

OLYMPUS

Your Vision, Our Future

Digital SLR
OLYMPUS E-1
System Catalogue

NEW

OLYMPUS

Strictly Digital —
The All-New, All-Digital SLR

E-1



OLYMPUS CORPORATION
www.olympus.com

N1240189-0903UT



E-1 with ZUIKO DIGITAL ED 50-200mm f2.8-3.5 [f3.5, 1/320 sec.]



Wildlife Photographer
Mitsuaki Iwago

Born 1950 in Tokyo. Hugely impressed by the natural wonders of the Galapagos Islands, which he visited at the age of 19. Launched his career as an animal photographer as a result, and since then has taken photographs in the field in countless locations across the globe. Iwago's stunning photographs fire the imagination and have earned him international acclaim. His work has appeared in and on the cover of National Geographic.

Mitsuaki Iwago



Digital SLR Renaissance

What is a true interchangeable-lens digital SLR camera?

Olympus has been striving to answer this question since 1997 when we introduced our first built-in lens digital SLR camera.

After carefully analysing all the elements required for the creation of a true interchangeable-lens digital SLR capable of achieving the highest quality images, the smoothest possible operation, and much more, we concluded that the only solution would be to design a complete, fully integrated system specifically for digital SLR photography. This new system would have to encompass not only the main camera unit, but all components including the lens, the flash, and the accessories.

Now, that new digital SLR system has arrived, setting the stage for a new era in digital photography that will transform today's imaging culture.

Meet the Olympus E-1.

The only digital SLR that lets professionals achieve their full creative potential.

The only digital SLR that lets professionals make the most of every shooting opportunity.

And the first digital SLR that truly meets all the needs of professionals.

2003. The renaissance of digital SLR photography.



Completely Re-engineered For Digital SLRs,
The E-1's Design Maximises Image Quality, Reliability, And Mobility

Created to meet the rigorous demands of professional photographers, the E-1 has been completely re-engineered to optimise digital performance, with each and every component designed exclusively for digital SLRs. These include a new full-frame transfer CCD designed exclusively for still pictures, plus revolutionary Zuiko Digital lenses that maximise the CCD's performance, as well as a high-performance image-processing engine. Together these ensure that superb image quality is maintained even when the picture size is greatly enlarged.

Another welcome addition for professional photographers who often change lenses is an advanced dust reduction system with the world's first Supersonic Wave Filter. In combination with a rigid magnesium-alloy body and drip-proof processing throughout the key parts of the body and lens, the E-1 can be counted on to stand up to harsh shooting environments and provide professional photographers with the long-term reliability and durability they need.

The dimensions and weight of this remarkable new camera have also been optimised for professional use. Intricate craftsmanship and rugged design give this camera the warm, comfortable feeling of traditional professional cameras, while direct, analogue-style operation gives full rein to the photographer's creativity.

With high image quality, high reliability, and high mobility, the E-1 is expanding the world of digital photography.



OLYMPUS  **-SYSTEM**



Exclusively For Digital SLRs — The Four Thirds System

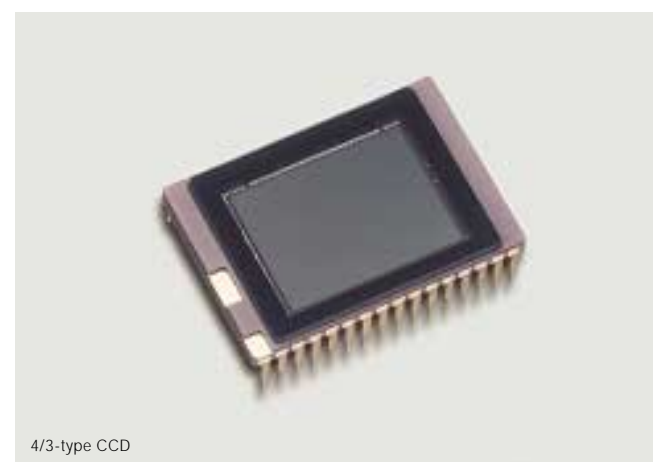


A New Standard Designed Specifically For Digital SLR: The Four Thirds System

First introduced early in the 20th century, 35mm film cameras were developed to provide an optimal common standard for cameras around the world. In turn, digital SLR camera development has relied extensively on the know-how gained in the development of 35mm film cameras. However, the creation of a true digital SLR for the digital era demands that we abandon those pre-conceived ideas and focus our attention on designing an optimal standard specifically for digital SLRs.

At Olympus, we have done exactly that. To achieve the best image quality possible, we maximised the performance of two core elements — the image sensor and lens — to create an all-new camera system for digital photography. The new Four Thirds System — so called because it uses a 4/3-type image sensor — features high image quality throughout the entire image, just as professionals demand. Moreover, this new format makes it possible to design cameras and lenses that are much smaller than their 35mm counterparts, giving professionals anytime, anywhere mobility. And, because the Four Thirds System is an open standard, the future looks promising for system expansion.

The all-new, all-digital SLR standard, the Four Thirds System is setting the new standard for the era of high-quality digital photography.



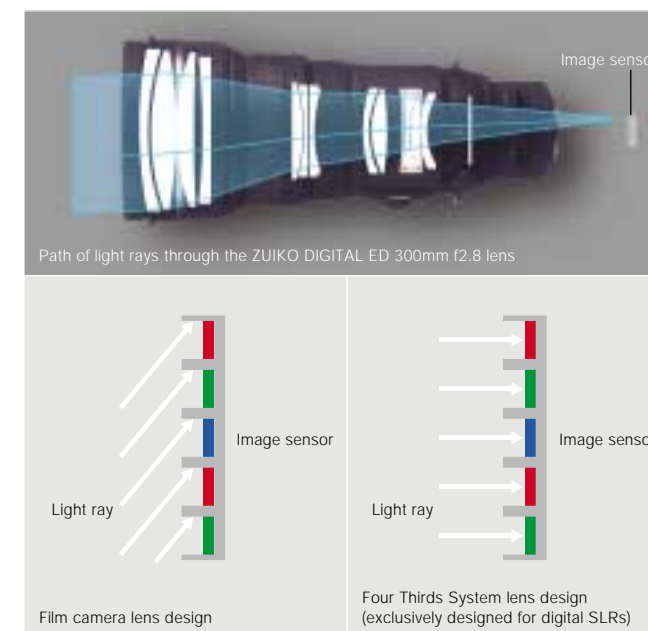
4/3-type CCD



The Four Thirds System was awarded the prize for Best Innovative Technology at the "TIPA European Photo & Imaging Awards 2003 - 2004". TIPA (Technical Image Press Association) is made up of representatives from photography and imaging magazines in 12 European countries.

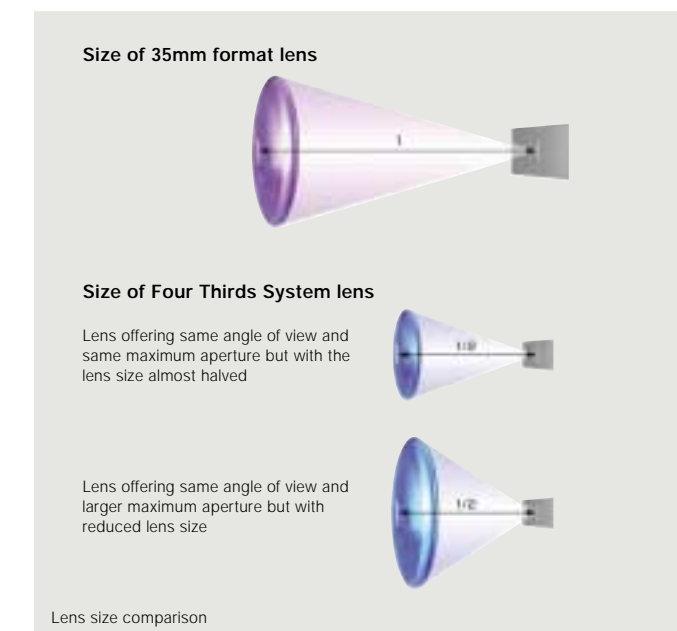
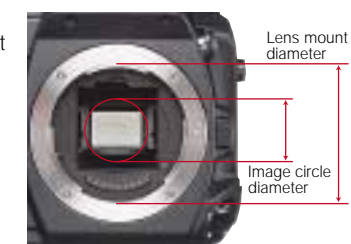
The Ultimate Partnership Between Image Sensor And Lens

