E-M1X

- Two TruePicVIII image processor with double quad-core system with dedicated AF performance processing chip
- Advanced AF system with high-speed sequential shooting - C-AF of 18fps and S-AF of 60fps
- Fast-response EVF with 6 millisecond response time to easily keep up with moving subjects
- Splash/dust/freezeproof build which also dampens shock to enable worry-free shooting

- Cross-type AF sensor for higher accuracy and more flexibility when focusing on the subject
- Pro Capture mode for lag-free shooting so you can get the precise shot you want
- Unrivalled mobility with lightweight, compact design even with large telephoto lenses
- Advanced battery with increased capacity and battery status display

Absolute Confidence.

The E-M1X delivers the absolute confidence every photographer comes to expect with a professional camera. It perfectly meets the needs of true professionals: excellent handling, class-leading capture and recording technologies, and a system for assignments anywhere in the world, any time of year. The innovative technology and features have been engineered to take the game a level higher: On the outside, the integrated vertical grip gives photogaphers instant flexibility and mirrors the horizontal grip for intuitive operation, including the Multi Selector joystick. While the world's best dust/splashproof sealing* makes a rain cover obsolete. On the inside, a range of autofocus options and the world's best image stabilisation**, which has also been specially engineered for filmmaking, deliver the high-res picture quality and precision essential for photo shoots. Videographers also have in the E-M1X a tool for recording life in superb C4K.

*Based on the IEC standard 60529, paired with M.Zuiko water-resistant lens, as of 1/2019
**Based on the CIPA standard, within system cameras, when the E-M1X is paired with the M.Zuiko Digital ED 12–100mm F4.0 IS PRO lens, as of 1/2019

OLYMPUS

Specifications

Type

Body material	Magnesium alloy body
Lens mount	Micro Four Thirds

Image Sensor

Type	4/3" Live MOS sensor
Effective pixels	20.4 Megapixels
Filter array	Primary colour filter (RGB)
Aspect ratio & area	4:3 / 17.3 x 13.0mm
Full resolution	21.8 Megapixels

Engine

Type	2x TruePic VIII

Filter

Dust reduction filter	Supersonic Wave Filter

Viewfinder

Type	Electronical Viewfinder
Pixel number	2360K dots
Diopter adjustment	Yes; -4.0 - +2.0 diopters / built-in type
Field of view	Approx. 100%
Magnification	Max. 1.65x with a 50mm lens set to infinity at -1 dioptre (depending on selected viewfinder style)
Eye point	21mm at -1 dioptre from eyepiece lens
Style	3 styles selectable
Displayed information	Aperture value
	Shutter speed
	AF frame (super impose)
	AF confirmation mark
	AF lock
	Auto bracket
	Battery check
	Exposure compensation indicator
	Exposure compensation value indicator
	Exposure level indicator
	Exposure mode
	Flash
	FP flash
	IS activating mode
	Metering mode
	Number of storable sequential pictures
	White balance
	Level Gauge
	Highlight & Shadow
	Live Pre-view function
	Histogram
Brightness adjustment	Adaptive Brightness Technology / Manual settings: +/- 7 levels
Correction of colour temperature	+/- 7 levels
S-OVF	Expands the Live View dynamic range

*Available in the EVF when in P, A, S, M and B modes. Art filter, WB and exposure are not reflected in EVF.

Live View

Displayed information	Aperture
	Shutter speed
	Auto bracket
	AE lock
	Focus mode
	Shooting mode
	Battery check
	IS activating mode
	Face / Eye detection mode
	Record mode
	ISO
	Sequential shooting mode
	White Balance
	Metering mode
	Exposure compensation value
	AF frame display
	AF confirmation mark
	Shooting information
	Spot metering area
	Super FP
	Flash status
	Touch Panel Condition
	Focal length
	Flash mode
	Histogram
	Level Gauge
	Highlight & Shadow
	Focus peaking
	Number of storable pictures
	Custom
	Face detection
	Flash intensity
	WiFi
Field of view	Approx. 100%
Magnification levels	3 / 5 / 7 / 10 / 14x
Dynamic range expansion	When in HDR1 or HDR2
Display modes	Comparison
	Grid (4 types)
	Grid
	Histogram
	Level Gauge
	Magnified View
	Standard information
	Off

