

Appendix

1080 Full HD Movie recording

Full HD movie recording (1980 x 1080) offers the best moving picture quality available in a pocket-sized camera today. With Full HD, footage is realistic, smooth, bright and clear. Movies become a fascinating window on real life when viewed on a big Full HD TV.

3.0" Super Precision 1,030,000 dot HyperCrystal III LCD for TOUGH

Unique to TOUGH Series cameras, this exceptional LCD features 1,030,000 dot resolution that generates beautifully bright and clear images. It also has a special layer that reflects light from external sources, thus reducing reflection even in direct sunlight – for outstanding visibility in a variety of shooting situations. And of course it's super-tough. A triple-coated acrylic finish makes the LCD more scratch-resistant than ever before.

3D Mode (3D photo shooting)

Captures two shots of a scene from two different angles to create still photos that can be viewed with the added excitement and realism of 3D (on a 3D-compatible computer, TV or photo frame). There are two 3D settings: Manual and Automatic. In both settings, the camera indicates when it is time to pan. In Automatic, when the camera is panned horizontally after the first shot, it automatically takes the second shot at the ideal moment. Manual is for 3D experts – the user decides when to take the second shot.

3D Photo (Red & Cyan photo shooting)

Captures photos just like regular 3D Mode, but generates a red and cyan 3D anaglyph photo that can be viewed using supplied 3D glasses on any regular 2D display, including your camera's LCD. There's no need for a 3D-compatible computer, TV or photo frame.

5-axis Image Stabilisation System

A world-first in interchangeable lens cameras, this sophisticated mechanism compensates for vertical, horizontal and rotational camera shake around the optical axis, in addition to the usual pitch and yaw corrected by regular image stabilisation systems. In this way 5-axis IS eliminates blur altogether, from photos and videos alike. It is especially effective with telephoto shots, macros and long exposures, where even the slightest hand tremors can have a disastrous effect on the quality of the image captured. What's more, you can see 5-axis IS take effect before you fully depress the shutter button. It gives you a crisp view of your subject in the electronic viewfinder system (EVF), making it easier to frame. 5-axis IS is built into the body of your

Olympus camera to ensure sharp, blur-free images irrespective of the lens attached.

AF tracking

This system tracks a moving subject automatically and keeps it continually in focus – for optimally focused and exposed pictures. It even memorises the subject when it goes out of frame and resumes tracking when it reappears.

(Advanced) Face Detection technology (compact cameras)

A technology that searches for faces in a composition and recognises them as the main subject. It then automatically puts them in focus and optimally adjusts exposure to create an image that's sharp in the right places and ideally exposed. Face Detection Technology can detect up to 12 faces while Advanced Face Detection Technology can detect up to 16 faces.

Advanced Face Detection technology (PEN)

A new technology that searches for faces in a composition and recognises them as the main subject. It then automatically puts them in focus and optimally adjusts exposure to create an image that's sharp in the right places and ideally exposed. Advanced Face Detection technology also comes with Eye Detection AF, which focuses on the pupil of the eye closest to the camera. It can even be set to distinguish between the left and right eye. Available for photos and videos.

Advanced i-Auto Mode

The enhanced new version of i-Auto makes it simple to take professional-looking photos and HD movies at the touch of a button, even underwater. Advanced i-Auto Mode recognises a greater variety of scenes, including blue skies and sunsets, and automatically applies the correct settings to create the best possible shot for the conditions. In HD Movie Mode, Olympus' Advanced i-Auto Mode is best-in-class, identifying a record number of different scenes. This ingenious feature is powerful enough to detect nuances within a single shot, for example backlight, and apply different settings to different areas of the scene. Thanks to Advanced i-Auto Mode, it's never been easier to capture perfect pictures, be they sunsets, backlit portraits or city lights at night.

Advanced Shadow Adjustment Technology

An enhanced version of a tried-and-tested Olympus technology, Advanced Shadow Adjustment Technology helps you take beautiful photos of people even when a source of light behind them creates heavy contrasts that would normally ruin the shot. Harnessing the power of its TruePic processor, your

camera automatically adjusts the brightness and gradation, reducing picture noise in dark areas to create a natural looking photo.

