OLYMPUS

DIGITAL CAMERA

E-M10 Mark Ⅲ S

Instruction Manual
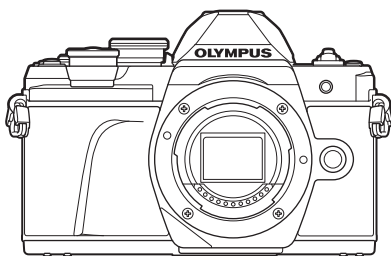
▌ Thank you for purchasing an Olympus digital camera. Before you start to use your new camera, please read these instructions carefully to enjoy optimum performance and a longer service life.

▌ Be sure you have read and understood the contents of "9. SAFETY PRECAUTIONS", before using this product. Keep these instructions available for future reference.

▌ We recommend that you take test shots to get accustomed to your camera before taking important photographs.

▌ The screen and camera illustrations shown in this manual were produced during the development stages and may differ from the actual product.

▌ If there are additions and/or modifications of functions due to firmware update for the camera, the contents will differ. For the latest information, please visit the Olympus website.

Before You Begin

Read and Follow Safety Precautions

To prevent incorrect operation resulting in fire or other damage to property or harm to yourself or to others, read "9. SAFETY PRECAUTIONS" (P. 163) in its entirety before using the camera.

While using the camera, consult this manual to ensure safe and correct operation. Be sure to keep the manual in a safe place once it is read.

Olympus will not be held liable for violations of local regulations arising from use of this product outside the country or region of purchase.

Wireless LAN

The camera features built-in wireless LAN. Use of this feature outside the country or region of purchase may violate local wireless regulations; be sure to check with local authorities before use. Olympus will not be held liable for the user's failure to comply with local regulations.

Disable wireless LAN in areas where its use is prohibited. ☞ "Changing the connection method" (P. 128)

■ User Registration

Visit the OLYMPUS website for information on registering your OLYMPUS products.

■ Installing software/applications

Olympus Workspace

This computer application is used to download, view, and edit photos and movies recorded with the camera. It can also be used to update the camera firmware. The software can be downloaded from the website below. Be prepared to provide the camera serial number when downloading the software.
https://support.olympus-imaging.com/owdownload/

OLYMPUS Image Share (OI.Share)

You can load images in the camera to a smartphone. You can also remotely operate the camera and shoot using a smartphone.
https://app.olympus-imaging.com/oishare/

Product Manuals

In addition to the "Instruction Manual", we also offer a "Camera Function Guide". Consult these manuals when using the product.

Instruction Manual (this pdf)
A how-to guide to the camera and its features. The Instruction Manual can be downloaded from the OLYMPUS website or directly using the "OLYMPUS Image Share" (OI.Share) smartphone app.

Camera Function Guide
A function and setting guide that helps you use camera features to the full. It has been optimized for display on mobile devices and can be viewed using OI.Share.
https://cs.olympus-imaging.jp/jp/support/cs/webmanual/index.html

Indications used in this manual
The following symbols are used throughout this manual.

💡	Points to note when using the camera.
⚠️	Useful information and hints that will help you get the most out of your camera.
☞	Reference pages describing details or related information.

EN | *3*

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Names of parts

① Mode dial ....P. 25
② Rear dial* (🖑)
....P. 45–49, 94
③ ◉ (Movie)/☑ button ....P. 53/P. 98
④ 📷 (Digital Tele-converter)/**Fn2** button
....P. 62/P. 89, 94
⑤ Shutter button ....P. 26
⑥ Front dial* (🖑)
...............................P. 45–49, 61, 66, 94
⑦ Lens attachment mark ....P. 17
⑧ Mount (Remove the body cap before attaching the lens.)
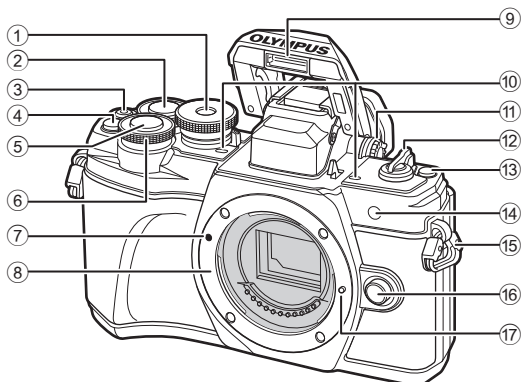
⑨ Built-in flash ....P. 66
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⑪ Diopter adjustment dial...................P. 23
⑫ **ON/OFF** lever ....P. 19
⑬ 🖵 (Shortcut) button ....P. 27
⑭ Self-timer lamp/AF illuminator
....P. 68/P. 103
⑮ Strap eyelet....................................P. 13
⑯ Lens release button ....P. 18
⑰ Lens lock pin

* In this manual, the 🖑 and 🖑 icons represent operations performed using the front dial and rear dial.
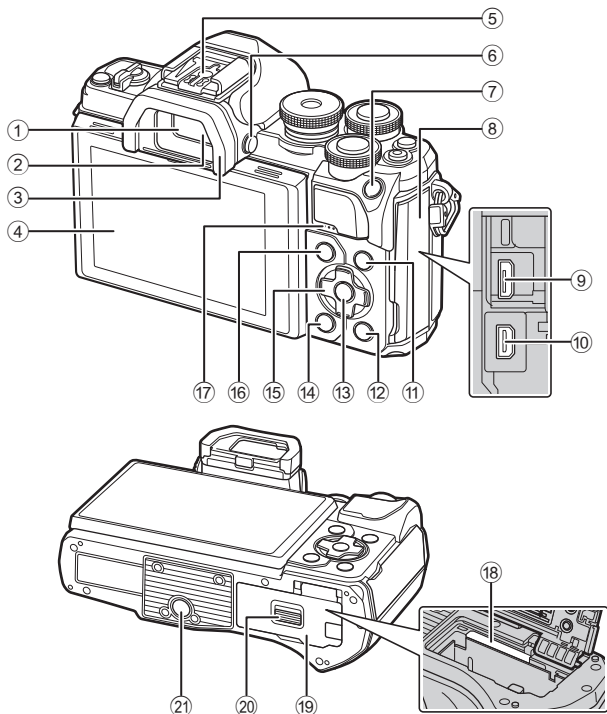
① Viewfinder ....P. 23
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③ Eyecup..P. 145
④ Monitor (Touch screen)
........................P. 21, 23, 52, 70, 92, 100
⑤ Hot shoe ....P. 141
⑥ |□| (Monitor) button ....P. 23
⑦ **AEL/AFL** / **Fn1** button
....P. 61, 120/P. 89
⑧ Connector cover
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⑪ **INFO** button ....P. 24, 93, 121

⑫ ▶ (Playback) button......................P. 94
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⑭ 🗑 (Erase) button ....P. 98
⑮ Arrow pad* (△ ▽ ◁▷)
.................................P. 20, 63–68, P. 94
⑯ **MENU** button...............................P. 101
⑰ Speaker
⑱ Card slot ....P. 16
⑲ Battery/card compartment cover
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⑳ Battery/card compartment lock
....P. 14, 16
㉑ Tripod socket

* In this manual, the △ ▽ ◁▷ icons represent operations performed using the arrow pad.

1 **Preparation**

Unpacking the box contents

At purchase, the package contains the camera and the following accessories.
If anything is missing or damaged, contact the dealer from whom you purchased the camera.

