

OLYMPUS E-500

quick view

PRICE £600

- SENSOR: 8.89MP total/8MP effective
- SHUTTER SPEED: 60-1/4000sec
- ISO: 100-400 boost up to 1600
- EXP MODES: P, A, S, M, 15 Scene
- FLASH: Pop up GN 13, hotshoe
- VIEWFINDER/MONITOR: Opt/2.5" LCD
- OTHER: CF 1/1, xD, USB 2.0, sRGB and Adobe RGB
- POWER: Lithium-ion
- DIMENSIONS/WEIGHT: 129.5 x 94.5 x 66mm/435g

8 mega pixels

Digital E-evolution

The E-500 boasts a whole host of impressive features, and at a reasonable price, but do its images do the specification justice? **Jamie Harrison** checks out Olympus's latest Four-Thirds camera



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Top: Using the shadow spot meter enabled this low-key image

Above: There's plenty of detail here and the white balance is spot on

Right: Images from the E-500 are pin sharp even with the basic kit lens

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front
Olympus has returned to the traditional pentaprism to produce a conventional looking camera. The lens mount is the open standard 4/3rds mount



top
The grip is comfortable, with plenty of room to curl the fingers around. There's a hotshoe for external flash



side
The camera has a built-in pop-up flash. Image transfer is via USB 2.0

Olympus E-500

With the arrival of Olympus's third E-system camera, we see a return to traditional values, with a camera that looks like a traditional SLR. And it seems like a tasty one too. Not only does it have 8 million pixels, it offers something different in terms of digital photographic theory.

Olympus has always ploughed its own furrow, both in camera design and technology. The digital age has given the company a new edge – Olympus was an early and successful adopter of the new technology. A couple of years ago the emerging SLR market offered Olympus the chance to take its lateral thinking into a new direction, with the Four-Thirds system.

FOUR-THIRDS REFRESHER
In a nutshell, Olympus claims that with digital we can break free of the limitations of film, that the differences between film and digital sensors required a rethink of previous formats, optics and technology – and so Olympus came up with the Four-Thirds system. Physical differences between film and sensors are marked: film is flat, sensors are 'bumpy' (due to the individual pixels). With traditional lenses where light is coming into the lenses at extreme angles, especially wideangle lenses, pixel shading can occur. That is, pixels can

obstruct the light wave to neighbouring pixels. This leads to vignetting or data loss. Olympus's solution is twofold. The first is to design lenses that are near telecentric. That is, the elements bend the light as it goes through the lens, resulting in the light waves hitting the sensor perpendicularly. This means each individual pixel captures the maximum amount of information.

The second element to this is the sensor itself; the 4/3rds sensor is smaller than an APS sensor commonly found in consumer SLRs. The image area – that is, the circle projected by the lens onto the sensor – is 4/3 of an inch in diameter. The sensor is smaller (and rectangular), and fits perfectly within the image circle, allowing those perpendicular light waves to completely cover the sensor. Of course, a cynic might say that it is easier to offer accurate coverage when the sensor is smaller, reducing the acute angles that a larger sensor would be susceptible to anyway.

The final major point about the Four-Thirds system is the lens mount. Olympus wisely made the Four-Thirds system an open standard. This means that unlike, say, Canon and Olympus, other manufacturers are free to make Four-Thirds cameras and lenses, and a few have signed up. It is interesting to note that, when Olympus

up against

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CANON 350D
£500



NIKON D70S
£550



PENTAX *IST DL
£450

buying guide

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VIEWFINDER

The optical viewfinder is reasonably bright but quite small and, like the sensor, has a 4:3 ratio

LCD DISPLAY

The large 2.5-inch screen is bright and clear. Relevant shooting information is displayed and some changes can be made here

FOUR-WAY CONTROLLER

The directional arrows can be used to rapidly change certain functions. They are also used to navigate the menu and scroll through images in review mode



launched the E1, one of the major points was that old 35mm lenses failed to provide optimum image quality, and file efficiently. At the time, one of the major reasons for buying a DSLR was that users already had the lenses so they could stay with a system they knew. The past couple of years, however, has seen new lenses from all of the major manufacturers that are digitally optimised to match the new cameras. It seems that Olympus's radical idea was on the right track after all.

THE THIRD E CAMERA

But I digress. The E-500 marks something of a backtrack, over the radical design of the E-300, although Olympus promises to continue to experiment with form and design in the future. So here is a traditional-looking camera with many of the features that attracts Olympus users in the first place. First, the camera is small, which has always been one of Olympus's attractions. However unlike other small SLRs from the likes of Pentax and even Canon, the smaller sensor of the E system means the lenses can be much smaller too. Instead of a 1.5x magnification ratio of APS-C sensor equipped cameras, Olympus offers a 2x magnification. So a 25mm lens is the equivalent to the standard 50mm lens. This is particularly useful for telephoto, where an old type of heavy 200mm lenses, for example, can now be packaged into the shorter focal length of 100mm so the equivalent lenses are smaller and lighter too.