Art Filters / Magic Filters

Make it possible to create special artistic effects in still images and/or movies directly in the camera. Unless indicated, Art Filters / Magic Filters always work with both movies and stills. All Olympus cameras feature between six and ten 10 filters from the list below.

Cross Process I:

Produces unexpected effects by instantly changing colours and contrasts. The resulting image can appear to come from another world.

Cross Process II:

Whereas green is the dominant colour with the Cross Process I effect, this new and enhanced version coats your shot with a powerful purple hue – to give even the most everyday images a surreal feel.

Miniature / Diorama:

Gives images a miniature model feel by narrowing the depth of field and enhancing colour and contrast.

Dramatic (Tone):

Boosts the contrast to give images a more dynamic atmosphere.

Dramatic (Tone) II:

The new black-and-white version of Dramatic Tone, one of the most successful filters invented by Olympus.

Drawing:

Transforms images into line drawings to give the impression that subjects have been sketched by an artist.

Fish-Eye:

Simulates the dramatic effect of a fish eye lens, lending a new perspective to the whole scene with a “wrap-around” effect.

Fragmented (photos only):

Creates a collage of tiles, as if the original photo had been cut up and reassembled. Gives the shot a lively new look and feel with a friendly, three-dimensional texture.

Gentle Sepia:

Elegant filter that gives images a muted, soft tone but conserves their dark edges. It replaces colours by various shades of sepia. The contrast between light and dark gives pictures a touch of class.

Grainy Film:

This effect recreates the powerful expression of grainy, high-contrast black and white pictures. The resulting strong presence and dramatic

atmosphere make the subject stand out impressively.

Key Line:

Enhances the lines around the edge of your image to make it look more like an illustration, with two different settings so you can adjust the level of detail. Key Line is a more subtle version of the common posterise filter, which doesn't preserve the dividing lines you need for the illustration effect.

Light Tone:

Brightens up the whole image to enhance detail, especially in darker areas where details would otherwise be hard to make out.

Pale & Light Colour:

Softens the light and reduces the contrast to create a pastel-coloured version of the original image.

Pin Hole:

Reduces peripheral brightness, like with an image seen through a pinhole. A unique colour tone results in a style that has an air of secrecy or portrays the feeling of being lost in another dimension or space.

Pop Art:

Enhances colours, making them stronger and more vivid, to create high-impact pictures that express the light-hearted feeling of the pop art style.

Punk:

Displays images primarily in contrasting pink and black to give them an edgy, punk-inspired feel.

Reflection:

Creates a spectacular horizontal reflection of the real image similar to a mirror image created by still water.

Soft Focus:

Creates a soft tone that gives pictures an ethereal, otherworldly atmosphere. It renders pictures as though they were veiled in heavenly light, without obscuring details such as hair or flower petals.

Sparkle (photos only):

Adds twinkling lights to objects.

Watercolour:

Another piece of artistic wizardry. This time images are turned into a watercolour painting surrounded by soft light.

Beauty Mode

Beauty Mode touches up the appearance of subjects even while the shot is being taken. This feature recognises faces and automatically makes skin on the face and adjacent areas appear smoother, brighter and more youthful.

Beauty Make-up Mode

Lets you customise up to three people's faces before you take their picture. You can apply up to 18 effects (double the nine usually offered by rival systems), including eye liner, lipstick, eye brightening, cheek lift and soft focus. Changes show up almost instantaneously to make sure you don't miss a shot.

Live Bulb

During long-exposure bulb shooting, this clever feature displays the image you are shooting on the OLED rear-panel monitor or the electronic viewfinder (EVF), and updates it at set intervals. This gives you a big advantage over regular bulb features, which normally show a blank screen while you are taking the shot. You can watch the image as it's created and stop the exposure if need be – to make sure you get exactly the result you want.

Built-in image stabilisation

Built directly into the camera, this feature can stabilise any attached lens, thus improving the image quality of photos. First a gyro sensor detects the precise direction of the camera shake then, using the on-board Supersonic Wave Drive (SWD), the image sensor shifts to compensate for the unwanted movement.