Camera	Body cap	Strap	USB cable CB-USB12

Lithium-ion battery BLS-50	Lithium-ion charger BCS-5	• Basic Manual • Warranty card

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Attaching the strap

1

2

3
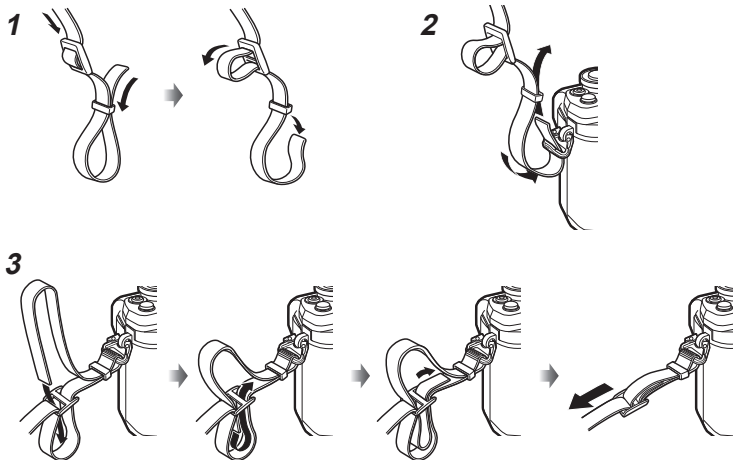
- Attach the strap on the other side in the same way.
- Lastly, pull the strap firmly, making sure that it is fastened securely.

Charging and inserting the battery

1 Charging the battery.

Charging indicator

Charging in progress	Lights orange
Charging complete	Off
Charging error	Blinks orange

(Charging time: Up to approximately 3 hours 30 minutes)

Charging indicator

Direction indicating mark (▲)

Lithium ion battery

AC wall outlet

Lithium ion charger

AC cable
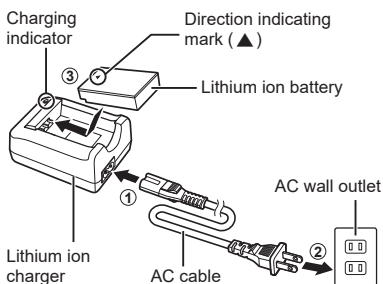
- Unplug the charger when charging is complete.

2 Confirm that the **ON/OFF** lever is in the **OFF** position.

ƎUP

ON

OFF

ON/OFF lever

3 Opening the battery/card compartment cover.
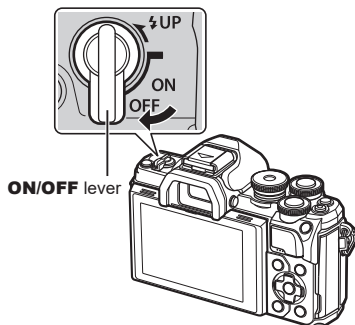
Battery/card compartment lock

Battery/card compartment cover
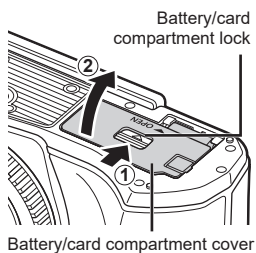
4 Loading the battery.
  • Use only BLS-50 batteries (P. 13, 162).

Direction indicating mark
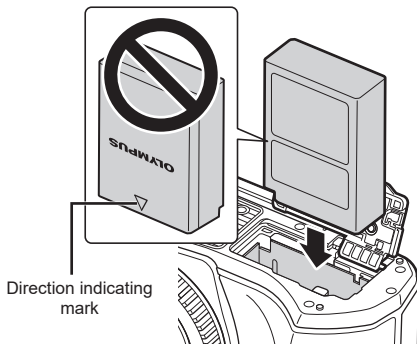
Removing the battery
Turn off the camera before opening or closing the battery/card compartment cover. To remove the battery, first push the battery lock knob in the direction of the arrow and then remove.
  • Do not remove the battery while the card write indicator is displayed (P. 21).
  • Contact an authorized distributor or service center if you are unable to remove the battery. Do not use force.
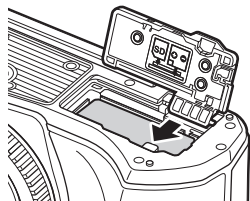
✎
  • It is recommended to set aside a backup battery for prolonged shooting in case the battery in use drains.
  • The camera is not equipped with a built-in charger and cannot be recharged via a USB connection.
  • Also read "Battery and charger" (P. 137).

Inserting the card

In this manual, all storage devices are referred to as "cards."
The camera uses third-party SD, SDHC, or SDXC memory cards conforming to the SD (Secure Digital) standard. Read "Usable cards" (P. 138) before use.

1 Loading the card.
  - Open the battery/card compartment cover.
  - Slide the card in until it is locked into place.
    ☞ "Usable cards" (P. 138)

Terminal area
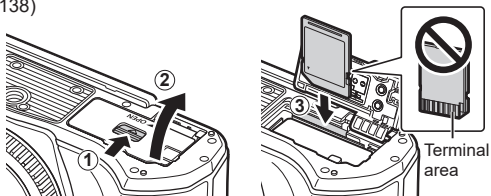
  - Turn off the camera before loading or removing the battery or card.
  - Do not forcibly insert a damaged or deformed card. Doing so may damage the card slot.

2 Closing the battery/card compartment cover.

  - Be sure the battery/card compartment cover is closed before using the camera.
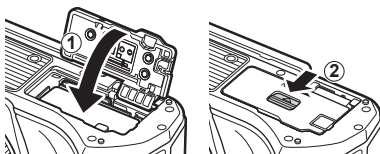
Removing the card

Press the inserted card lightly and it will be ejected. Pull out the card.
  - Do not remove the card while the card write indicator is displayed (P. 21).
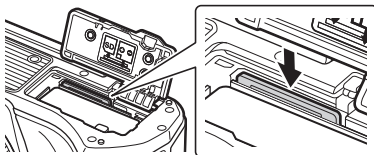
Attaching a lens to the camera

1 Confirm that the **ON/OFF** lever is in the **OFF** position.

ⴏ UP

ON
OFF

ON/OFF lever
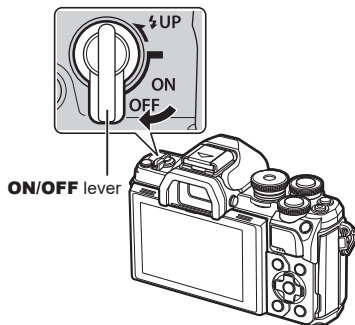
2 Remove the rear cap of the lens and the body cap of the camera.

Rear cap

① ② ② ①
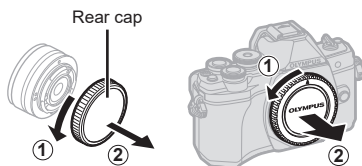
3 Align the lens attachment mark (red) on the camera with the alignment mark (red) on the lens, then insert the lens into the camera's body.

Lens attachment mark
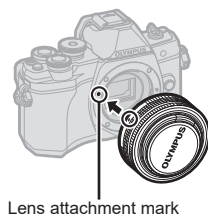
4 Rotate the lens clockwise until you hear it click.
   • Do not press the lens release button.
   • Do not touch internal portions of the camera.

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5 Remove the front lens cap.
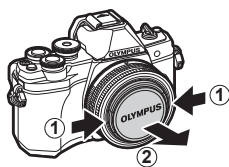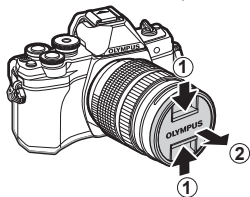
- Before attaching or removing lenses, confirm that the camera **ON/OFF** lever is in the **OFF** position.

Removing Lenses

1 Confirm that the **ON/OFF** lever is in the **OFF** position.
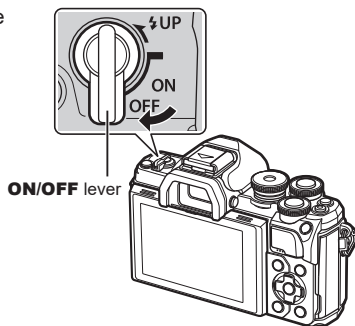
ON/OFF lever

2 Hold the lens release button and rotate the lens as shown.

Lens release button
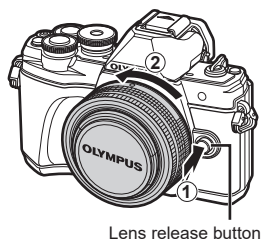
Interchangeable lenses
Read "Interchangeable lenses" (P. 140).