Image Stabiliser

Type	Sensor shift
Modes	Five-dimensional, vertical or horizontal activation, automatic
Effective Compensation Range	Up to 7.0 EV steps*
	Up to 7.5 EV steps**
	Based on CIPA measurement conditions *When using M.Zuiko Digital ED 12-40mm f/2.8 PRO (focal length =40mm (35mm equivalent: 80mm))
	**When using M.Zuiko Digital ED 12-100mm f/4.0 PRO (focal length =100mm (35mm equivalent: 200mm)), with camera body IS set to Off, Frame rate: High
Live View stabilisation	Yes

Focusing System

Method	TTL phase difference detection system, contrast detection system
Focus areas	121 points / cross-type phase detection AF
	121 points / contrast AF
	All target, single target (normal / small), group target (5-area / 9-area / 25-area), custom target 1-4 (AF area and its increment steps selectable)
AF working range	-6 - 20EV (ISO approx.100, with a f/1.2 lens)
AF lock	Yes; Locked by first position of shutter release button in single AF mode, AE/AF lock button (customised)
Modes	Manual focus
	Preset MF**
	Single AF*
	Continuous AF*
	AF* Tracking
	Stacking
	Bracketing
	* incl. manual override
	** Distance setting values are rough estimates and only AF lenses can be used.
AF illuminator	Yes
Manual focus	Yes; With enlarged focusing area or focus peaking
Face Detection extension	Eye Detect AF: Off
	Left side priority
	Near side priority
	Right side priority
Predictive AF	Yes
AF tracking	Yes; Available in continuous AF mode
Intelligent Subject Detection AF	Formula cars
	Ralley cars
	Motorcycles
	Aircrafts
	Helicopters
	Bullet trains
	Steam locomotives

Focus peaking

Colour selection	White, black, red, yellow
Intensity	High / Normal / Low
Back light effect	On / Off

Focus Bracketing Mode

Number of images	3 - 999 shots
Step size	10 levels
	Compatible with: All Micro Four Thirds AF lenses

Focus Stacking Mode

Technology	3-15 images are taken at different focus points and automatically composited together into a single

Exposure System

Modes	Programme automatic
	Aperture priority
	Shutter priority
	Manual
	Bulb
	Time
	Movie
	HDR
	My Mode
	Custom shooting
	Custom 1
	Custom 2
Exposure compensation	+/- 5 EV (1, 1/2, 1/3 steps)
	Note: Monitor and EVF displays only up to ±3 EV.
Exposure bracketing	2 / 3 / 5 frames (+/- 1/3, 2/3, 1 EV steps)
	7 frames (+/- 1/3, 1/2, 2/3 EV steps)
ISO bracketing	3 frames (1/3, 1/2, 1 EV steps)
AE lock	Yes
My Mode	4 settings storable
Enhancement function	Digital Shift (horizontal and vertical compensation can be performed simultaneously)
	Shadow Adjustment Technology
	Flicker Scan: Available for M, S and silent mode (can be confirmed in Live View)
HDR bracketing	3 / 5 frames (+/- 2 / 3 EV steps)
	7 frames (+/- 2 EV steps)

Multi-Exposure

Max. number of frames	2 frames (shooting)
	3 frames (editing)
Auto gain control	Yes
Frame assistance	Live View

Light Metering

Method	TTL open aperture light metering
Zones	324 zones Multi-pattern Sensing System
Detection range	-2 - 20 EV (17mm f2.8, ISO 100)
Modes	ESP light metering
	Spot metering
	Centre weighted metering
	Highlight
	Shadow

Art Filter

Modes	Pop Art
	Soft Focus
	Pale & Light Colour
	Light Tone
	Grainy Film
	Pin Hole
	Diorama
	Cross Process
	Dramatic Tone
	Gentle Sepia
	Key Line
	Water colour
	Vintage
	Partial Colour*
	Bleach Bypass
Variation / Effect	Available
Art Filter bracketing	Art Filters selectable

Sensitivity

Auto	(customisable, default ISO LOW - 6400)
Manual	ISO LOW - 25600 in 1/3 or 1 EV ISO steps

Shutter

Shutter type	Computerised focal-plane shutter
Self timer	2s / 12s / Custom
Durability	400000 shots

Shutter Speeds

Shutter speed range	1/8000 - 60s (in 1/3, 1/2, 1 EV steps)
Bulb mode	Up to 30 minutes (selectable longest time in the menu, default: 8 minutes)

High res shot

Shutter type	Electronic shutter
Shutter speed	1/8000 - 60s
Start delay	0, 1/8, 1/4, 1/2, 1, 2, 4, 8, 15. 30s
Resolution	JPEG: 8160 x 6120 / 5760 x 4320 RAW: 10368 x 7776
	Equivalent to 50M / 25M pixel sensor (8 shots combined into a single JPEG using sensor shift)
	Available in P/A/S/M mode

Anti shock mode

Shutter type	Electronic first curtain shutter
Shutter speed	1/320* - 60s
Start delay	0, 1/8, 1/4, 1/2, 1, 2, 4, 8, 15, 30s
	* For speeds over 1/320 sec., mechanical shutter will automatically be selected.

