the full line of EOS Speedlites, including the popular 430EZ and 300EZ models which feature Canon's advanced A-TTL flash exposure mode. Other compatible Speedlites include the economical 200E and the Macro Ring Lite ML-3 which is designed for effortless close-up flash photography.

The EOS Elan is compatible with all Canon EF lenses, from the newly introduced EF 14mm f/2.8L ultra-wide-angle to the EF 600mm f/4.0L super-telephoto. There are currently 34 EF Lenses, including 12 USM models and 10 L-Series professional lenses.

Body construction consists primarily of fiberglass-reinforced polycarbonate with ABS coverplates. The body's lens mount is made from stainless steel, similar to the top-of-the-line EOS-1.

The Elan measures 6.1 (W) \times 4.1 (H) \times 2.7 (D) inches (154.2 \times 105.0 \times 69.1mm) and weighs 20.1 oz.(570 g). The 6-Volt 2CR5 lithium battery adds 1.4 oz.(40 g) for a total weight of 21.5 oz.(610 g).

Available in late September, the Canon EOS Elan will be sold as a Kit with the EF 28-80mm f3.5-5.6 USM zoom lens, 2CR5 battery and wide camera strap for a suggested list price of \$980. The camera body and EF 28-80mm f3.5-5.6 USM zoom lens will also be available separately at suggested list prices of \$580 and \$425, respectively.

The suggested list prices of the currently available optional Remote Controller RC-1 and Bar Code Reader E are \$19.50 and \$60, respectively. The Grip Extension GR-70 that increases the size of the grip and comes with a wrist strap to be attached to the camera is also available at a suggested list price of \$28. The new "EOS Bar Codes 101" sample photo booklet will be available in September at a suggested list price of \$14.

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