Turning the camera on

1 Set the **ON**/**OFF** lever to the **ON** position.
  - When the camera is turned on, the monitor will turn on.
  - To turn the camera off, return the lever to the **OFF** position.

■ **ON/OFF lever**
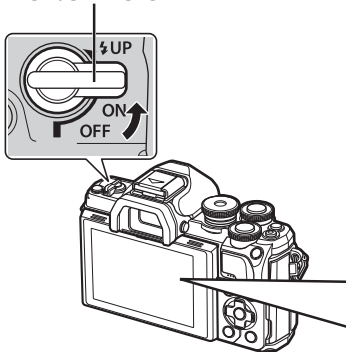
■ **Monitor**

Battery level

The battery level icon will be displayed.

▮▰▰▰ (green): The camera is ready to shoot.
▮▰▰ (green): The battery is not full.
▮▱ (green): The battery is low.
▮▱ (blinks red): Charge the battery.

Using the monitor
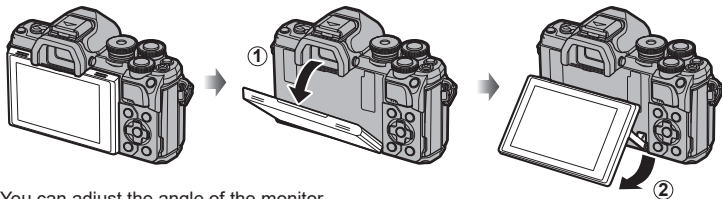
You can adjust the angle of the monitor.

Camera sleep operation

If no operations are performed for a minute, the camera enters "sleep" (stand-by) mode to turn off the monitor and to cancel all actions. The camera activates again when you touch any button (the shutter button, ▶ button, etc.). The camera will turn off automatically if left in sleep mode for 4 hours. Turn the camera on again before use. You can choose how long the camera remains idle before entering sleep mode. ☞ [Sleep] (P. 119)

Setting the date/time and the language

Date and time information is recorded on the card together with the images. The file name is also included with the date and time information. Be sure to set the correct date and time before using the camera. Some functions cannot be used if the date and time have not been set.

You can change the language used for the on-screen display and error messages from English to another language.

1 Display the menus.
   • Press the **MENU** button to display the menus.
   • A guide is displayed in 2 seconds after you select an option.
   • Press the **INFO** button to view or hide guides.

Shooting Menu 1

🗂1 Reset	
🗂2 Picture Mode	✦3
🎥 Digital Tele-converter	Off
▶ Metering	🔲
✿	
🔧	
Back MENU	Set OK

MENU button
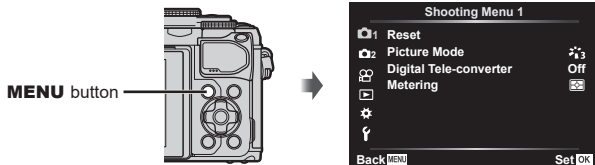
2 Select [🕐] in the [🔧] (setup) tab.
   • Use △ ▽ on the arrow pad to select [🔧] and press ▷.
   • Select [🕐] and press ▷.

Setup Menu

🗂1 Card Setup	
🗂2 🕐	'--.--.-- --:--'
🎥 🈂	English
▶ 🔅	🔆±0 ☀±0
🔧 Rec View	0.5 sec
Wi-Fi Settings	
🔧 Firmware	
Back MENU	Set OK

[🔧] tab
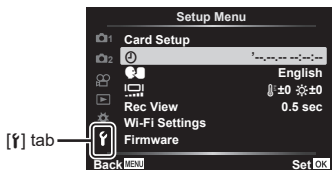
3 Set the date, time, and date format.
   • Use ◁▷ to select items.
   • Use △ ▽ to change the selected item.
   • Press the ⊛ button to set the camera clock.

🕐

Y	M	D	Time	
2020	--	--	--:--	Y/M/D

Cancel MENU

The time is displayed using a 24-hour clock.

4 Select [🈂] (changing the display language) in the [🔧] (setup) tab.
   • Use △ ▽ ◁▷ to highlight a language and press the ⊛ button to select the highlighted language.

5 Press the **MENU** button to exit the menus.

• If the battery is removed from the camera and the camera is left for a while, the date and time may be reset to the factory default setting.

2 Shooting

Information displays while shooting

Monitor display during still photography
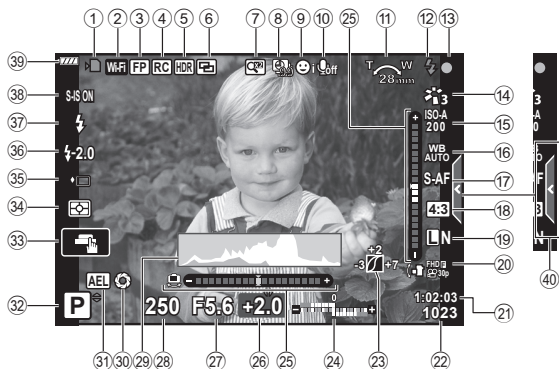
① Card write indicator...................P. 15, 16
② Wireless LAN connection.....P. 125 – 129
③ Super FP flash ....P. 141
④ RC mode..P. 142
⑤ HDR ....P. 36
   AE Bracketing ....P. 40
   Focus Bracketing ....P. 41
⑥ Multiple exposure............................P. 35
   卄 Keystone compensation ....P. 39
⑦ Digital Tele-converter ....P. 103
⑧ Time lapse shooting.......................P. 104
⑨ Face priority/Eye priority ....P. 64
⑩ Movie sound ....P. 107
⑪ Zoom operation direction/
   Focal length/Internal temperature
   warning ⚠℃/℉ ....P. 154
⑫ Flash ....P. 66
   (blinks: charging in progress, lights up:
   charging completed)
⑬ AF confirmation mark......................P. 26
⑭ Picture mode..........................P. 72, 103
⑮ ISO sensitivity ....P. 65
⑯ White balance ....P. 73
⑰ AF mode ....P. 75
⑱ Aspect ratio.....................................P. 76

⑲ Image quality (still images) ....P. 76
⑳ Record mode (movies) ....P. 77
㉑ Available recording time ....P. 139
㉒ Number of storable still pictures ...P. 139
㉓ Highlight & shadow control ....P. 88
㉔ Top: Flash intensity control ....P. 80
   Bottom: Exposure compensation....P. 61
㉕ Level gauge ....P. 24
㉖ Exposure compensation value........P. 61
㉗ Aperture value ....P. 45 – 49
㉘ Shutter speed ....P. 45 – 49
㉙ Histogram ....P. 24
㉚ Preview...P. 90
㉛ AE lock....................................P. 61, 120
㉜ Shooting mode.........................P. 25 – 54
㉝ Touch operation ....P. 52
㉞ Metering mode................................P. 82
㉟ Sequential shooting/Self-timer........P. 68
   Silent shooting ....P. 37
㊱ Flash intensity control ....P. 80
㊲ Flash mode.....................................P. 66
㊳ Image stabilizer...............................P. 80
㊴ Battery level ....P. 19
㊵ Live guide recall..............................P. 28

Monitor display during movie mode
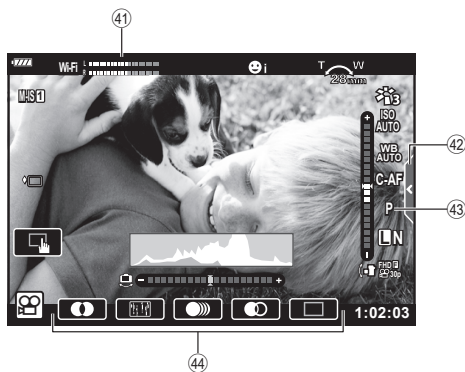
⑪ Recording level meter...................P. 107
⑫ Silent shooting tab ....P. 60
⑬ Movie (exposure) mode ....P. 79
⑭ Movie effect ....P. 55

Switching between displays

The camera is equipped with an eye sensor, which turns the viewfinder on when you put your eye to the viewfinder. When you take your eye away, the sensor turns the viewfinder off and turns the monitor on.