Silent mode

Shutter type	Electronic shutter
Shutter speed	1/32000 - 60s
Start delay	0, 1/8, 1/4, 1/2, 1, 2, 4, 8, 15. 30s

Flicker Scan

Stills	1/7634 - 1/50s
Movies	1/250 - 1/30s *
	* Frame rates greater 30fps are limited to their reciprocal value

Handheld High res shot

Shutter type	Electronic shutter
Shutter speed	1/8000 - 60s
Resolution	JPEG: 8160 x 6120 / 5760 x 4320 RAW: 8160 x 6120
	Equivalent to 50M / 25M pixel sensor (8 shots combined into a single JPEG using sensor shift)
	Available in P/A/S/M mode
	Flash can not be used

White Balance

AUTO WB system	Advanced detection system with Live MOS sensor
Manual White balance (One-Touch)	Yes
White balance bracketing	3 frames / +/- 2, 4, 6 mired steps
One-touch white balance	4 custom settings can be registered
Custom WB	1 setting can be registered at Kelvin temperature (2000K - 14000K)
Preset values	Tungsten
	Flourescent 1
	Sunlight
	Flash
	Overcast
	Shade
	Underwater
Auto Flash adjustment	Off / Auto WB / Flash
Keep warm colour	On / Off

Sequence Shooting

Speed (H)	Approx. 15fps
	Max. number of frames: RAW 103 / JPG (LF): 132
Speed (L)	10fps
	Max. number of frames: RAW 287 / JPG (LF): Up to card capacity
Silent mode	
Speed (H)	Approx. 60fps
	Max. number of frames: RAW 49 / JPG (LF): 49
Speed (L)	Approx. 18fps
	Max. number of frames: RAW 74 / JPG (LF): 89
Pro Capture mode	
Speed (H)	Approx. 60fps
Speed (L)	Approx. 18fps
Pre-shutter Frames	0 - 35 frames (recorded by half release prior to full release)
Frame count limiter	1- 99 frames / Off (unlimited frames) (incl. pre-shutter frames)
Conditions	Memory card: TOSHIBA SDHC UHS-II R95 W90 EXCERIA™
	When using the M.Zuiko Digital ED 12-40mm f2.8 Pro
	Maximum sequential shooting speed may be affected by several factors including lens used, brightness, aperture, shutter speed, and ISO setting.
	When ISO is 8000 or above, 30 fps becomes the maximum sequential shooting speed. The actual shooting speed may become slower than the set shooting speed by a few frames per second. When using ISO Bracketing, performance will be affected at ISO 2000 or above.

Image Processing

Colour space	sRGB / AdobeRGB
Sharpness + Contrast	5 levels
Contrast	5 levels
Saturation	5 levels
Black & White filter	Yellow, Orange, Red, Green
Black & White toning	Sepia, Blue, Purple or Green in Black & White mode
Picture mode	
Gradation	4 levels (auto, high key, normal, low key)
Engine	TruePic VIII
Art Filter bracketing	Available
Tele converter effect	2x
Fisheye compensation	Available when M.Zuiko Digital ED 8mm Fisheye PRO is attached Angle of view adjustable in 3 levels Compensation automatically ON when using Underwater Modes, available (can be confirmed in Live View)

External Flash Control

X-sync speed	1/250s / 1/8000s (Super FP Mode)
Type	TTL AUTO, AUTO, MANUAL, FP TTL AUTO, FP MANUAL
Modes	Auto
	Red-eye reduction
	Slow synchronisation
	2nd curtain and slow synchronisation
	Fill-in for exclusive flash
	Manual
Intensity	+/- 3 EV (1/3, 1/2, 1 EV steps)
	Note: Some functions are only available if they are supported by the external flash.