The E-500 offers a surprising amount of features for what is essentially an entry-level camera. Aside from a full set of the usual exposure modes, both automatic and manual, there is also quite a comprehensive set of scene

'The E-500 offers a surprising amount of features for an entry-level camera'

modes: 15 in all including Portrait and Landscape and so on, as well as other useful modes such as Children, Document and Sunset. The system is split in two: the most used scene modes are on the mode dial, while a 'scene' position on the mode dial takes you to the menu where the wider choice is found.

Among the most impressive of the features is the metering options. Considering the price, the E-500 is remarkably equipped with a new 49-point digital ESP system, which is a multi-zone system that can also be linked to the autofocus points for accurate metering on a central subject.

Alternatively a 2% spot metering is included, along with a highlight and shadow spot metering options. With this you can spot meter in shadow or highlight areas and the camera makes the necessary exposure compensation to achieve the best detail. It's essentially an automatic

exposure compensation system, for adjusting high or low-key subjects. Of course, there is also the trusty old centrewighted metering which still comes in useful after all these years.

I mentioned that the metering can be attached to the AF points. The AF is actually a pretty nifty operator, with three AF points that can be automatically, or individually selected. There's an option of single and continuous AF, or manual focus. A nice touch is an option to combine the auto and manual focus, which is ideal for fine tuning focus, especially if using macro or telephoto lenses at wide apertures where depth of field is narrow.

There is a downside to the focus control, though. The position of the focus point selector is in the top right corner of the camera back. Immediately above that is the command dial. To change focus points you need to press the selector button and then turn the command dial to the required point. This is really fiddly and slow, in fact, because the camera is small and the top-plate is compact. So when trying to change focus points with my eye to the eyepiece, I kept reaching for the main mode dial. After a

image quality

The Olympus E-500 is capable of some very nice images indeed, especially at the lower end of the ISO range. Where the E-300 was widely criticised for its levels of image noise, Olympus seems to have overcome many of those problems.

Similarly, in comparison to images from the E-1, the higher ISO speeds are much improved. But it's still not perfect in that regard. Other cameras, notably Canon models, handle high ISO noise better, but the E-500 is by no means the worst.

Colour is generally very good, though keep an eye on the white balance in some images. RAW images are easily remedied in this respect. Incidentally the camera comes

with Olympus Master software for image conversion, which allows several changes to RAW images, rather than just the conversion that some makers' software does. Olympus Studio is faster and more feature laden but costs more, while, at the time of writing, Photoshop doesn't support the E-500.

Overall I was very pleased with the images, and there are few problems that can't be fixed by changing a setting somewhere in the camera. I was lucky enough to have great autumn weather, which can be harsh, leading to some blown-out highlights. But the camera handled them better than I expected and a small tweak to the contrast level, or switching to high-key mode, really helped.

Zuiko Lenses

The Olympus E-500 comes in a variety of kits with different lenses. Our sample was sent with the Zuiko Digital 14-45mm f/3.5-5.6. The 2x magnification of the 4/3rds system means this is the equivalent of 28-90mm in 35mm terms. For a kit lens, it's not a bad performer. While not the fastest in the world, it works well with the camera and is pin sharp.

I also used a 50-200mm lens for the test, as in this image, which again is known by the camera and optical faults were corrected for in camera.



White Balance
AF Point selector

WHITE BALANCE/ AF POINT SELECTOR

The WB button function can be changed in the menu to DoF preview, for example. The AF point selector is used in conjunction with the command dial above, which is fiddly

specifications

**HOTSHOE**

As well as the pop-up flash in the pentaprism, the E-500 accepts external flash units via the hotshoe. There's no PC socket for studio flash, so an X sync adapter would need to be used

MODE DIAL

Features all the usual MASP controls, as well as Auto. Commonly used scene modes can also be accessed here, while more scene modes can be accessed in the 'SCENE' position. These can then be selected via the LCD.

week of use I still hadn't really got used to the system and in a fast-moving situation could easily have missed several shots. A toggle switch, such as Canon's, is a better solution than this.

It would also be nice to have the AE Lock next to the focus selector instead of the manual white balance control, so that you would be able to easily select and then lock focus and exposure. I can see that you would maybe keep the two separate to avoid accidentally locking exposure, but I would prefer it. However, there are ways around this problem, of which more later.