Put your eye to the viewfinder

Monitor

Viewfinder

View through lens shown in monitor

View through lens shown in viewfinder

• If the viewfinder is not in focus, put your eye to the viewfinder and focus the display by rotating the diopter adjustment dial.
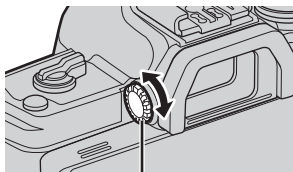
Diopter adjustment dial

• You can display the EVF Auto Switch setting menu if you press and hold the |○| button. ☞ [EVF Auto Switch] (P. 119)
• When [Off] is selected for [EVF Auto Switch], you can switch displays by pressing the |○| button.
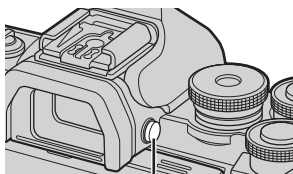
|○| button

✎
• Tilting the monitor disables the eye sensor.

Switching the information display

You can switch the information displayed in the monitor during shooting using the **INFO** button.

INFO button

Basic Information*

Image Only

Level Gauge display
(Custom2)

Histogram display
(Custom1)
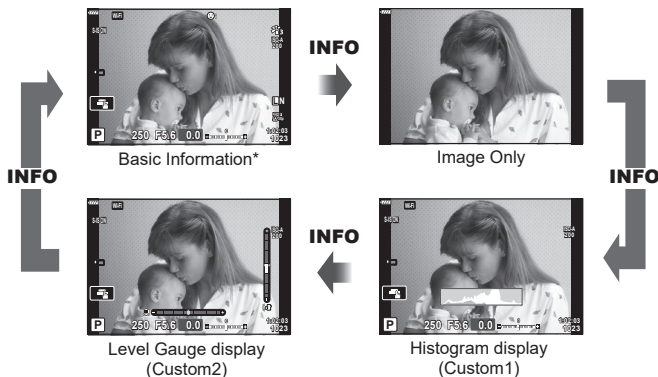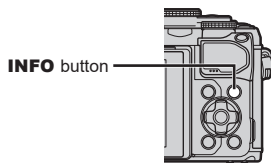
* Not displayed in ♫ mode (movie mode) unless recording is in progress.

• You can change Custom1 and Custom2 settings. ☞ [▦/Info Settings] > [LV-Info] (P. 115)
• The information display screens can be switched in either direction by rotating the front dial while pressing the **INFO** button.

Histogram display

A histogram showing the distribution of brightness in the image is displayed. The horizontal axis gives the brightness, the vertical axis the number of pixels of each brightness in the image. During shooting, overexposure is indicated in red, underexposure in blue, and the range metered using spot metering in green.

More

Less

Dark   Bright

Level gauge display

The orientation of the camera is indicated. The "tilt" direction is indicated on the vertical bar and the "horizon" direction on the horizontal bar. The camera is level and plumb when the bars turn green.

• Use the indicators on the level gauge as a guide.
• Error in the display can be corrected via calibration (P. 119).

Shooting still pictures

Use the mode dial to select the shooting mode, and then shoot the image.

Indicator ——   —— Mode icon
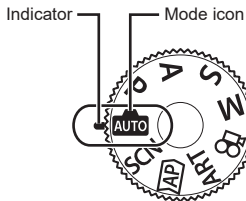
■ Types of shooting modes

For how to use the various shooting modes, see the following.

Shooting mode	Description	☞
ⓐ	The camera automatically selects the most appropriate shooting mode.	28
SCN	The camera automatically optimizes settings for the subject or scene.	29
ⒶⓅ	Use for quick access to advanced shooting settings.	32
ART	You can shoot with the effect of artistic expression added.	42
P	The camera meters subject brightness and automatically adjusts shutter speed and aperture for optimal results.	45
A	You choose the aperture and the camera automatically adjusts shutter speed for optimal results.	47
S	You choose the shutter speed and the camera automatically adjusts aperture for optimal results.	48
M	You choose both the aperture and shutter speed.	49
ⓜ	Shoot movies of various types.	54

Functions that cannot be selected from menus

Some items may not be selectable from the menus when using the arrow pad.
- Items that cannot be set with the current shooting mode.
- Items that cannot be set because of an item that has already been set:
  Settings such as picture mode are unavailable when the mode dial is rotated to ⓐ.

1 Rotate the mode dial to choose a mode.
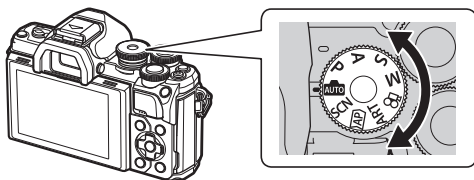
2 Frame the shot.
- Be careful that your fingers or the camera strap do not obstruct the lens or AF illuminator.

Landscape position   Portrait position
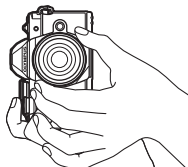
3 Adjust the focus.
- Display the subject in the center of the monitor, and lightly press the shutter button down to the first position (press the shutter button halfway).
  The AF confirmation mark (●) will be displayed, and a green frame (AF target) will be displayed in the focus location.

AF confirmation mark

Press the shutter button halfway.

250 F5.6   1:02:03
                                  1023

AF target
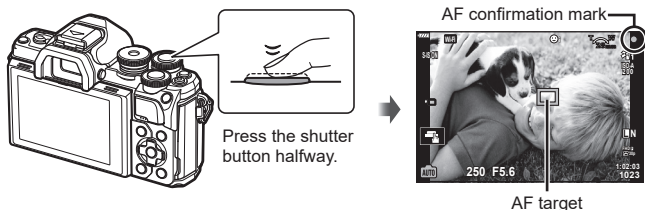
- If the AF confirmation mark blinks, the subject is not in focus. (P. 150)

4 Release the shutter.
- Press the shutter button all the way (fully).
- The camera will release the shutter and take a picture.
- The shot image will be displayed on the monitor.

Press the shutter button all the way.
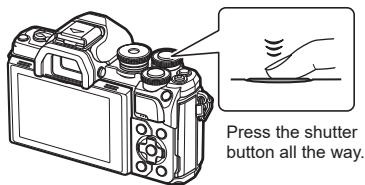
✍
- You can focus and take pictures using touch controls. ☞ "Shooting with touch screen operations" (P. 52)
- To exit to shooting mode from menus or playback, press the shutter button halfway.

Switching Displays with the ⏩ (Shortcut) Button

Press the ⏩ button to switch to each screen of the selected shooting mode between shots.
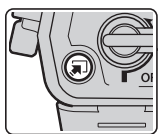
⏩ (Shortcut) button   Mode dial
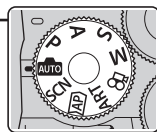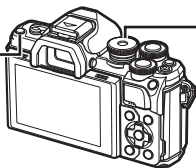
AUTO
Live guide (P. 28)

SCN
Scene mode (P. 29)

AP
Advanced photo mode (P. 32)

ART
Art filter mode (P. 42)

P/A/S/M
LV super control panel (P. 71)
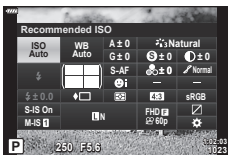
🎬
Movie mode (P. 54)

Letting the camera choose the settings (AUTO mode)

The camera adjusts settings to suit the scene; all you have to do is press the shutter button.
Use live guides to easily adjust such parameters as color, brightness, and background blurring.

1 Set the mode dial to ⒜.
   • In auto mode, the camera automatically selects the scene mode option appropriate to your subject when you press the shutter button halfway. Once the selection has been made, the ⒜ icon in the bottom left corner of the display will be replaced by the icon for the chosen scene.
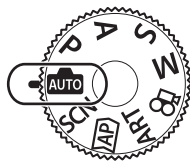
2 To adjust shooting settings, display the live guide by pressing the 🔲 button.
   • Use △▽ to highlight an item in the live guide and press ⓞ to display a slider.