Wireless Flash Control

Number of channels	4 channels
Compatible external flash	FL-36R, FL-50R, FL-300R, FL-600R, FL-700WR, FL-900R
Control method	Triggered and controlled by bundled flash
Group setting	4 groups
	Available when used together with cameras compatible with the Olympus wireless RC flash system.

Monitor

Monitor type	Vari-angle LCD - Touch Panel
Monitor size	7.6cm / 3.0" (3:2)
Resolution	1037K dots
Brightness adjustment	+/- 7 levels
Colour balance	+/- 7 levels Vivid (default) / Natural
Touch Control fucntions	AF area enlargement
	AF area selection
	Art Filter
	Enlargement
	Enlargement playback
	Frame forward/backward
	Live Guide
	Scene Modes
	Shooting mode
	Shutter release
	Super Control Panel
	Wifi connection

Level Gauge

Detection	2-axis
Display	Rear display and viewfinder

Super Control Panel

Displayed information	Battery indicator
	Record mode
	Shutter speed
	Aperture value
	Exposure compensation indicator
	ISO
	AE bracketing
	AF frame
	Focus mode
	AEL notification
	Face detection
	Number of storable frames
	Metering mode
	Exposure mode
	Exposure level view
	Flash compensation value
	Colour space
	Gradation
	Colour saturation compensation value
	Sharpness compensation value
	Contrast compensation value
	White balance
	White balance compensation value
	Noise reduction
	Flash mode
	Drive mode
	Internal temperature warning
	Histogram

Recording Formats

RAW	12bit
RAW & JPEG	Yes; parallel recording
JPEG	Yes
Aspect ratio	4:3 / 3:2 / 16:9 / 6:6 / 3:4

Image Size

RAW	5184 x 3888 compressed
	5184 x 3888 Fine (compression: 1/4)

Still Image Recording

EXIF	2.3
DCF	Yes
RAW	Yes
Dual SD card settings	Standard, Auto Switch, Dual Independent, Dual Same
	When two cards are inserted, card to be saved on to or to be viewed can be designated.

Movie Recording System

Recording format	MOV(MPEG-4AVC/H.264)
Picture mode	Flat, OM-Log400 (View assist compatible)
Time code	Rec run / Free run
	Drop frame / Non-drop frame
Image Stabilisation Mode	Yes; Sensor shift
	M-IS1 (Image sensor shift and electronic image stabilizer with multi motion IS)
	M-IS2 (Image sensor shift with multi motion IS)
4K Movie quality	4096 x 2160 (C4K) / 24p / IPB (approx. 237 Mbps)
	3840 x 2160 (4K) / 30p, 25p, 24p / IPB (approx. 102 Mbps)
HD Movie quality	Full HD 1920 x 1080 (16:9) / 30p, 25p, 24p / ALL-I (A-I), IPB (SF, F, N) (MOV)
	Full HD 1920 x 1080 (16:9) / 60p, 50p / IPB (SF, F, N) (MOV)
	HD 1280 x 720 (16:9) / 60p, 50p, 30p, 25p, 24p / ALL-I (A-I), IPB (SF, F, N)
	ALL-I: ~ 202 Mbps
	FullHD IPB (SF: ~52Mbps, F: ~30Mbps)
	HD IPB (SF: ~26Mbps, F: ~14Mbps, N: ~10Mbps)
	HD 1280 x 720 (16:9) / 30p
Movie quality	640 x 480 / 30p (AVI Motion JPEG®)
Maximum Recording Time	29min (MOV)
Max. file size	4GB (AVCHD)
	2GB (Motion-JPEG)
Exposure Modes	Aperture priority
	Manual
	Programme automatic
	Shutter priority
	* Frame rate may drop when using certain art filter
	Class 10 or higher SD card is recommended for movie shooting
	UHS-II or UHS-I U3 card is recommended for ALL-I shooting

Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer

Movie Specialties

High-Speed Recording	1920x1080 (MOV) / 120fps
Time lapse	4k, 1080p, 720p (AVI Motion JPEG®)
Fast motion	Yes
Slow motion	Yes
Movie clips	1, 2, 4, 8s
	(Extension up to 16s by pressing record button before clip ends.)
Movie effects	Multi shot echo
	One shot echo
	Art fade
	One push tele-converter
	Old Film
Art Filter	Cross Process
	Diorama
	Dramatic Tone
	Gentle Sepia
	Grainy Film
	Key Line
	Light Tone
	Pale & Light Colour
	Pin Hole
	Pop Art
	Soft Focus
	Vintage
	Partial Colour*
	Bleach Bypass
	* 18 colours selectable
	Frame rate limited to 30fps or lower
Flicker Scan	Available in M mode (can be confirmed in Live View)

HDMI Live View

Monitor mode	Video signal and info display is processed
	While recording, footage is simultaneously displayed on the HDMI monitor and on the camera, but the info display is shown only on either one of the two.
	While playing movies, footage is simultaneously displayed on the HDMI monitor (normal size) and on the camera (normal size or enlarged).
Record mode	Only video signal is processed
	Movie quality is set to YCbCr 4:2:2 (8 bit), frame rate follows movie setting (24p, 30p and 60p settings are not recommended.), and sound will be recorded.