Interchangeable-lens digital SLR cameras that use existing interchangeable lenses designed for 35mm film SLR cameras typically incorporate image sensors equivalent in size to 35mm film or APS film to match the lenses. While this results in a physically compatible system, the inherent structural differences between film and image sensors make this system unable to consistently meet demand for true professional image quality. Because film can be exposed by light coming from oblique angles, most 35mm film camera lenses are not designed to ensure that light only strikes the film from straight ahead. Conversely, the image sensor used in a digital camera is a chip with pixels laid out at regular intervals on a grid, with photodiodes in the depressions inside the pixels. As a result, light can only reach the photodiodes effectively if it comes straight through the lens. This means that if a 35mm film camera lens is attached to a digital camera, colour reproduction tends to be inaccurate and brightness insufficient at the periphery of the image sensor where light is apt to strike obliquely. These problems generally get even worse with wide-angle lenses. The Four Thirds System solves this problem by ensuring that light is passed through to the image sensor in a near-straight line, thereby achieving consistently high image quality even at image edges and even when wide-angle lenses are used.



Smaller, Brighter Lens Expands Shooting Possibilities

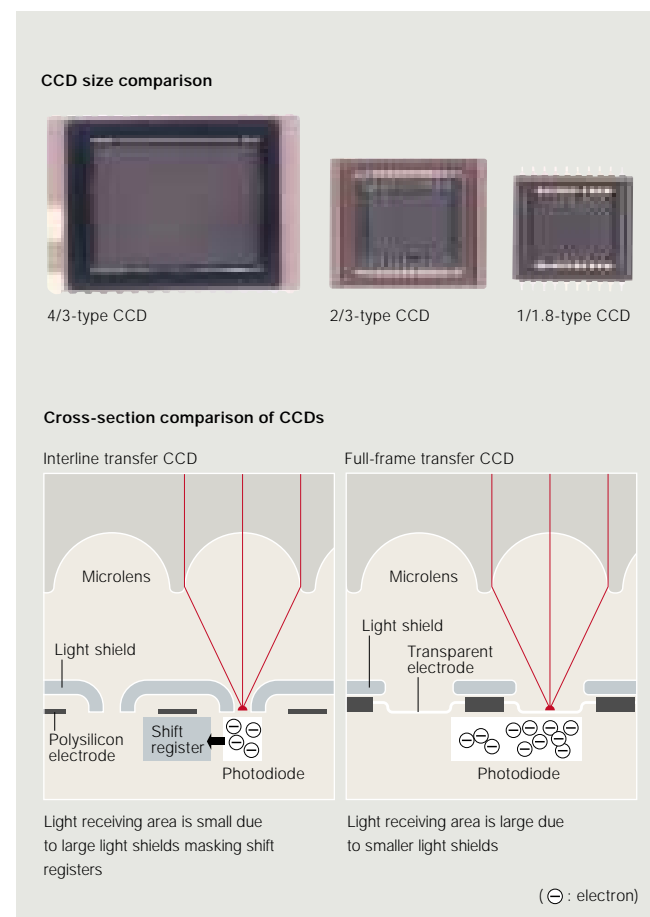
Lenses for digital cameras should be designed so that light is accurately captured not only at the centre of the image, but also on its periphery. Passing light straight through to a 35mm-equivalent image sensor would require lenses so large they would be unusable. However, with the Four Thirds System, the diameter of the lens mount is much larger than that of the image circle, making it easy for light to pass straight to the image sensor. This not only makes the system compatible with various kinds of image sensors, it also greatly expands the flexibility of lens design. Moreover, since the required focal length for the Four Thirds System is half that of a 35mm camera, it makes it possible for lenses to be much smaller than traditional 35mm camera lenses. For example, with the Four Thirds System, a 300mm lens can achieve the same telephoto effect as a 600mm lens of a 35mm camera. In the near future, it will be possible to make bright lenses much shorter, dramatically expanding the creative possibilities of digital photography.



Meeting Professional Requirements With Both Superior Image Quality And Reliability

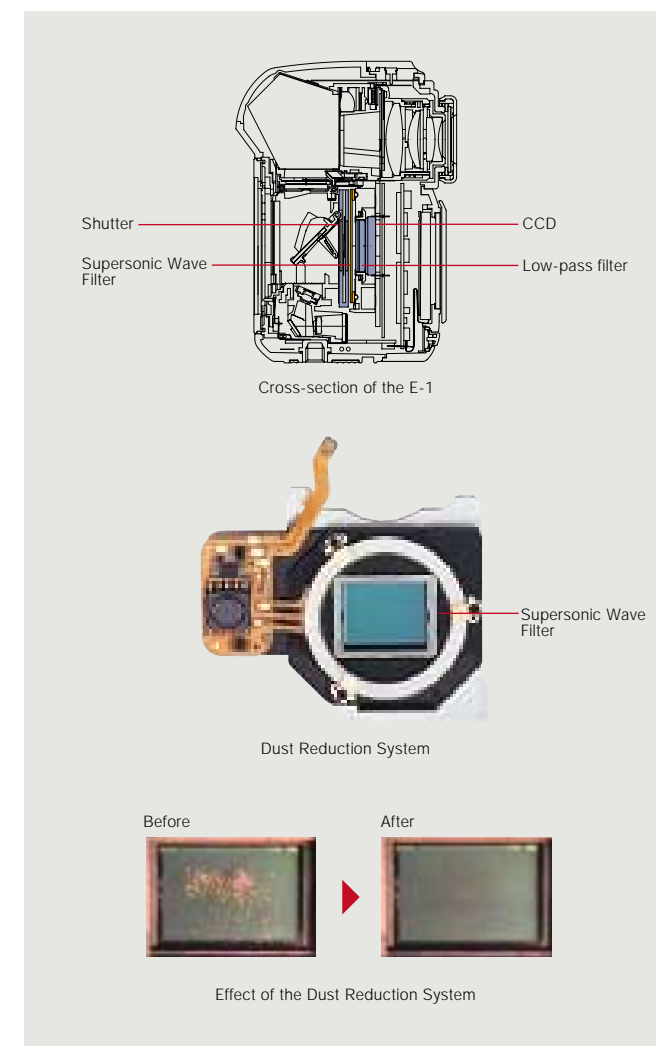
Full-Frame Transfer CCD For High Image Quality

The E-1's superb image quality is made possible by a 4/3-type full-frame transfer CCD that boasts an area 4 to 5 times greater than the 1/1.8- and 2/3-type image sensors used in ordinary compact digital cameras. Unlike the interline transfer CCDs commonly found in digital SLRs, which have light shielded shift registers that leave only a small active pixel area for each photodiode, the full-frame transfer CCD has only a small area masked, allowing it to receive much more light. The quality of the resulting images is greatly enhanced by the wider exposure latitude made possible by the full-frame transfer CCD. To maximise performance of the CCD, new Zuiko Digital lenses are available that have been specifically designed to take advantage of the characteristics of the Four Thirds System.



Advanced Dust Reduction System

When you use interchangeable lenses with a digital SLR, dust or debris may get on the low-pass filter or the image sensor and affect the quality of your pictures. To prevent this, Olympus developed a new dust reduction system that uses a Supersonic Wave Filter. Placed between the E-1's shutter unit and low-pass filter, the Supersonic Wave Filter generates ultrasonic vibrations that shake off dust and debris when the camera's power is turned on. This dust and debris then becomes attached to a dust sheet.



Drip-Proof, Dust-Proof Body For Professional Use

The E-1's body is cast from a solid magnesium-alloy that is light, yet tough enough to withstand the rigorous demands of professional use. Packed with professional functions, yet weighing a mere 660g, the E-1 features enhanced drip and dust proofing that effectively seals the lens mount and many other components to ensure reliable, long-term performance.



E-1 with ZUIKO DIGITAL ED 50-200mm f2.8-3.5 [f4.5, 1/800 sec.]