Guide item

3 Use △▽ to position the slider and choose a level.
   • Press the ⓞ button to save changes.
   • To exit, press the **MENU** button.
   • When [Shooting Tips] is selected, use △▽ to highlight the item and press the ⓞ button to display the detail.
   • The effect of the selected level is visible in the display.
   If [Blur Background] or [Express Motions] is selected, the display will return to normal, but the selected effect will be visible in the final photograph.
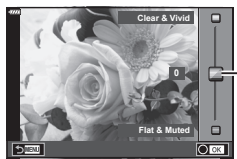
Slider

4 To set multiple live guides, repeat Steps 2 and 3.
   • A check is displayed on the guide item for live guides that are already set.
   • [Blur Background] and [Express Motions] cannot be set at the same time.

5 Shoot.
   • To clear the live guides from the display, press the **MENU** button.

- If [RAW] is currently selected for image quality, image quality will automatically be set to [◨N+RAW].
- Some live guide settings are not applied to RAW images.
- Pictures may appear grainy at some live guide setting levels.
- Changes to live guide setting levels may not be visible in the monitor.
- Frame rates drop the closer the [Express Motions] slider is to [Blurred Motion].
- The flash cannot be used when a live guide is set.
- Choosing live guide settings that exceed the limits of the camera exposure meters may result in pictures that are overexposed or underexposed.

✍
- Touch controls can also be used.

Shooting in scene mode (SCN mode)

The camera automatically optimizes settings for the subject or scene.

1 Rotate the mode dial to **SCN**.
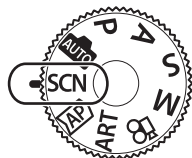
2 Use △ ▽ ◁ ▷ to highlight a scene and press the ⊛ button.

3 Use ◁ ▷ to highlight a scene mode and press the ⊛ button.
- Press the ▣ button to choose a different scene.
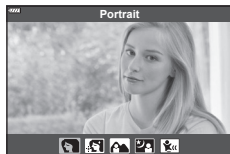
4 Shoot.

✍
- Touch controls can also be used.

■ Types of scene modes

Subject type	Scene mode	Description
People	[icon] Portrait	Suitable for portrait shooting. Brings out skin texture.
	[icon] e-Portrait	Smooths out skin tones and texture. This mode is suitable when viewing images on a high-definition TV. The camera records two pictures: one with the effect applied and one without.
	[icon] Portrait + Landscape	Suitable for portraits featuring a landscape in the background. Blues, greens, and skin tones are captured beautifully.
	[icon] Portrait + Nightscape	Suitable for portrait shooting against a background of night view. Use of a tripod and remote control via OI.Share is recommended (P. 127).
	[icon] Children	Suitable for photographs of children and other active subjects.
Nightscapes	[icon] Nightscape	Suitable for tripod shooting of night scenes. Use of a tripod and remote control via OI.Share is recommended (P. 127).
	[icon] Portrait + Nightscape	Suitable for portrait shooting against a background of night view. Raise the flash (P. 66). Use of a tripod and remote control via OI.Share is recommended (P. 127).
	[icon] Handheld Starlight	Suitable for shooting night scenes without a tripod. Reduces blur when shooting low light/illuminated scenes. The camera makes eight exposures and combines them into a single photograph.
	[icon] Fireworks	Suitable for shooting fireworks at night. Use of a tripod and remote control via OI.Share is recommended (P. 127).
	[icon] Light Trails	The camera automatically shoots multiple images, takes newly bright areas only, and composites them into a single image. With normal long exposure, an image of light trace such as star trails with bright buildings tends to get too bright. You can capture them without over exposure while checking the progress. Press the shutter button to start shooting, then view the changing result in the monitor and press the shutter button again to end shooting once the desired result is achieved (maximum 3 hours). Use of a tripod and remote control via OI.Share is recommended (P. 127). • Advanced settings can be accessed via live composite photography (dark and light field composite) in **M** mode (P. 51).

Subject type	Scene mode	Description
Motion	✕ Sport	Suitable for fast action shooting. The camera will take photos while the shutter button is pressed.
	🏃 Children	Suitable for photographs of children and other active subjects.
	🏃 Panning	Choose to blur the background behind moving objects. The camera chooses the optimal shutter speed for panning shots based on camera motion.
Scenery	🏔 Landscape	Suitable for landscape shooting.
	🌅 Sunset	Suitable for shooting the sunset.
	❄ Beach & Snow	Suitable for shooting at snow-capped mountains, seascapes in the sun, and other whitish scenes.
	🖼 Backlight HDR	Suitable for contrasting scenes. This mode captures multiple images and merges them into one, properly exposed image (P. 36).
Indoors	🕯 Candlelight	Suitable for shots of candlelit scenes. Warm colors are preserved.
	🔇 Silent[♥]	Disable camera sounds and lights in situations in which they may be unwelcome (P. 37). • For information on taking photos using this feature, see "[Silent[♥]] Mode" (P. 37), starting from Step 2.
	👤 Portrait	Suitable for portrait shooting. Brings out skin texture.
	👤 e-Portrait	Smooths out skin tones and texture. This mode is suitable when viewing images on a high-definition TV. The camera records two pictures: one with the effect applied and one without.
	🏃 Children	Suitable for photographs of children and other active subjects.
	🖼 Backlight HDR	Suitable for contrasting scenes. This mode captures multiple images and merges them into one, properly exposed image (P. 36).
Close-ups	🌷 Macro	Suitable for close-ups.
	🌷 Nature Macro	Suitable for vivid close-ups of flowers or insects.
	📄 Documents	Suitable for photos of timetables or other documents. The camera heightens the contrast between the text and background.
	🔲 Multi Focus Shot	The camera takes eight photos, varying the focus distance with each shot (P. 41).

- To maximize the benefits of the scene modes, some of the shooting function settings are disabled.
- Some time may be needed to record pictures taken using [e-Portrait]. In addition, when the image quality mode is [RAW], the image is recorded in RAW+JPEG.
- Movies cannot be recorded using [e-Portrait], [Handheld Starlight], or [Backlight HDR].
- [Handheld Starlight] pictures taken with [RAW] selected for image quality will be recorded in RAW+JPEG format, with the first frame recorded as a RAW image and the final composite as a JPEG image.
- [Backlight HDR] records HDR-processed images in JPEG format. When the image quality mode is set to [RAW], the image is recorded in RAW+JPEG.
- In [Panning], 🖾 is displayed during panning detection, and 🖾 is displayed when nothing is detected.
- When using a lens with an image stabilizer switch in [Panning], turn the image stabilizer switch off.
  Sufficient panning effects may not be obtained in bright conditions. Use a commercially available ND filter to obtain effects more easily.

Shooting in advanced photo mode (AP mode)

Use for quick access to advanced shooting settings.

1 Rotate the mode dial to AP.
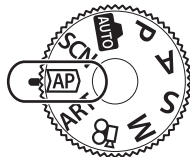
2 Use ◁▷ to highlight an AP mode.
- Some modes offer additional options that can be accessed using ▽.

3 Press the ⊛ button to select the highlighted mode.
- Press the ⏸ button to choose a different mode. If additional options are displayed, press △.

✍

- In some modes, the front dial can be used for exposure compensation (P. 61) and the rear dial for program shift (P. 46).
- Touch controls can also be used.

■ **AP Mode Options**

AP mode	Description	☞
⬛ **Live Composite**	Record light trails from stars and other objects while keeping exposure constant overall.	33
⬛ **Live Time**	Choose for photos of fireworks and night scenery. Make long time exposures at selected shutter speeds.	34
⬛ **Multiple Exposure**	Combine two different images on top of one another.	35
HDR **HDR**	Capture details in both highlights and shadows.	36
⬛ **Silent[♥]**	Disable camera sounds and lights in situations in which they may be unwelcome.	37
⬛ **Panorama**	Take photos that can afterwards be joined on a computer to create a panorama.	38
⬛ **Keystone Compensation**	Correct the effects of perspective in photos of buildings or landscapes.	39
⬛ **AE Bracketing**	Each time the shutter button is pressed, the camera takes a series of photos, varying exposure with each shot.	40
⬛ **Focus Bracketing**	Each time the shutter button is pressed, the camera takes a series of eight photos, varying the focus distance with each shot.	41

■ **[Live Composite]: Live Composite Photography**

Create photos that record light trails from stars and other objects without changing the brightness of the background; during shooting, the changing results can be viewed in the monitor. You can adjust white balance or picture mode and other settings not available with the **SCN** mode "Light Trails" option.