One of the features that has proved popular on the E system is the anti-dust feature. Whenever a lens is changed on an SLR, there is a danger that dust will land on the sensor, which will then be visible on all the pictures. This is compounded more on digital cameras by static from the sensor, and is even worse if the camera is not turned off when switching lenses. Olympus's solution is to blast the sensor's filter with supersonic waves. The dust is essentially shaken off the sensor and is caught on a sticky catch pad. Every time the camera is switched on, this is performed, illustrated by an animation on the LCD. It slows down start-up time by a second or so, but is so useful that it can be forgiven.

Another nice touch that we don't usually expect on a camera at this level is the ability to record RAW and JPEG images simultaneously. Yes it's a common feature on most cameras, but only the higher-end (ie expensive) models allow you to choose the JPEG quality. Happily, the E-500 does too, so a choice of three JPEG modes are available.

A similar situation occurs in regard to media cards. Most DSLRs, except the high-end ones, only accept one card. The E-500 takes two: CompactFlash and xD. It doesn't offer simultaneous recording, or the option to save JPEG to one and RAW to another, but what do you want for £600?

As Jimmy Cricket used to say, 'There's more'. The digital image controls include both sRGB and Adobe RGB, as well as the option to change tone, saturation and so on. There's a choice to set controls for high-key and low-key subjects too, which can further be enhanced by setting the gradation controls on the camera. I've not seen many cameras recently that offer so many

variables. For example, the black and white controls have the option to use digital filters, not only to add tints such as sepia and so on (which is usually better to perform on the PC later anyway), but also, black and white modes offer yellow, orange, red and green filters to adjust the tones of an image just as you would with traditional glass filters.

Another nice bonus is the anti-shock feature. This dampens the mirror, to reduce camera shake during long exposures or with telephoto lenses. It's not quite up to the Konica Minolta Anti-Shake CCD but I certainly found that it gave me an extra half stop of safe, handheld shooting. It's not massive, but it helps.

'The E-500 can record RAW and JPEG images simultaneously... and allows you to choose JPEG quality'

Most of the camera features are buried in the menu, and this is definitely worth exploring while you use the camera. For a start, the menu is displayed on a large 2.5inch monitor, which also displays all the camera shooting information. The menu opens up a world of possibilities, including assigning new or customised commands to buttons on the camera. Remember I talked about the AE/AF lock button. You can assign that functionality in a variety of ways to the shutter release button. The function button can be used for manual white balance (default) or be changed to depth of field preview, or custom settings and others. You can even change the direction of the focus ring if you wish.

Incidentally, a proper depth of field button is something that I would like to see on the camera. I often use both DOF preview and manual white balance, and I'm sure landscape photographers, for example, would do the same. In all, though, the Olympus E-500 has a fantastic feature set with excellent handling. While not totally perfect, its adaptability makes it one of the most useful cameras at this price.

VERDICT

The Olympus E-500 is a vast improvement on the E-300 in both design and image quality. The sheer amount of technology means that the camera has something for everyone, and it packs a surprising amount into a small body at a reasonable price. At this rate I really can't wait to see the next E-system camera – the system is going from strength to strength.

WDC

MANUFACTURER: Olympus

MODEL: E-500

PRICE: £600

CCD: 4/3 type Full Frame Transfer
CCD 8MP effective/8.89 MP
total 3264x2448pixels

MAX PRINT SIZE: 16x12-inch at 200dpi

LENS: Four-Thirds mount

SHUTTER SPEEDS: 60-1/4000 sec

ISO: 100-400 with boost up to 1600

EXP MODES: Auto, M, A, S, P, 15 scene modes

FLASH: Hotshoe, Pop-up GN 13m

DRIVE MODES: Single, continuous 2.5fps
JPEG to capacity of media card

METER: Digital ESP, centre-weighted
average and spot, Highlight and
shadow based spot metering

WHITE BALANCE: Auto, 8 preset, custom, colour
temperature, bracketing

FOCUS: 3-point AF: Single AF, continu-
ous AF, manual focus, single AF
+ MF, and continuous AF + MF

VIEWFINDER: Pentaprism 95% coverage

MONITOR: 2.5in TFT LCD, 230,000 pixels

CONNECTION: USB 2.0 Full speed, AV

REC FORMAT: JPEG, TIFF, RAW (12-bit)

FILE SUPPORT: EXIF 2.21, DPOF, DCF, PIM II,
PictBridge

VIDEO OUTPUT: Pal, NTSC

POWER: Lithium-ion

STORAGE: CF VII, xD,

OTHER: Adobe RGB, sRGB, Anti-dust

DIMENSIONS: 129.5 x 94.5 x 66mm

WEIGHT: 435g

scores



PROS: Feature packed,
price, image quality



CONS: Some fiddly button
placement, no dedicated
depth of field button

| | |
|---------------|----|
| features | 19 |
| ease of use | 17 |
| image quality | 17 |
| design | 18 |
| value | 18 |

89%