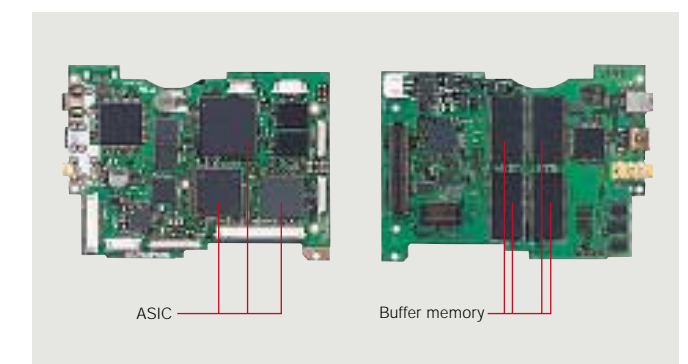
Durable Shutter Unit Lasts Over 150,000 Releases

Designed to stand up to the heaviest professional usage, the E-1's extremely durable vertical-travel metal focal-plane shutter has been tested and found reliable under Olympus's standard testing conditions at over 150,000 releases. Shutter speed precision is assured every time across a wide range from 1/4000 sec. to 60 sec. An Anti-Shock function is also provided, allowing you to set the camera so that the shutter is not released until after the vibrations caused by the mirror up have stopped.



Three ASICs And A Huge Buffer Memory To Support Professional Specifications

In addition to a high-performance CPU, the E-1 incorporates three different ASIC (Application-Specific Integrated Circuit) chips to enable simultaneous image processing, data transfer, and camera control. There's also a huge 128MB buffer memory for high-speed sequential shooting.



High-Precision Control Assures Maximum Creative Flexibility

High-Speed, High-Precision Autofocus

Thanks to a newly developed TTL phase-contrast detection system, the E-1 is able to perform high-speed, high-precision autofocus under a wide range of conditions from 0EV to 19EV (with ISO 100). If insufficient light is available, you can light the AF illuminator. You can also choose whether to use release-priority AF or focus-priority AF. To focus on moving subjects, the continuous AF estimates the subject's next position. The camera automatically selects the most suitable focusing area from the three focusing areas or you can select the focusing area manually. Of course, a focus ring is also provided for manual focus, as well as for manually fine-tuning focus after autofocus is complete. You can set the focus ring's "∞" rotation direction to right or left as you prefer.

Sequential Shooting Of Up To 12 Pictures At 3 FPS

Thanks to the large 128MB buffer memory, rapid sequential shooting at up to 3 frames/second is possible. Up to 12 pictures can be taken sequentially in all record modes — even RAW and TIFF.

Versatile Exposure Control Options

With the E-1, you can choose from several different methods for controlling exposure: aperture-priority AE, shutter-priority AE, programme AE (programme shift available), and manual exposure. You can easily adjust exposure compensation across a wide range between ±5EV using the exposure compensation button and the main dial or sub dial. The default compensation step is 1/3EV, but you can change it to 1/2EV or 1EV. AE lock can be engaged by pressing down the shutter button halfway or by pressing the AE lock button.

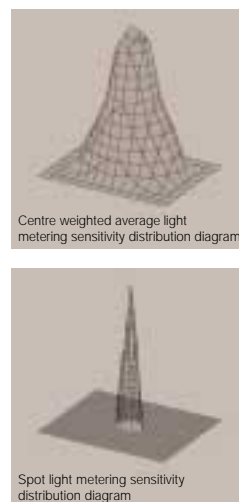
Precision Auto Exposure Bracketing Setting

3- or 5-frame auto exposure bracketing is possible in 1/3, 1/2, or 1EV steps. You can engage it by pressing the auto bracket button and turning the main dial or sub dial.



Accurate Light Metering With Three Systems To Choose From

When measuring available light, you can choose from Olympus's exclusive Digital ESP (Electro-Selective Pattern) light metering, centre weighted average light metering, and spot light metering. Renowned for its accuracy even under difficult lighting conditions, Olympus's Digital ESP light metering system uses a unique calculation to set the appropriate exposure. The centre weighted average light metering system measures light mainly in the centre of the viewfinder, while the spot light metering system checks only the light in a very small area (about 2%).



Dual-Sensor White Balance For High Accuracy

By using both a CCD and a light source detection sensor, the E-1 is able to achieve extremely accurate white balance detection. Auto, Preset, and One-Touch white balance settings are available. With Preset, you can choose from 12 different white balance settings with levels from 3000K to 7500K, while with One-Touch, you can conveniently register up to four of the white balance values you use most frequently for instant, one-touch access. You can also make fine adjustments in 1-step increments (2 mired) within ±7 steps.



* 4000K, 4500K, and 6600K are not colour temperatures in a strict sense but correlated colour temperatures. Use these settings when shooting under fluorescent light. (4000K: white fluorescent light, 4500K: intense white fluorescent light, 6600K: daylight fluorescent light)

Auto White Balance Bracketing Now Available

3-frame auto white balance bracketing is possible in 1-step increments (4 mired) within ±3 steps. This is helpful under lighting conditions where it is difficult to determine a strict white balance value.

Wide ISO Range With Support For High Sensitivity

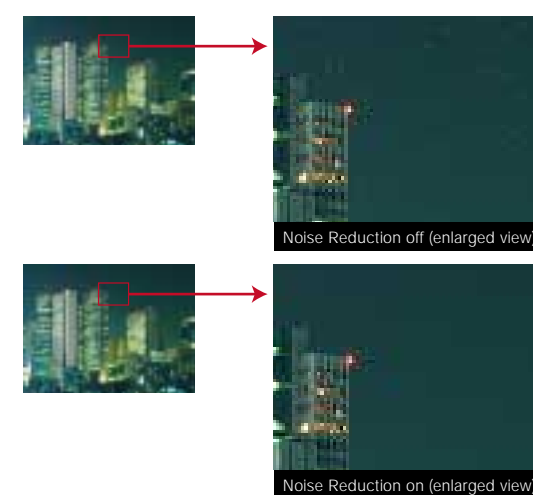
Sensitivity can be set to ISO 100, 200, 400, 800, and auto. Thanks to the high-performance CCD and high-quality image processing software, sharp, clear images with minimal noise can be obtained even when sensitivity is set to ISO 800. Plus, you can set sensitivity to ISO 1600 or 3200 with the ISO Boost mode.

* Noise is likely to appear a little when set to ISO 1600 or 3200.

Noise Reduction For Long Exposure Shooting

To minimise the noise that can appear in long exposure shooting and ensure clear images, the E-1 incorporates an exclusive Noise Reduction function that uses an original Olympus calculation process to detect and delete noise.

* Shooting time is twice the normal time.



Saturation, Contrast, And Sharpness Settings

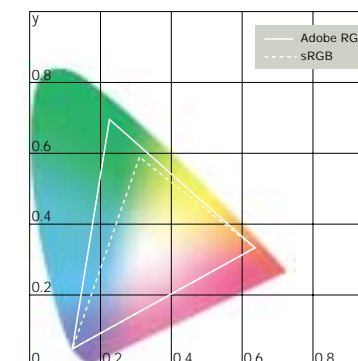
Saturation and contrast can be adjusted at 5 levels, while sharpness can be set to any one of 7 levels. You can also choose to emphasise a specific colour that contains red, green, or blue.



E-1 with ZUIKO DIGITAL 14-54mm f2.8-3.5 [f4.5, 1/800 sec.]

Two Colour Matrices Available

For best results, you can choose from two different colour matrices: sRGB, which is suitable for Windows or inkjet printers; and Adobe RGB, which has a wider colour space.



Adobe RGB:
Colour space for Adobe Photoshop. Colour reproduction spectrum is much wider than sRGB.

sRGB:
Standardised colour space for Windows. Factory-default setting.

Comprehensive Flash Control

High-precision flash shooting is possible using optional electronic flashes developed specifically for digital cameras (FL-50, FL-40, FL-20, SRF-11, and STF-22). Various flash modes, including auto, red-eye reduction, slow synchronisation (1st curtain/2nd curtain), or fill-in flash, can be selected. Flash intensity control is also available in 1/3 (default), 1/2, or 1EV steps within ±2EV. With the FL-50, SRF-11, and STF-22, you can also take advantage of Super FP (Focal Plane) flash, which synchronises with a high-speed shutter.