1 Highlight [Live Composite] in the AP mode menu (P. 32) and press the Ⓐ button.

2 Press the shutter button halfway down to focus.
 • To reduce blur caused by camera shake, fix the camera securely to a tripod and use a remote shutter release controlled via OI.Share (P. 127).
 • If the focus indicator blinks, the camera is not in focus.

3 Press the shutter button all the way down to shoot.
 • The camera configures the proper settings automatically and starts shooting.
 • After pressing the shutter button, there is a time lag until shooting starts.
 • The composite image will be displayed at regular intervals.

4 Press the shutter button again to stop shooting.
 • View the changing result in the monitor and press the shutter button to end shooting once the desired result is achieved.
 • The recording length in one shooting is up to 3 hours.

✎
 • Advanced settings can be accessed via live composite photography (dark and light field composite) in **M** mode (P. 51).

■ [Live Time]: Live Time Photography

You can make long exposures without having to keep the shutter button pressed. The changing result can be viewed in the monitor during shooting.

1 Highlight [Live Time] in the AP mode menu (P. 32).

2 Press ▽, use ◁▷ to choose the maximum exposure time, and press the ⊛ button.
   - The display refresh rate may change automatically depending on the maximum exposure time selected.
   - The shorter the maximum exposure time, the faster the display refresh rate.

3 Press the shutter button halfway down to focus.
   - To reduce blur caused by camera shake, fix the camera securely to a tripod and use a remote shutter release controlled via OI.Share (P. 127).
   - If the focus indicator blinks, the camera is not in focus.

4 Press the shutter button all the way down to start live time photography.
   - The camera adjusts settings automatically and begins shooting.
   - The changing result can be viewed in the monitor.

5 Press the shutter button again to stop shooting.
   - View the changing result in the monitor and press the shutter button to end shooting once the desired result is achieved.
   - Shooting ends automatically when the selected exposure time is reached.

✍
   - The long exposure (bulb/time) options in **M** mode offer more advanced settings (P. 50).

■ **[Multiple Exposure]: Shooting Multiple Exposures**

Combine two different images on top of one another.

1 Highlight [Multiple Exposure] in the AP mode menu (P. 32) and press the ⊛ button.

2 Press the shutter button halfway down to focus.
   • If the focus indicator blinks, the camera is not in focus.

3 Press the shutter button all the way down for the first shot.
   • 🖼 is displayed in green if shooting starts.
   • The image is shown superimposed on the monitor.
   • Press 🗑 to delete the last shot.

4 Take the second shot.
   • Use the first image as a guide to compose the second shot.

• The camera will not go to sleep while multiple exposure is in effect.
• Performing any of the following actions automatically deletes the second shot:
   The camera is turned off, the ▶ button is pressed, the **MENU** button is pressed, pressing the ⏏ button, rotating the mode dial, the battery power runs out, or any cable is connected to the camera.

⚙️
• For more information on creating image overlays: ☞ "Combining Pictures (Image Overlay)" (P. 110)

■ [HDR]: Taking Composite Photos with HDR

Capture details in both highlights and shadows. The camera varies exposure over a series of four shots and combines them into a single image.

1 Highlight [HDR] in the AP mode menu (P. 32).

2 Press ▽, use ◁▷ to choose [HDR1] or [HDR2], and press the ⊛ button.

HDR1	Four shots are taken, each with a different exposure, and the shots are combined into one HDR image inside the camera. HDR2 provides a more impressive image than HDR1. ISO sensitivity is fixed to 200.
HDR2	

3 Press the shutter button halfway down to focus.
   • If the focus indicator blinks, the camera is not in focus.

4 Press the shutter button all the way down to start HDR photography.
   • The camera automatically takes four shots when the shutter button is pressed.

• Noise may be more noticeable in photos taken in conditions associated with slow shutter speeds.
• For best results, secure the camera by, for example, mounting it on a tripod.
• The image displayed on the monitor or in the viewfinder while shooting will differ from the HDR-processed image.
• The HDR-processed image will be saved as a JPEG file. When the image quality mode is set to [RAW], the image is recorded in RAW+JPEG.
• The picture mode is fixed to [Natural] and the color space is fixed to [sRGB].

■ [Silent[♥]] Mode

Disable camera sounds and lights in situations in which they may be unwelcome.

1 Highlight [Silent[♥]] in the AP mode menu (P. 32) and press the ⊛ button.

2 Press the shutter button halfway down to focus.
   • If the focus indicator blinks, the camera is not in focus.

3 Press the shutter button all the way down to shoot.
   • When the shutter is released, the monitor screen will go dark for a moment. No shutter sound will be emitted.

• The desired results may not be achieved under flickering light sources such as fluorescent or LED lamps or if the subject moves abruptly during shooting.
• When [Silent[♥]] is selected in the **SCN** or $\overline{AP}$ mode, the following measures are undertaken to reduce the sound and light produced by the camera.
   - Electronic shutter: Enabled
   - ■))): Off
   - AF Illuminator: Off
   - Flash mode: Off
• Note that due to the electronic shutter, the subject may appear to be distorted in photographs if camera moves quickly during shooting or when shooting fast-moving subjects.
• Long exposure noise reduction is not available when [Silent[♥]] is selected in the **SCN** or $\overline{AP}$ mode.

✍
• Press ▽ for sequential/self-timer photography (P. 68).
• Advanced settings are available when you select Silent [♥] photography (P. 69) in the **P/A/S/M/ART** mode. ☞ "Silent-Mode Options (Silent[♥]Settings)" (P. 106)

■ [Panorama]: Taking Pictures for a Panorama

Pictures taken using this option can be joined together to form a panorama. You will need to install the latest version of Olympus Workspace on your computer to join pictures together to form a panorama. ☞ "Connecting the camera to a computer and a printer" (P. 130)

1 Highlight [Panorama] in the AP mode menu (P. 32) and press the Ⓞ button.

2 Use △ ▽ ◁ ▷ to choose a pan direction.

3 Take a picture, using the guides to frame the shot.
   • Focus, exposure, and other settings are fixed at the values for the first shot.
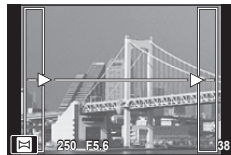
4 Take the remaining images, framing each shot so that the guides overlap with the previous picture.

   • A panorama may include up to 10 images. A warning indicator (🕮) is displayed after the tenth shot.
   • During panorama shooting, the image previously taken for position alignment will not be displayed. With the frames or other markers for display in the images as a guide, set the composition such that the edges of the overlapping images overlap within the frames.

5 After taking the last shot, press Ⓞ to end the series.

■ [Keystone Compensation]

Keystone distortion due to the influence of lens focal length and proximity to the subject can be corrected, or enhanced to exaggerate the effects of perspective. Keystone compensation can be previewed in the monitor during shooting. The corrected image is created from a smaller crop, slightly increasing the effective zoom ratio.

1 Highlight [Keystone Compensation] in the AP mode menu (P. 32) and press the ⊛ button.

2 Adjust the effect in the display and frame the shot.
   - Use the front dial and rear dial for keystone correction.
   - Use △ ▽ ◁ ▷ to choose the area to be recorded. The area cannot be changed depending on the amount of correction.
   - Press and hold the ⊛ button to cancel any changes.
   - To adjust exposure compensation and other shooting options while keystone compensation is in effect, press the **INFO** button to view a display other than keystone compensation adjustment. To resume keystone compensation, press the **INFO** button until keystone compensation adjustment is displayed.
   - The following may occur as the correction amount increases.
      - The image will be coarse.
      - The magnification ratio for image cropping will be large.
      - The crop position will not be able to move.