Conversion lenses

Fish-Eye lens converter:

Offers a whole new level of creativity. It captures a distorted hemispherical image to generate dramatic shots with a wrap-around quality.

Macro lens converter:

Enables the user to capture fascinating close-ups from as little as 24cm away from the subject (depending on the lens). Perfect for unusual shots of the natural world.

Wide-angle lens converter:

Ideal for shooting in confined spaces, a wide-angle lens converter allows the user to capture a broader shot, for example to include more people at a party. What's more, it alters the proportions of close and distant subjects. Subjects nearer the lens appear much larger while subjects in the background shrink – creating a dynamic sense of depth.

Digital Image Stabilisation

Helps to avoid image blur caused by camera shake or fast-moving subjects.

Dual Image Stabilisation

Providing two-fold protection, this special function helps to avoid image blur caused by camera shake or fast-moving subjects. It combines high ISO values with a CCD-based mechanical image stabiliser, where a built-in gyro sensor detects camera movement and adjusts the CCD accordingly.

e-Portrait

Recognises faces and automatically makes them and adjacent areas appear smoother, brighter and more youthful – before or after the shot is taken.

Echo Effect for Movies

Creates a ghosting effect to add a dynamic extra dimension to your videos. You can create one-shot or multi-echo effects.

Eye-Fi card compatibility

Lets users insert an Eye-Fi SD storage card and set it to automatically wirelessly transfer new photos and HD movies to the sharing website and computer of their choice.

FAST AF

FAST AF (Frequency Acceleration Sensor Technology Autofocus) is a super-fast autofocus system and a breakthrough in autofocus technology. FAST AF is fed by a new sensor that supplies the necessary video signals at double the read-out speed (120fps) of previous sensors. The electrifying performance of FAST AF is enhanced by Full Time AF that ensures the camera constantly adjusts the focus, even before a photo or movie is taken. Not only does FAST AF guarantee lightning quick focussing, it also speeds up the AF system boot response following shutter release.

GPS & e.compass

Automatically records the geographic location where your photos were taken so you can re-trace your steps in pictures on a digital map and easily sort through large numbers of pictures according to location. GPS & e.compass works in more than 180 countries and can identify more than 700,000 landmarks, displaying the information as text at the top of the image. For each photo, GPS & e.compass records latitude and longitude, plus the direction you are shooting in. What's more, it retrieves this data quickly – thanks to new Assist GPS, your camera always connects to the satellite network in under 10 seconds.

Handheld Starlight Mode

One of several features powered by Olympus' new 16 Megapixel backlit CMOS Sensor, Handheld Starlight Mode counteracts picture noise and camera shake so you can capture razor-sharp photos in poor light without using a tripod. You simply point your Olympus and shoot. Instead of recording just one image, the camera takes multiple images very quickly at different exposure settings then automatically merges them, selecting the most suitable gradation for each part of the photo and discarding the rest. The result is a perfectly exposed handheld composite photo that you couldn't normally shoot without supporting the camera on a base.

HD Movie (720p High Definition)

High Definition video (HD video) delivers a high-quality movie experience when played back on an HD TV. In HD Movie Mode, the camera captures HD video using the advanced AVI Motion JPEG or MPEG-4 AVC/H.264 movie compression format at a resolution of 1280 x 720 pixels.

HDR Backlight Adjustment

What Shadow Adjustment Technology is to people shots, HDR Backlight Adjustment is to photos of inanimate objects. Driven by Olympus' powerful 16 Megapixel backlit CMOS Sensor, it helps you capture the scene just as you see it, no matter if you're shooting against the light. Instead of recording just one shot, your camera takes multiple images very quickly at different exposure settings then automatically merges them, selecting the most suitable gradation for each part of the photo and discarding the rest. In this way, HDR Backlight Adjustment effectively creates a collage of ideally exposed photos, blended seamlessly into one perfect shot.