Super FP flash

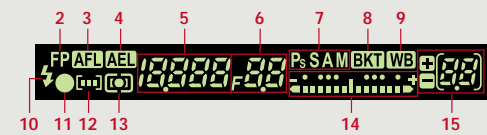
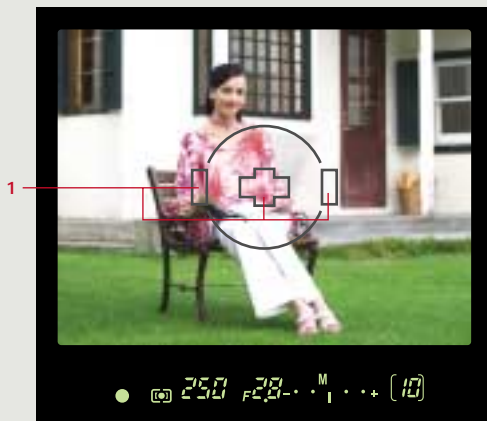


E-1 with FL-50 attached

Smooth Operation Allows You To Act Quickly And Concentrate On Shooting

100% Field-Of-View Optical Viewfinder For Professionals

To enable you to obtain the precise framing you need, the E-1's optical viewfinder offers a field-of-view of approximately 100%. Thanks to the viewfinder's comprehensive shooting information display, you won't have to take your eyes off the subject so you can always concentrate on the next shot, not the camera setup. Other features include a preview button that lets you check depth of field, continuous dioptic adjustment from -3 to +1 m⁻¹, and an eyepiece shutter to prevent light from entering the viewfinder.

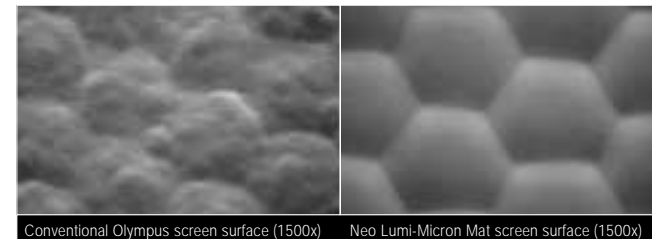


- | | |
|------------------|---|
| 1 AF frame | 11 AF confirmation mark |
| 2 Super FP flash | 12 AF frame |
| 3 AF lock | 13 Light metering mode |
| 4 AE lock | 14 Exposure level indicator |
| 5 Shutter speed | Exposure compensation indicator |
| 6 Aperture value | 15 Number of storable sequential pictures |
| 7 Exposure mode | Exposure compensation value indication* |
| 8 Auto bracket | * Appears only when the exposure compensation button has been pressed |
| 9 White balance | |
| 10 Flash | |

All viewfinder indications

Bright, Easy-To-See New Focusing Screen

The E-1's focusing screen features Olympus's newly developed Neo Lumi-Micron Mat, which uses deformed hexagon micropisms arrayed with a 20µm pitch that ensures a clear, bright view for easy focusing and minimises moiré in the out-of-focus area for more natural-looking images. This can easily be switched with the optional FS-2 Focusing Screen with grid lines.



Large Colour LCD Monitor For Image Checking

The E-1 is equipped with a large 1.8 inch TFT colour LCD monitor. The LCD's 134,000-pixel screen assures sharp, crisp images and also features precise 15-level brightness adjustment capability. You can view the picture you have just taken right away simply by pressing the playback mode button. With the Rec View function, you can view the picture currently being recorded to the memory card. Other convenient features include an index display with 4, 9, or 16 pictures and a close-up display with magnification of up to 4x.

Various Picture Data Displays Including Histogram

In addition to displaying images you have taken, the LCD monitor can display information about those images. Available displays include histogram, highlight alarm, and shooting information. With the histogram display, a graphic chart helps you check for overexposed and underexposed sections in the picture, while with the highlight alarm display, overexposed areas will blink. The shooting information display includes focal length, exposure mode, exposure compensation value, shutter speed, aperture, sensitivity, and much more.

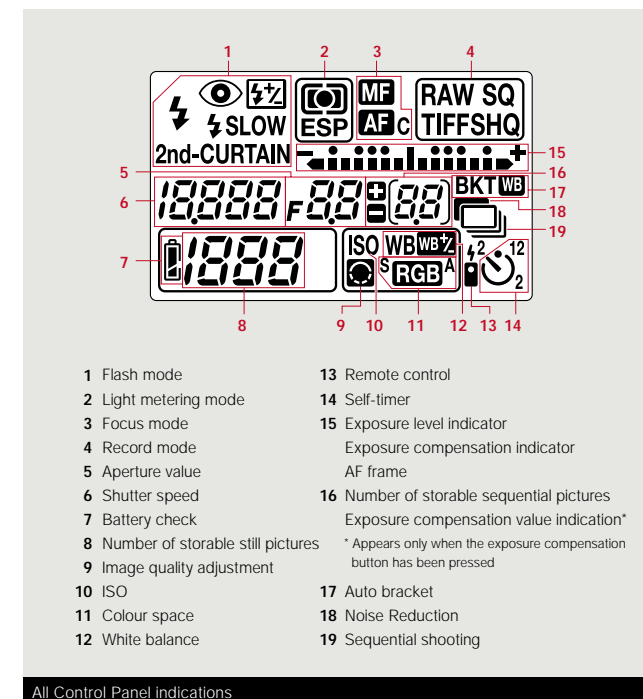


Histogram display

Shooting information display

Control Panel With Comprehensive Shooting Information

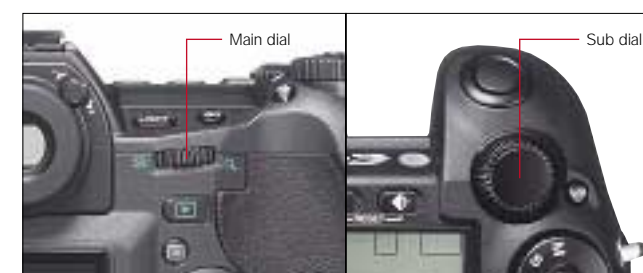
In addition to the shooting information available in the viewfinder, the Control Panel on top of the camera displays information on various shooting-related items, ensuring that you have all the data you need for reliable picture-taking. For easy viewing in the dark, the Control Panel comes with a backlight that can be switched on as required.



All Control Panel indications

Main Dial And Sub Dial For Smooth Operation

You can set shutter speed, aperture, exposure compensation, and so on with the main dial and sub dial conveniently located at your fingertips. When setting auto exposure modes, you can change the default function assignments for each dial to suit your preferences.



E-1 with ZUIKO DIGITAL 14-54mm f2.8-3.5 [f8, 1/40 sec.]

Compatible With High-Capacity Memory Media

The E-1 is compatible with both CompactFlash and Microdrive. Both of these offer very large memory capacities, enabling you to shoot large numbers of pictures. You can also use xD-Picture Card with the optional MACF-10 CF Card Adapter.

Simultaneous RAW And JPEG Image Recording

Images can be saved in RAW, TIFF, or JPEG formats, and simultaneous recording of both RAW and JPEG is possible. Five record modes are available: RAW, TIFF, SHQ (Super High Quality - JPEG), HQ (High Quality - JPEG), and SQ (Standard Quality - JPEG).

High-Speed Interface: IEEE1394, USB2.0

Two different PC interfaces, IEEE1394 and USB2.0, are provided to ensure easy connection and high-speed data transfer with most types of computer. A video-out jack is also provided so you can play back images directly on a television set.

Self-Timer, Remote Control, And Remote Cable

Self-timer shooting is available with either a 12-second or 2-second delay. You can also use the optional RM-1 Remote Control to trigger the shutter remotely after a set time, either 2 seconds or 0 seconds. An optional RM-CB1 Remote Cable is also available.



The Birth Of A New Legend: Zuiko Digital

When Olympus's predecessor, the Takachiho Corporation, produced its first camera lens, the lens was given the name, Zuiko. It was an auspicious choice, both because Zuiko is a Japanese word that means "light of the gods" and because the corporate name, Takachiho, is the Japanese word for "mountain of the gods".