3 Press the shutter button halfway down to focus.
   - If the focus indicator blinks, the camera is not in focus.

4 Press the shutter button all the way down to shoot.

- Photos are recorded in RAW+JPEG format when [RAW] is selected for image quality.
- The desired results may not be obtained with converter lenses.
- Depending on the amount of correction, some AF targets may be outside the display area. An icon (🔺, 🔻, ⬅ or ➡) is displayed when the camera focuses on an AF target outside the display area.
- If a focus distance is selected for [🔲Image Stabilizer], the correction will be adjusted for the selected focus distance. Except when using a Micro Four Thirds or Four Thirds lens, choose a focal length using the [🔲Image Stabilizer] option (P. 80).

■ [AE Bracketing]: Varying Exposure over a Series of Shots

Take a series of photos, varying exposure with each shot.

1 Highlight [AE Bracketing] in the AP mode menu (P. 32).

2 Press ▽, use ◁▷ to choose the number of shots, and press the ⊛ button.

3f	Take 3 shots, the first at optimal exposure (±0.0 EV), the second at −1.0 EV, and the third at +1.0 EV.
5f	Take 5 shots, the first at optimal exposure (±0.0 EV), the second at −1.3 EV, the third at −0.7 EV, the fourth at +0.7 EV, and the fifth at +1.3 EV.
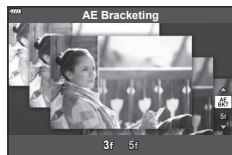
3 Press the shutter button halfway down to focus.
  • If the focus indicator blinks, the camera is not in focus.

4 Press the shutter button all the way down to shoot.

  • Take the set number of shots.
  • The [BKT] indicator turns green during bracketing.
  • The camera brackets the value currently selected for exposure compensation.

■ **[Focus Bracketing]: Varying Focus Distance over a Series of Shots**

Each time the shutter button is pressed, the camera takes a series of eight photos, varying the focus distance with each shot.

1 Highlight [Focus Bracketing] in the AP mode menu (P. 32).

2 Press ▽, use ◁▷ to choose the amount focus distance changes with each shot, and press the ⊛ button.

〣	The focus distance changes by a small amount with each shot.
〣〣	The focus distance changes by a large amount with each shot.

Focus Bracketing

3 Press the shutter button halfway down to focus.
  • If the focus indicator blinks, the camera is not in focus.

4 Press the shutter button all the way down to shoot.

• The camera takes eight photos, varying the focus distance with each shot. The camera will take pictures at, and at distances in front of and behind, the focus distance chosen when the shutter button is pressed halfway.
• The BKT indicator turns green during bracketing.
• Focus bracketing ends if zoom is adjusted during shooting.
• Shooting ends when focus reaches infinity.
• Focus bracketing uses the electronic shutter.
• Focus bracketing is not available with lenses that have mounts conforming to the Four-Thirds or some Micro Four-Thirds standards.

Using art filters (ART mode)

Using art filters, you can easily have fun with artistic effects.

1 Rotate the mode dial to **ART**.

2 Use ◁▷ to highlight a filter.

3 Press ▽, highlight an effect using ◁▷, and press the ⊛ button.
   • Press the ◣ button to choose a different art filter. If effects are displayed, press △.
   • The effects available vary with the selected filter (Soft Focus Effect, Pin Hole Effect, Frame Effect, White Edge Effect, Star Light Effect, Color Filter, Monochrome Color, Blur Effect, or Shade Effect).

4 Shoot.

✍

• [Color Filter] (P. 85) and [Monochrome Color] (P. 85) options are available with some art filters.
• The front dial can be used for exposure compensation (P. 61).
• The rear dial can be used for program shift (P. 46).
• Touch controls can also be used.

Pop Art I/II	Creates an image that emphasizes the beauty of color.
Soft Focus	Creates an image that expresses a soft tone atmosphere.
Pale&Light Color I/II	Creates an image that expresses warm light by scattering overall light and slightly overexposing the image.
Light Tone	Creates a high-quality image by softening both shadows and highlights.
Grainy Film I/II	Creates an image that expresses the roughness of black and white images.
Pin Hole I/II/III	Creates an image that looks as if it was taken using an old or toy camera by dimming the image perimeter.
Diorama I/II	Creates a miniature-like image by emphasizing saturation and contrast, and blurring unfocused areas.
Cross Process I/II	Creates an image that expresses a surreal atmosphere. Cross Process II creates an image that emphasizes magenta.
Gentle Sepia	Creates a high-quality image by drawing out shadows and softening the overall image.
Dramatic Tone I/II	Creates an image that emphasizes the difference between brightness and darkness by partially increasing contrast.
Key Line I/II	Creates an image that emphasizes edges and adds an illustrative style.
Watercolor I/II	Creates a soft, bright image by removing dark areas, blending pale colors on a white canvas, and further softening contours.
Vintage I/II/III	Expresses an everyday shot in a nostalgic, vintage tone using printed film discoloration and fading.
Partial Color I/II/III	Impressively expresses a subject by extracting colors you want to emphasize and keeping everything else monotone.
Bleach Bypass I/II	The "bleach bypass" effect, which you may recognize from motion pictures and the like, can be used to great effect in shots of streetscapes or metal objects.
Instant Film	A contemporary take on the shadow and skin tones typical of film.

II and III are altered versions of the original (I).

Shooting

2

- To maximize the benefits of the art filters, some of the shooting function settings are disabled.
- If [RAW] is currently selected for image quality (P. 76), image quality will automatically be set to [■N+RAW]. The art filter will be applied to the JPEG copy only.
- Depending on the subject, tone transitions may be ragged, the effect may be less noticeable, or the image may become more "grainy."
- Some effects may not be visible in live view or during movie recording.
- Your choice of filters, effects, and movie quality when recording movies may affect playback speed and smoothness.

■ Using [Partial Color]

Record only selected hues in color.

1 Select [Partial Color I/II/III] in the art filter menu (P. 42).

2 Highlight an effect and press the ⊛ button.
   - A color ring appears in the display.

3 Rotate the front dial or rear dial to select a color.
   - The effect is visible in the display.

4 Shoot.

- If you want to change the extracted color after shooting, rotate the front dial or rear dial to display the color ring.

Letting the camera choose aperture and shutter speed (Program mode)

P mode is a shooting mode where the camera automatically sets the optimal aperture and shutter speed according to subject brightness. Set the mode dial to **P**.

Aperture value
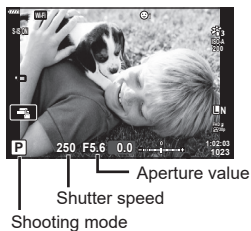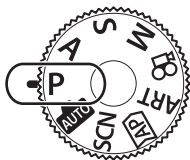
Shutter speed

Shooting mode

- The shutter speed and aperture selected by the camera are displayed.
- You can use the front dial to select exposure compensation.
- You can use the rear dial to select program shift.
- The shutter speed and aperture value displays will blink if the camera is unable to achieve correct exposure.
  The aperture value at the moment when its indication blinks varies with the lens type and focal length of the lens.
  When using a fixed [ISO] setting, change the setting. ☞ "Changing ISO sensitivity (ISO)" (P. 65)

Warning display example (blinking)	Status	Action
60" F2.8	The subject is too dark.	• Use the flash.
4000 F22	The subject is too bright.	• The metered range of the camera is exceeded. A commercially available ND filter (for adjusting the amount of light) is required. • Take pictures in silent mode. ☞ "The Electronic Shutter (Silent[♥])" (P. 69)

▪ Program Shift

Without changing exposure, you can choose from different combinations of aperture and shutter speed selected automatically by the camera. This is known as program shift.