High Sensitivity (HS) Sensor

The High Sensitivity CCD Sensor is larger than the sensors usually found in compact cameras and its pixels are larger than those in comparable sensors, too. It provides outstanding image quality in any lighting conditions, including twilight, low light, dusk and dawn.

i-Auto Mode

The "intelligent-Auto" mode uses advanced automatic detection technology that enables the camera to automatically recognise up to six or eight (depending on the camera) of the most commonly shot scenes. This makes it possible to capture perfect photos without the need for manual settings.

i-Underwater Snapshot

In i-Auto Mode, the camera detects when it is underwater and automatically

activates i-Underwater Snapshot, adjusting the tricky settings required for top-quality underwater shooting. It's perfect for portraits shot in shallow water and captures the subject and the background vividly.

[ib] software

Olympus now offers [ib], an integrated photo browsing and organising software. Images can be organised by person with a new face recognition technology, by place with a GPS-based mapping function or by event.

i-Enhance

i-Enhance automatically enhances colours so that the image captured more closely resembles the intensity of the scene the way we remember it.

iHS (Intelligence, High Sensitivity and High Speed)

iHS is a combination of advanced technologies that let you capture exactly the photos you want, no matter the shooting conditions. By dramatically improving low-light performance, speeding up camera response and enhancing scene and subject recognition, iHS transforms results when you shoot fast-moving subjects, night scenes and other traditionally difficult shots for photographers. The key technologies behind iHS are the next-generation TruePic V and VI image processor and the backlit CMOS Sensor that delivers high sensitivity and low noise. These two technologies drive a number of advanced Olympus features that take all the work out of capturing difficult shots, from HDR Backlight Adjustment to Advanced Shadow Adjustment.

In-camera Panorama

Lets you create an impressive super-wide angle, wrap-around photo simply by panning the camera across the scene. Three frames are taken and combined by the camera. As soon as the target marks and pointers overlap, the camera automatically releases the shutter.

Live Guide

An extension of i-Auto, in just three steps Live Guide lets anybody master the settings that make all the difference – motion and background blur, colour intensity, lighting temperature and brightness. In a typical situation, Live Guide helps you blur out the background to make a shot more dramatic and show off the foreground to the best effect. Instead of having to adjust depth of field using the lens or menu yourself, now you just move a slide bar up and down on the LCD. Live Guide automatically adjusts all the parameters and alters the picture to show what affect your changes would have on the end result. When you see the effect you want on the LCD, you stop scrolling

and move on to the next setting – or just capture the shot.

Macro Arm Light

Not one light, but two bright LEDs – each on the end of its own fully flexible metal arm and powered by the camera. Both arms extend out up to 17cm from a sleek and slender unit mounted on the Accessory Port. For macro shots or attractive close-ups of small items for sale in online auctions, the Macro Arm Light is ideal for getting the lighting just right.

Micro Four Thirds Standard

Micro Four Thirds was developed to maximise the performance potential of digital imaging technology. It allows users to enjoy the same high image quality as with the Four Thirds Standard's 4/3-type image sensor in a much more compact camera body. The new Micro Four Thirds Standard has made it possible to develop ultra-compact digital camera systems with interchangeable lenses that are unlike anything seen before. It also incorporates a greater number of lens-mount electrical contacts for the support of new features and expanded system functionality in the future.

Multi-motion Movie IS (Image Stabilisation)

When you're walking and capturing videos at the same time, blur can be a big problem. Not with Multi-motion Movie IS. This advanced image stabilisation technology counteracts blurring even with slow-moving subjects, long shots and pans. It's ideal for making dynamic, spontaneous movies when you're on the move – and invariably don't have a tripod.

Multi Aspect

Lets photographers choose from a number of different aspect ratios so they can frame scenes individually and add expression to shots. The ratio selected shows up on the camera's LCD or electronic viewfinder. Depending on the camera, this feature offers some or all of the following ratios: 4:3, 3:2, 16:9 and 6:6.

Multi Exposure

With this feature, RAW images can be overlapped to create a new picture while shooting or in Editing Mode.

Multi Recording

Olympus Dual Engine technology allows users to combine various photo and movie recording modes simultaneously. Olympus cameras with Multi Recording offer at least one of the following combinations:

Photo & Movie:

A Full HD movie and photos. While users are recording a Full HD movie, they can take a high-resolution photograph as well.