Sound Recording System

Internal microphone	Stereo
Recording format	Stereo PCM/16bit, 48kHz, Wave Format Base
Image footage	30s
Speaker	Yes
Microphone functions	Wind Noise Reduction
	Recording Volume
	Volume limiter
	Audio Dubbing

Linking Olympus PCM Recorders

Functions	Slate Tone / Synchronised Audio Rec-Movie Rec
	Compatible with: LS-100

View Images

Modes	Single
	Index
	Clips
	Calendar
	Zoom
	Movie
	Slide show
	Light box
Auto rotation	Yes
Histogram in playback mode	Yes
Shooting information	Off / On
Highlight/Shadow point warning	Yes

Erase / Protect / Copy Function

Erase modes	Single, All, Selected
Image protect mode	Single frame, Selected frames, All Frames, Release protect (Single/All selected)

Image Editing

Editing functions	RAW data edit
	Red-eye reduction
	Sepia
	Black & White
	Resize
	Correction of saturation
	Correction of brightness
	Correction of colour balance
	Shadow Adjustment
	Trimming
	e-Portrait
	Aspect ratio

Menu

Menu languages in camera	English, French, German, Spanish, Italian, Russian, Czech, Dutch, Danish, Polish, Portuguese, Swedish, Norwegian, Finnish, Croatian, Slovenian, Hungarian, Greek, Slovak, Turkish, Latvian, Estonian, Lithuanian, Ukrainian, Serbian

Customisation Options

Fn Button	Yes
My Mode	4 settings storable (Can be set to mode dial.)
Factory reset	Full / Basic
Programmable button	Yes

Interface

Media	SD Memory Card (SDHC, SDXC, UHS-I, UHS-II compatible) Class 10 or higher SD card is recommended for movie shooting UHS-II or UHS-I U3 card is recommended for 4K, C4K, ALL-I shooting.
HDMI™	Yes; Micro connector (Type D) *
USB 3	Type C
Wireless connectivity	WiFi
	Bluetooth®
	* "HDMI", the HDMI logo and "High-Definition Multimedia Interface" are trademarks or registered trademarks of HDMI Licensing LLC.
Tethered control	USB cable (camera operation by both PC or camera controls)
	WiFi (transfer of recorded images to PC via access point, 5GHz and 2.4GHz available)
Microphone jack	3.5 ø mm mini-jack
Earphone jack	3.5 ø mm mini-jack
Synchro socket	Yes

Wi-Fi Functions

Easy Connection	QR code setting
Wireless Shooting	Live View
	Power off
	Rec View
	Self timer
	Touch AF & Shutter
	P/A/S/M exposure modes
	Bulb mode
	Zoom
	Movie recording
	Live Composite
	Short movie

Power Supply

Battery	BLH-1 Lithium-Ion Battery
Sleep mode	1, 3, 5min. and off selectable.
DC-input	AC-5
Internal Charging	AC / USB
USB charging	Performance varies depending on different USB devices
USB bus power	USB PD bus power can be used (PD compliant camera: Rev 3.0 Ver 1.0a)
Battery life	
Image shooting	870 shots (using 2 BLH-1 and Toshiba SDXU-D032G with IS ON, with no flashes attached, based on CIPA test standards) 2580 shots (using quick sleep mode, under Olympus testing conditions based on CIPA test standards)
Movie recording	170min (standard JEITA conditions) 350min (when zoom and other operational functions are not used)
	Note: Values are approximate.

Environment

Temperature	-10 - 40°C Operating temperature / -20 - 60°C storage temperature
Humidity	30 - 90% operation humidity / 10 - 90% storage humidity

Dimensions

Width	144.4mm
Height	146.8mm
Depth	75.4mm
Weight	997g (including battery and memory card)
	849g (body only)

Exterior

Available Colours	Black