In those days, conventional wisdom held that lenses made in the West were superior to lenses made in Japan. But the Zuiko lens more than lived up to its name. The outstanding resolution of the Zuiko lens captured the interest of photographers worldwide and soon the Zuiko brand had become synonymous with high performance. Zuiko interchangeable lenses came to be regarded as the most critical component of OM systems, while the sharp resolution and rich details they captured earned them a reputation for performance both inside and outside Japan. It's a reputation that continues to this day.

In 2003, Olympus created an all-new lens for the Four Thirds System that builds on the foundation laid by its predecessor. We named this lens Zuiko Digital. Zuiko Digital is a high-resolution lens designed to maximise performance when used with a digital SLR. As an intelligent lens system designed for the digital era, each lens, teleconverter, and extension tube has its own built-in CPU that's able to exchange status data such as focal length, aperture value, and so on with the camera, enabling adjustments to be made to ensure the best possible image quality. The Four Thirds System's unique design also makes possible both a large aperture and a compact, lightweight body. A high-performance lens worthy of the most demanding professionals, Zuiko Digital expands shooting opportunities under a wide range of conditions.

Zuiko Digital isn't just the rebirth of an old legend, it's the start of a new one.

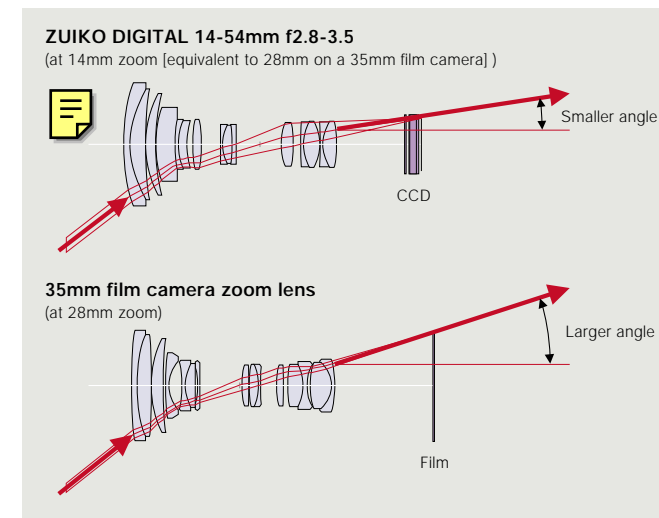
ZUIKO
DIGITAL



Exclusively Designed Lenses Provide The Foundation For The New Era Of Digital SLRs

Exclusive Digital Design

Zuiko Digital lenses boast an all-new design that optimises the performance of the image sensors used in digital cameras. Unlike lenses for conventional film cameras, Zuiko Digital lenses are designed to pass light to the image sensor in a near-straight line. This allows the image sensor to effectively capture almost all incoming light, maximising image quality and minimising light attenuation — even in the peripheral areas of the image.



ZUIKO DIGITAL 11-22mm (22-44mm) f2.8-3.5 Available Soon

An ultra wide-angle zoom lens equivalent to a 22-44mm lens on a 35mm camera, this bright, compact f2.8-3.5 lens offers extra-wide coverage of 11mm and delivers sharp image reproduction throughout the image area. Thanks to the original Four Thirds System design, the lens is small as well. Zooming is done by rotating the zoom ring.



ZUIKO DIGITAL 14-54mm (28-108mm) f2.8-3.5

This bright f2.8-3.5 zoom lens is equivalent to a standard 28-108mm zoom lens for 35mm cameras. Three high-quality aspherical glass lenses are incorporated to achieve high image quality in a compact body. This lens is capable of shooting subjects as close as 22cm at any zoom position. Zooming is done by rotating the zoom ring.



ZUIKO DIGITAL ED 50mm (100mm) f2.0 Macro

A telephoto macro lens equivalent to a 100mm lens on a 35mm camera, this lens features both a bright f2.0 maximum aperture and compact design thanks to the original design of the Four Thirds System. The large aperture is compatible with high shutter speeds, giving you much greater shooting flexibility. To ensure the best possible image quality, an ED (Extra-low Dispersion) lens is used. The maximum magnification is 1/2x equivalent to 1x on a 35mm camera lens.

High-Precision Design Standard

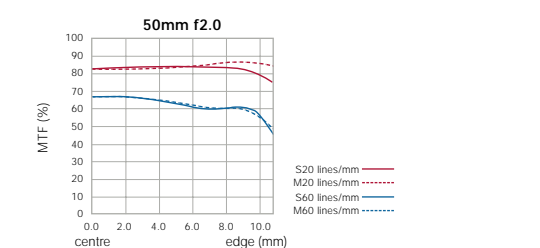
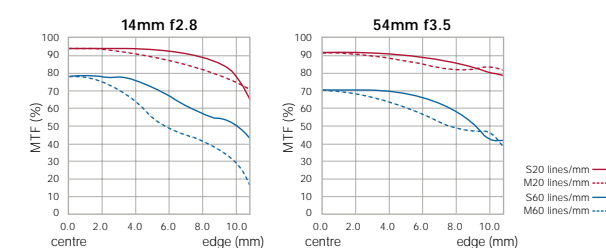
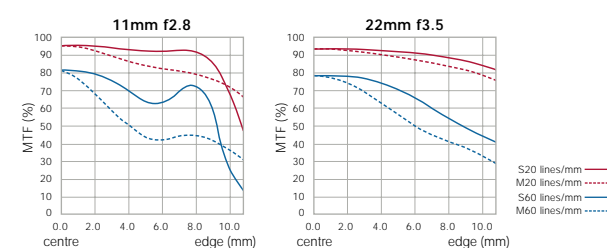
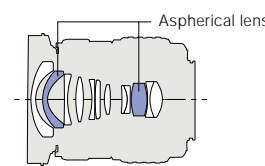
The smaller a film or image sensor is, the higher the precision and resolution required of the lens. Theoretically, Zuiko Digital lenses require a design with twice the level of precision required of 35mm camera lenses. Olympus's decades-long experience in precision engineering and optical engineering has given us the skills and expertise to design and manufacture lenses with the requisite high level of precision.

Drip-Proof Design For Professional Use

Not only the camera body but also all Zuiko Digital lenses are drip-proofed to withstand exposure to the severe conditions associated with shooting outdoors.

Smooth Handling

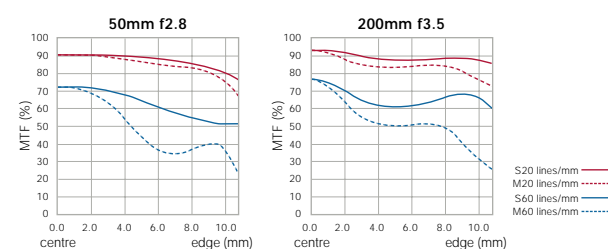
Zuiko Digital lenses achieve high-speed, high-accuracy focusing. For finer focus adjustment after completion of autofocus, focus can be further adjusted using the focus ring. The focal length of a Zuiko Digital lens is exactly half of that of a 35mm camera lens with the same angle of view, so calculation of the equivalent is easy.





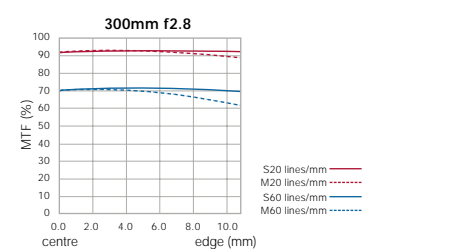
E-1 with ZUIKO DIGITAL ED 50-200mm f2.8-3.5 [f3.5, 1/250 sec.]

ZUIKO DIGITAL ED 50-200mm (100-400mm) f2.8-3.5
 Equivalent to a 100-400mm on a 35mm camera lens, this super telephoto zoom lens takes advantage of Four Thirds System technology to offer both extended telephoto performance and a bright f2.8-3.5 maximum aperture. Three ED (Extra-low Dispersion) lenses are used, ensuring that chromatic aberration is kept to a minimum. Zooming is done by rotating the zoom ring.