Multi-File Movies:

A Full HD movie and a movie with less resolution.

Multi-Framing Movies:

A wide-angle and a close-up HD movie.

Magic Filter & Original Movie:

A regular HD movie and a movie with a Magic Filter effect.

OLED

Organic light-emitting diode displays emit light directly and offer significant advantages over LCDs: better power efficiency, deeper black levels, increased contrast, more realistic colours, wider viewing angles and improved brightness.

PENPAL

A sleek Communication Unit for storing up to 2600 images and transferring them via wireless Bluetooth® to other Bluetooth®-enabled devices, such as a mobile phone, PC or even another PENPAL-equipped camera. From there it's easy to share them with friends in online communities or via e-mail.

Pet Detection

Automatically detects dog or cat faces (two different modes) and works together with the Auto Release to capture the photo the moment the dog or cat turns to face the camera.

Photo Surfing

By selecting this option in the Playback menu, users can opt to browse pictures by date, scene, person, place, or image collection.

Scene Mode

Offers a choice of different scenes to suit the subject being captured, for example, landscape, night, beach and snow or pet. The camera automatically adjusts a host of parameters to achieve the best possible result for the chosen scene.

Shadow Adjustment Technology (SAT)

A technology designed to improve exposure for pictures with dark areas. Using a sensor that works much like the human eye, dark parts of a composition (e.g., a shadow under a tree) are identified and the camera then adjusts the exposure settings accordingly for those areas. The result is a more realistic and detailed picture.

Smart Panorama

Allows the user to create an impressive super-wide angle, wrap-around photo simply by panning the camera horizontally or vertically. There's no need to pay attention to points of intersection – the camera knits the separate stills together automatically.

Super-resolution Zoom

A clever technology that effectively increases the power of your camera's optical zoom, with virtually no loss of image quality. Unlike digital zooms, which trade off image resolution and sharpness against zooming power, Olympus' Super-resolution zoom digitally extends the range of the optical zoom and uses frequency range analysis to counteract fuzzy edges. For example, it can boost a 12.5x optical zoom to 25x but still retain the clear outlines and low noise of an optically zoomed image.

Supersonic Wave Filter

Dust entering digital cameras with interchangeable lenses can affect image quality. The Supersonic Wave Filter is a transparent filter located between the camera's shutter and sensor. It shakes off settled dust particles by generating a series of ultrasonic vibrations. Olympus was the first to incorporate dust protection.

TruePic III+ image processor

Automatically enhances important aspects of image quality, including colour reproduction (range, saturation and brightness) and picture sharpness (reduced image noise, improved edge reproduction), as well as processing data faster. Supports the Art/Magic Filters that enable unprecedented creative expression.

TruePic V image processor

Olympus' cutting edge image processing engine. It automatically enhances important aspects of image quality, including colour reproduction (colour range, saturation and brightness) and picture sharpness (reduced image noise, improved edge reproduction), as well as providing faster processing speeds. Furthermore, it supports Art/Magic Filters, HD Movie recording and high sensitivity shooting at up to ISO 6400 – for unprecedented creative expression.

TruePic VI image processor

This powerful, state-of-the-art image processing engine is especially designed for the new generation of Olympus cameras. Like the processors

used in computers, TruePicVI is essentially two separate processors, with one half dedicated purely to image reproduction. It enables the camera to capture and process images faster, with higher quality and extremely high light sensitivity of up to ISO 12800. The extra power of TruePic VI supports Olympus' super-fast autofocus system FAST AF (Frequency Acceleration Technology Autofocus). It is also crucial for 1080i Full HD movies and additional on-camera Magic Filters, Art Filters and Art Filter Effects that allow for spontaneous creative expression. What's more, it shortens recovery time and noticeably reduces noise. Colour range, saturation and detail are more impressive than ever before.

ZUIKO DIGITAL lens

ZUIKO DIGITAL lenses, first developed for Olympus cameras in 1936, provide precision and quality for professionals and amateurs alike. The design of ZUIKO DIGITAL lenses exploits the full potential of the camera's digital image sensors, resulting in clear photos with strong colours and sharp contrasts, right to the edges of the image.