E-1 with ZUIKO DIGITAL ED 300mm f2.8 [f5, 1/1000 sec.]

ZUIKO DIGITAL ED 300mm (600mm) f2.8 Manufactured Upon Request
 A super telephoto lens equivalent to a 600mm lens on a 35mm camera, this lens features a bright f2.8 maximum aperture and three ED (Extra-low Dispersion) lenses for maximum image quality. The compact, lightweight design made possible by the Four Thirds System makes this lens remarkably portable and easy to use. This lens can be used with the following filters: SCF-43 Standard Clear Filter, ND4-43 Filter, ND8-43 Filter, and DPF-43 Drop In Circular PL Filter.



E-1 with ZUIKO DIGITAL ED 300mm f2.8 + EC-14 [f4, 1/200 sec.]

EC-14 ZUIKO DIGITAL 1.4x Teleconverter
 A rear converter that magnifies the focal length by 1.4 times, the EC-14 includes 6 lens elements in 5 groups to produce sharp images without spoiling the performance of the master lens. It also features the same drip-proofing design as the camera and lenses.

* When used with the ZUIKO DIGITAL ED 50mm f2.0 Macro lens, this product will give inadequate performance if the aperture is larger than f2.8.



The MTF (Modulation Transfer Function) curve is an indicator for evaluating how faithfully image contrast is reproduced. The vertical axis represents the contrast value, while the horizontal axis represents the distance (mm) from the image centre to the edges. The S direction (Sagittal radiation direction) and M direction (Meridional concentric direction) are measured separately. Spatial frequency shows the number of lines per millimetre (lines/mm). While ordinary 35mm camera lenses are evaluated by a measurement standard of 10 lines/mm or 30 lines/mm, Zuiko Digital lenses are evaluated by a much stricter measurement standard: 20 lines/mm or 60 lines/mm, a value that is twice that of 35mm camera lenses. Nevertheless, the MTF curves of the Zuiko Digital lenses show a high value even when the aperture is fully or almost fully opened, clearly demonstrating the high performance capacity of Zuiko Digital lenses. Generally, the closer the 20 lines/mm curve approximates 100%, the better the contrast. Similarly, the higher the value of the 60 lines/mm curve, the higher the resolution of the lens.



E-1 with ZUIKO DIGITAL ED 50mm f2.0 Macro + EX-25 [f22, 1/60 sec.]

EX-25 Extension Tube
 An extension tube for macro shooting. When used with ZUIKO DIGITAL ED 50mm f2.0 Macro, maximum magnification is approx. 1x (equivalent to approx. 2x on a 35mm camera lens).



Lighting Your Way To The Perfect Image In Every Situation

FL-50 Electronic Flash

Designed specifically for digital SLR cameras, the new FL-50 is a high-power flash with a GN of 28-50 (at ISO 100) at focal lengths of 12-42mm (24-85mm on a 35mm camera). In addition to TTL-Auto, Auto, and Manual operation, the FL-50 incorporates a Super FP (Focal Plane) flash function that allows the flash to synchronise with shutter speeds as high as 1/4000 sec. The flash coverage angle is automatically adjusted when the lens is zoomed and can also be set manually. For extended coverage, a wide-angle panel is built-in for focal lengths as short as 8mm (16mm on a 35mm camera). Red-eye reduction, slow-synchronisation (1st curtain/2nd curtain), and other versatile flash modes are available, as well as precision flash intensity control in steps of $\pm 1/3EV$. This flash is usable with a wide selection of power supplies including AA batteries, LB-01 3V Lithium Battery, SHV-1 Flash High Voltage Set, and FP-1 Flash Power Grip.



FL-50

E-1 with FL-50 attached

FL-20 Electronic Flash

A very compact, yet precision-control flash with GN 20 (at ISO 100) designed especially for digital cameras. Offers excellent portability.



SRF-11 Ring Flash Set (Available soon)

Includes RF-11 Ring Flash and FC-1 Macro Flash Controller. (Camera and lens not included)



RF-11 Ring Flash (Available soon)

Designed for shadow-free macro photography, this flash has a GN of 11 (at ISO 100). For use in combination with the FC-1 Macro Flash Controller. Can be attached to the ZUIKO DIGITAL 14-54mm f2.8-3.5 directly or the ZUIKO DIGITAL ED 50mm f2.0 Macro with the FR-1 Flash Adapter Ring.



FC-1 Macro Flash Controller (Available soon)

Designed for use with the RF-11 Ring Flash or TF-22 Twin Flash, this controller connects to the E-1's hot shoe.



STF-22 Twin Flash Set (Available soon)

Includes TF-22 Twin Flash, SR-1 Shoe Ring, and FC-1 Macro Flash Controller. (Camera and lens not included)



TF-22 Twin Flash (Available soon)

Designed for macro flash photography, this twin flash has a GN of 22 (at ISO 100) for both lights and GN of 12 (at ISO 100) for one light. For use in combination with the FC-1 Macro Flash Controller. The included SR-1 Shoe Ring allows the angle of each light to be adjusted. Can be attached to the ZUIKO DIGITAL 14-54mm f2.8-3.5 directly or the ZUIKO DIGITAL ED 50mm f2.0 Macro with the FR-1 Flash Adapter Ring.



FR-1 Flash Adapter Ring (Available soon)

Enables the RF-11 Ring Flash or TF-22 Twin Flash to be attached to the ZUIKO DIGITAL ED 50mm f2.0 Macro.



SHV-1 Flash High Voltage Set

Includes HV-1 High Voltage Pack, BN-1 Ni-Mh Battery Pack, and AC-2 AC Adapter, and case. Charging time is about 2 hours. Rated voltage is 100 V - 240 V. Usable worldwide.*

* Plug design varies depending on the country or region where used. Make sure beforehand that the plug you use is suitable for the country or region.



HV-1 High Voltage Pack

Enables more than 250 flashes with a flash charging time of 1.3 seconds or less when used in combination with BN-1 Ni-Mh Battery Pack and FL-50 Electronic Flash.



BN-1 Ni-Mh Battery Pack

Exclusive rechargeable battery for the HV-1 High Voltage Pack. Equipped with a power indicator convenient for checking the remaining battery power level.



FP-1 Flash Power Grip

A flash power grip that runs on four C-type alkaline cells. Supplements the battery power in the Electronic Flash, facilitating high-speed flash charging and extending the number of shots that can be taken with the flash.



FL-CB05 Off Flash Cable

Connects the FL-50/FL-20 Electronic Flash to the E-1's hot shoe to enable the flash to be used at a distance from the camera of up to 1m.



FL-CB02 Bracket Cable

Connects the FP-1 Flash Power Grip to the E-1. Included with the FP-1 Flash Power Grip.



RG-1 Remote Grip Cable

Connects to the FP-1 Flash Power Grip on the E-1 to enable use of the Power Grip's shutter button.



Example of a combination of accessories

A Full Range Of Professional-Standard Accessories And Software

RM-1 Remote Control

Two shutter-release intervals (2-sec. and 0-sec.) are available.



FS-1/FS-2 Focusing Screen

These focusing screens feature Olympus's exclusive Neo Lumi-Micron Mat that uses deformed hexagon microprisms with a 20µm pitch. These focusing screens are bright for easy focusing and enable faithful reproduction with less moiré in the out-of-focus area. The E-1 is equipped with the FS-1 Full-Matte Focusing Screen. This can easily be switched with the optional FS-2 Grid Focusing Screen, if desired.



SHLD-2 Power Battery Holder Set

Includes the high-power BLL-1 Li-Ion Battery, BCL-1 Li-Ion Battery Charger and HLD-2 Power Battery Holder.



GS-2 Grip Strap

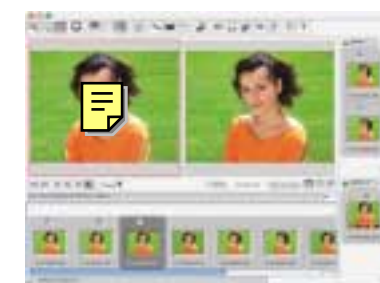
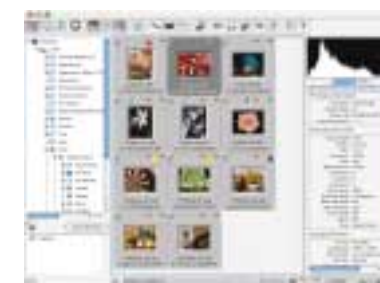
Attaches to the HLD-2 Power Battery Holder or FP-1 Flash Power Grip.



OLYMPUS Studio 1.0 Software

Spend More Time Shooting Images, Not Processing Them

Developed to provide professionals with the fast, efficient image processing capability they need, OLYMPUS Studio 1.0 Software incorporates a newly developed RAW data processing engine that enables image data to be processed much faster than conventional products. Professional workflows are supported by a selection function that makes it easy to quickly choose the best shots from among a large amount of images. OLYMPUS Studio 1.0 also includes a Camera Control function ideal for studio shooting that allows you to bypass memory media and transfer captured images directly to a computer, where they can be viewed immediately on the computer's monitor and stored on its hard disk.



Preliminary Selection By Referring To Image Information

In Browse mode, you can view thumbnails of all the images stored on the computer's hard disk. For each image, you can view a shooting information display, histogram display, and more, marking off images for preliminary selection before making your final choice.

Exact Selection By Comparing Images

You can check images on your computer in the same way as you would check film on a light box. The same point in several different shots can be enlarged simultaneously for comparison and selection. In combination with the Browse mode's marking function, this enables you to quickly sort through hundreds of pictures, narrowing down the ones you want to a dozen or so.



High-Speed RAW Data Processing And Image Editing With Batch Processing

The Image Editing mode includes many key editing functions like tone curve and gamma correction. The newly developed RAW data processing engine allows much faster and much more efficient RAW data processing than conventional products.

Camera Control Function Ideal For Studio Photography

When you cable the E-1 directly to a computer, you'll be able to use the computer to control the camera and take pictures. Captured images can be sent directly to the computer as soon as they are shot. This function is an excellent tool for studio photography.

RM-CB1 Remote Cable

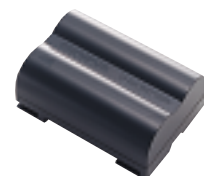
Cable release for the E-1. Can be attached to the FP-1 Flash Power Grip.



BLM-1 Li-ion Battery

Included with the E-1, this rechargeable lithium-ion battery has a capacity of 1500 mAh. Full charge enables approx. 400 shots.* Can be recharged up to 500 times.

* Under Olympus's standard testing conditions



BLL-1 Li-ion Battery

A high-power, rechargeable lithium-ion battery with a capacity of 3400 mAh. Full charge enables approx. 1000 shots.* Designed for use with the HLD-2 Power Battery Holder. Can be recharged up to 500 times.

* Under Olympus's standard testing conditions



CS-2SH Semi Hard Case

Case for storing the E-1 with ZUIKO DIGITAL 14-54mm f2.8-3.5 lens or ZUIKO DIGITAL ED 50mm f2.0 Macro lens attached.



EP-1 Eye Cup

Bayonet-type eye cup included with the E-1 that is easy to attach to the camera. The secure design ensures that it is difficult to accidentally detach.



BCM-1 Li-ion Battery Charger

Battery charger included with the E-1 exclusively for use with the BLM-1 Li-ion Battery. Charging time is about 2 hours. Rated voltage is 100 V - 240 V. Usable worldwide.*

* Plug design varies depending on the country or region where used. Make sure beforehand that the plug you use is suitable for the country or region.



BCL-1 Li-ion Battery Charger

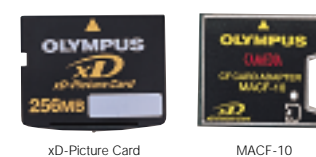
Battery charger included with the E-1 exclusively for use with the BLL-1 Li-ion Battery. Charging time is about 2 hours. Rated voltage is 100 V - 240 V. Usable worldwide.*

* Plug design varies depending on the country or region where used. Make sure beforehand that the plug you use is suitable for the country or region.



xD-Picture Card, MACF-10 CF Card Adapter

The xD-Picture Card is an ultra-small, high capacity memory card (16 - 512 MB). The MACF-10 CF Card Adapter allows an xD-Picture Card to be used with the E-1 and other devices that have a CompactFlash card slot.



EP-2 Eye Cup

Features a large hood section made of elastic rubber that provides a greater light blocking effect when used either horizontally or vertically. Bayonet-type design makes it easy to attach to the camera, while ensuring that it is difficult to accidentally detach.



AC-1 AC Adapter

Exclusively for use with the E-1. Rated voltage is 100 V - 240 V. Usable worldwide.*

* Plug design varies depending on the country or region where used. Make sure beforehand that the plug you use is suitable for the country or region.



HLD-2 Power Battery Holder

Exclusively for use with the high-power BLL-1 Li-ion Battery. Equipped with a shutter button, main dial, sub dial, AE lock button, and AF frame selection button for smooth operation when taking pictures with the camera held vertically.



P-440 Digital Colour Photo Printer

This photo-quality sublimation dye transfer printer features high image quality, high-speed processing, and durable print surfaces. Compatible with DCF, JFIF, DPOF, Exif 1.1/2.2, and PRINT Image Matching II.



Name Of Parts

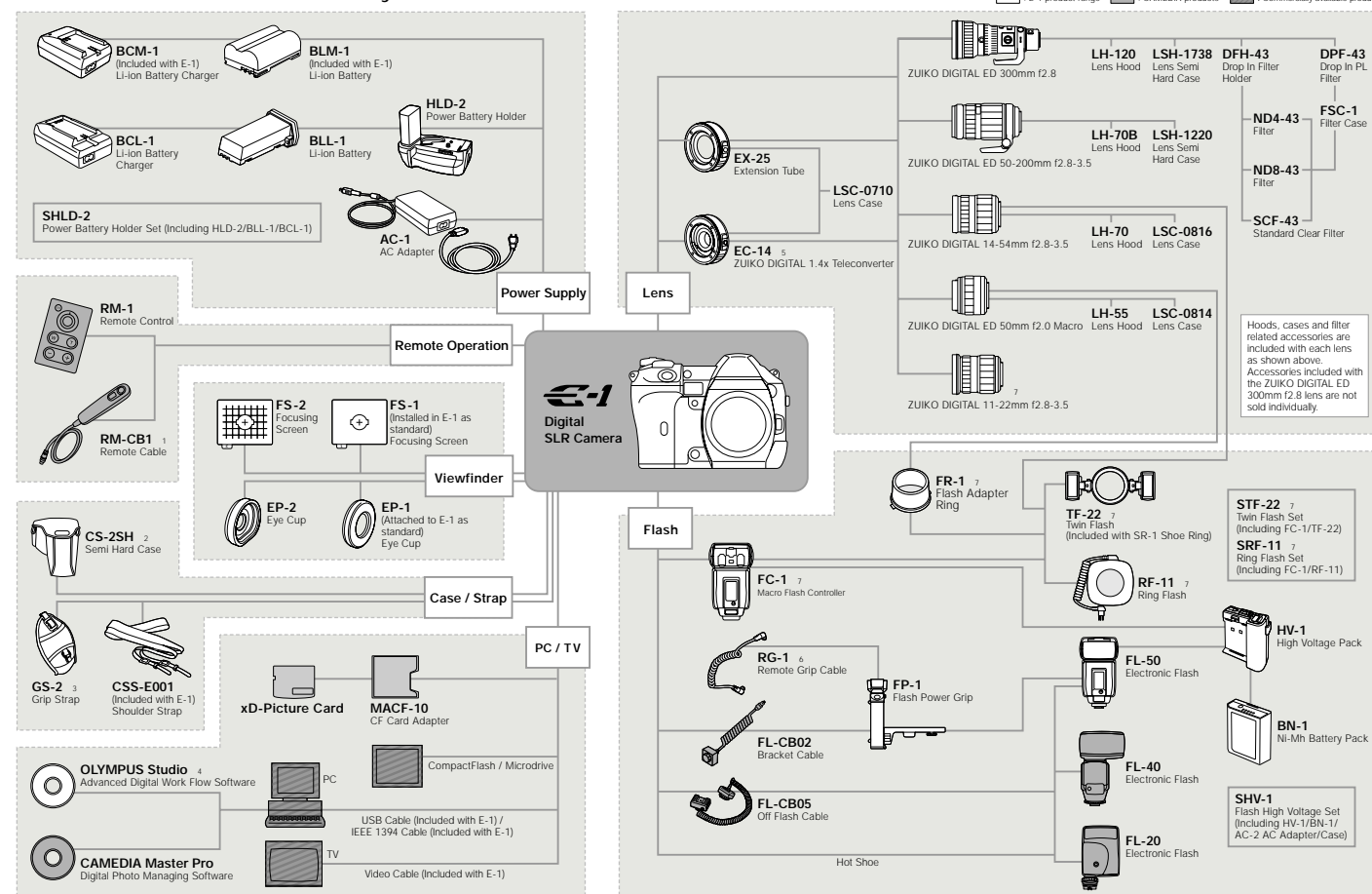


E-1 Specifications

Product type	
Product type	: Single-lens reflex digital camera with interchangeable lens system
Lens	: Zuiko Digital, Four Thirds System Lens
Lens mount	: Four Thirds Mount
No. of effective pixels	
No. of effective pixels	: 5.0 megapixels
Image pickup element	
Product type	: 4/3-type full-frame transfer primary colour CCD
Total no. of effective pixels	: Approx. 5,100,000 pixels
Screen size	: 17.3mm (H) x 13.0mm (V)
Aspect ratio	: 1.33 (4 : 3)
Viewfinder	
Product type	: Eye-level single-lens reflex viewfinder
Field of view	: Approx. 100%
Viewfinder magnification	: 0.96x (-1 m ⁻¹ , 50mm lens, infinity)
Eye point	: 20mm (-1 m ⁻¹)
Diopter adjustment range	: -3.0 - +1.0 m ⁻¹
Optical path fraction	: Quick return half mirror
Depth of field	: Can be checked with the preview button
Eyepeice shutter	: Built-in type
Focusing screen	: Interchangeable
Eye cup	: Interchangeable
Monitor	
Product type	: 1.8 inch TFT colour LCD
Total no. of pixels	: Approx. 134,000 pixels
Field of view	: Approx. 100%
Brightness control	: 15 levels
Shutter	
Product type	: Computerised focal-plane shutter
Shutter speed	: P exposure mode: 2 - 1/4000 sec. A, S, and M exposure modes: 60 - 1/4000 sec. Bulb: up to 8 min. (1/3, 1/2, or 1 EV steps available)
Focusing	
AF system	: TTL phase-contrast detection system
Focus mode	: (1) Single AF (2) Continuous AF (3) Manual focus
Focusing point	: 3-point multiple AF (left, centre, right)
AF luminance range	: EV 0 - 19 (at 20°C, ISO 100)
Selection of focusing point	: Auto, Optional
AF illuminator	: Built-in Effective distance for AF illuminator: Approx. 0.7 - 6.0m (ZUIKO DIGITAL ED 50mm f2.0 Macro)
Exposure control	
Metering system	: TTL full-aperture metering system (1) Digital ESP metering (2) Centre weighted average metering (3) Spot metering (approx. 2% for the viewfinder screen)
Metering range	: EV 1 - 20 (Digital ESP metering, Centre weighted average metering) EV 3 - 17 (Spot metering) (At normal temperature, ISO 100)
Exposure mode	: (1) P: Programme AE (Programme shift can be performed) (2) A: Aperture priority AE (3) S: Shutter priority AE (4) M: Manual
ISO sensitivity	: ISO 100 - 800 (High ISO values (ISO 1600 and ISO 3200) are available)
Exposure compensation	: ±5EV in 1/3, 1/2, or 1EV steps
Exposure bracketing	: 3 or 5 frames in 1/3, 1/2, or 1EV steps

White balance	
Product type	: CCD and white balance sensor
Mode setting	: Auto, Preset (12 settings), One-Touch (Up to 4 settings can be registered)
White balance compensation	: ±7 steps in 1-step (2 mired) increments
White balance bracketing	: 3 frames, within ±3 steps in 1-step (4 mired) increments
Recording	
Memory	: CompactFlash Type I/II, Microdrive
Recording format	: DCF, DPOF, Exif 2.2, PRINT Image Matching II
File format	: RAW (12 bits), TIFF (RGB), JPEG
Recording image size	: RAW 2560x1920 pixels (approx. 10MB) [uncompressed]
(File size)	TIFF 2560x1920 pixels (approx. 15MB) [uncompressed]
(Compression)	SHQ 2560x1920 pixels (approx. 3.8MB) [1/2.7]
	HQ 2560x1920 pixels (approx. 1.2MB) [1/8]
	SQ 1600x1200 pixels (approx. 1.4MB) [1/2.7] (approx. 0.5MB) [1/8]
	1280x960 pixels (approx. 0.9MB) [1/2.7] (approx. 0.3MB) [1/8]
	1024x768 pixels (approx. 0.6MB) [1/2.7] (approx. 0.2MB) [1/8]
	640x480 pixels (approx. 0.3MB) [1/2.7] (approx. 0.1MB) [1/8]
Playback	
Playback mode	: Single-frame playback, Close-up playback, Index display, Picture rotation, Slideshow
Information display	: Information display, Histogram display, Highlight display
Drive	
Drive mode	: Single-frame shooting, Sequential shooting, Self-timer, Remote control
Sequential shooting	: Max. 12 pictures (in all record modes) up to 3 frames/sec.
Self-timer	: Operation time: 12 sec., 2 sec.
Optical remote control	: Operation time: 2 sec., 0 sec.
Flash	
Synchronisation	: Synchronised with the camera at 1/180 sec. or less
Flash control mode	: TTL-Auto (TTL pre-flash mode), Auto, Manual
Flash attachment	: Hot shoe, External flash connector
Colour matrix	
sRGB, Adobe RGB	
Saturation	
5 levels	
Contrast	
5 levels	
Sharpness	
7 levels	
External connector	
USB connector (mini-B), IEEE1394 connector, DC-in jack, Video-out jack, Remote cable connector	
Dust/drip proof system	
Dust/drip proof sealing, Supersonic Wave Filter (dust reduction system for CCD)	
Power supply	
Battery	: BLM-1 Li-Ion Battery
AC power supply	: AC-1 AC Adapter (optional)
Others	: BLL-1 Li-Ion Battery for HLD-2 Power Battery Holder (optional)
Dimensions/weight	
Dimensions	: 141mm (W) x 104mm (H) x 81mm (D) (excluding protrusions)
Weight	: Approx. 660g
Operating environment	
Temperature	: 0 - 40°C (operation)/-20 - 60°C (storage)
Humidity	: 30 - 90 % (operation)/10 - 90 % (storage)

OLYMPUS E-SYSTEM System Chart



1 RM-CB1 Remote Cable can also be used with FP-1 Flash Power Grip. 2 Semi Hard Case for the E-1 body with the ZUIKO DIGITAL 14-54mm f2.8-3.5 lens or ZUIKO DIGITAL ED 50mm f2.0 Macro lens attached.
3 Usable with the HLD-2 Power Battery Holder or FP-1 Flash Power Grip. 4 Versatile image processing and management software for professional use that allows camera control from a PC, RAW data editing, web browsing, etc.
5 When used with the ZUIKO DIGITAL ED 50mm f2.0 Macro lens, this product will give inadequate performance if the aperture is larger than f2.8.
6 RG-1 Remote Grip Cable is connected to the camera body to enable use of the shutter button located on the FP-1 Flash Power Grip. 7 Available soon.

Launch Of F1 Sponsorship

In 2003, Olympus became an official sponsor of Ferrari, one of the leading teams in Formula 1 racing. The world's most renowned automobile race, F1 demands excellence from both man and machine. Only the combination of the most advanced automobile technology and the highest driving skills can bring victory in F1 racing. Working in different fields, Ferrari and Olympus share the same goal: to foster a competitive and cooperative environment where staff work as a team to continually develop products that feature the most advanced technology, the best possible performance, and the highest quality.