- Rotate the rear dial until the camera displays the desired combination of aperture and shutter speed.
- The shooting mode indicator in the display changes from **P** to **Ps** while program shift is in effect. To end program shift, rotate the rear dial in the opposite direction until **Ps** is no longer displayed.

Program shift

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- You can choose the functions performed by the front and rear dials. ☞ [Dial Function] (P. 114)
- You can choose whether the display reflects the effects of exposure compensation or maintains a constant brightness for ease of viewing. At default settings, the effects of exposure settings are visible in the display. ☞ [Live View Boost] (P. 115)

Choosing aperture (Aperture Priority mode)

A mode is a shooting mode where you choose the aperture and let the camera automatically adjust to the appropriate shutter speed. Rotate the mode dial to **A** and then use the rear dial to select an aperture value.
Larger apertures (lower F-numbers) decrease depth of field (the area in front of or behind the focus point that appears to be in focus), softening background details. Smaller apertures (higher F-numbers) increase depth of field.
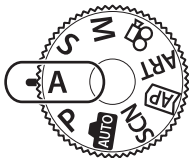
Aperture value

• You can use the front dial to select exposure compensation.

__Setting the aperture value__

Decreasing aperture value ←   → Increasing aperture value

F2.8← F4.0← **F5.6** →F8.0 →F11

(Decreasing depth of field) ←   → (Increasing depth of field)

• The shutter speed display will blink if the camera is unable to achieve correct exposure.
• When using a fixed [ISO] setting, change the setting. ☞ "Changing ISO sensitivity (ISO)" (P. 65)

Warning display example (blinking)	Status	Action
60" F5.6	The subject is underexposed.	• Decrease the aperture value.
4000 F5.6	The subject is overexposed.	• Increase the aperture value. • If the warning display does not disappear, the metered range of the camera is exceeded. A commercially available ND filter (for adjusting the amount of light) is required. • Take pictures in silent mode. ☞ "The Electronic Shutter (Silent[♥])" (P. 69)

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• You can choose the functions performed by the front and rear dials. ☞ [Dial Function] (P. 114)
• You can choose whether the display reflects the effects of exposure compensation or maintains a constant brightness for ease of viewing. At default settings, the effects of exposure settings are visible in the display. ☞ [Live View Boost] (P. 115)

Choosing shutter speed (Shutter Priority mode)

S mode is a shooting mode where you choose the shutter speed and let the camera automatically adjust to the appropriate aperture value. Rotate the mode dial to **S** and then use the rear dial to select shutter speed.
Fast shutter speeds freeze motion of fast-moving subjects. Slow shutter speeds add motion by blurring moving subjects.
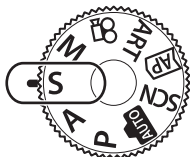
Shutter speed

- You can use the front dial to select exposure compensation.

Setting the shutter speed

Slower shutter speed ←   → Faster shutter speed

60"← 15← 30← **60** →125 →250 →4000

(Add motion) ←   → (Freeze motion)

- The aperture value display will blink if the camera is unable to achieve correct exposure.
- The aperture value at the moment when its indication blinks varies with the lens type and focal length of the lens.
- When using a fixed [ISO] setting, change the setting. ☞ "Changing ISO sensitivity (ISO)" (P. 65)

Warning display example (blinking)	Status	Action
2000 F2.8	The subject is underexposed.	• Set the shutter speed slower.
125 F22	The subject is overexposed.	• Set the shutter speed faster. Shutter speeds as fast as 1/16000 s are available in silent mode. ☞ "The Electronic Shutter (Silent[♥])" (P. 69) • If the warning display does not disappear, the metered range of the camera is exceeded. A commercially available ND filter (for adjusting the amount of light) is required.

- You can choose the functions performed by the front and rear dials. ☞ [Dial Function] (P. 114)
- You can choose whether the display reflects the effects of exposure compensation or maintains a constant brightness for ease of viewing. At default settings, the effects of exposure settings are visible in the display. ☞ [Live View Boost] (P. 115)

Choosing aperture and shutter speed (Manual mode)

M mode is a shooting mode where you choose both the aperture value and shutter speed. Bulb, time, and live composite photography are also available. Rotate the mode dial to **M**, and then use the front dial to select aperture value and the rear dial to select shutter speed.
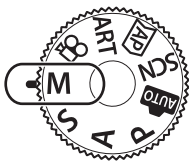
Difference from correct exposure

- The exposure determined by the aperture value and shutter speed you have set and the difference from the suitable exposure measured by the camera are displayed on the monitor.
- Shutter speed can be set to values between 1/4000 and 60 seconds or to [BULB(LIVE BULB)], [TIME(LIVE TIME)], or [LIVECOMP].
- Shutter speeds as fast as 1/16000 s are available in silent mode. ☞ "The Electronic Shutter (Silent[♥])" (P. 69)

$\diamond$
- You can choose the functions performed by the front and rear dials. ☞ [Dial Function] (P. 114)
- The brightness of the image displayed in the monitor (or viewfinder) will change with changes in aperture and shutter speed. You can fix the brightness of the display so that you can keep the subject in view while shooting. ☞ [Live View Boost] (P. 115)

Shooting with long exposure time (BULB/LIVE TIME)

Use for photos such as fireworks or night scenery. In **M** mode, rotate the rear dial in the direction shown until [BULB(LIVE BULB)] or [TIME(LIVE TIME)] is displayed in the monitor.
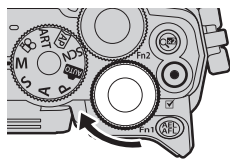
The shutter remains open while the shutter button is pressed. Releasing the button ends the exposure.
- The amount of light entering the camera increases the longer the shutter is open.
- When live bulb photography is selected, you can choose how often the camera updates the live view display during the exposure.

"Time" and "Live Time" Photography

The exposure begins when the shutter button is pressed all the way down. To end the exposure, press the shutter button all the way down again.
- The amount of light entering the camera increases the longer the shutter is open.
- When live time photography is selected, you can choose how often the camera updates the live view display during the exposure.

- To display the view through the lens in the monitor during bulb photography, select an option other than [Off] for [Live Bulb].
- Press the **MENU** button to choose the display interval for [Live Bulb] or [Live Time] photography. Select [Off] to disable the display while exposure is in progress.
- To refresh the display while exposure is in progress, tap the monitor or press the shutter button halfway.
- Some limitations apply to the choice of ISO sensitivity settings available.
- To reduce blur caused by camera shake, fix the camera securely to a tripod and use a remote shutter release controlled via OI.Share (P. 127).
- During shooting, there are limits on the settings for the following functions.
    Sequential shooting, self-timer shooting, time lapse shooting, image stabilizer, etc.
- Even when you have set [Noise Reduct.], noise and/or light spots may still be noticeable in the image displayed on the monitor and shot images under certain environmental conditions (temperature etc.) and camera settings.

Noise in images

While shooting at slow shutter speeds, noise may appear on screen. These phenomena occur when the temperature rises in the image pickup device or image pickup device internal drive circuit, causing current to be generated in those sections of the image pickup device that are not normally exposed to light. This can also occur when shooting with a high ISO setting in a high-temperature environment. To reduce this noise, the camera activates the noise reduction function. ☞ [Noise Reduct.] (P. 116)

Live composite photography (dark and light field composite)

Combine several exposures to create a photo that records light trails from stars or fireworks and other objects without changing the brightness of the background.

1 In **M** mode, set the shutter speed to [LIVECOMP].
  - In **M** mode, rotate the rear dial in the direction shown until [LIVECOMP] is displayed in the monitor.
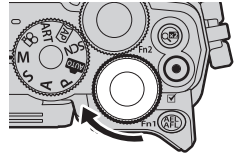
2 Press the **MENU** button to display [Composite Settings] and press △ ▽ to choose the exposure time for the individual exposures.

3 Press the shutter button to ready the camera.
  - The camera will shoot a frame as a reference for noise reduction.
  - The camera is ready when [Ready for composite shooting] is displayed in the monitor.

4 Press the shutter button halfway down to focus.
  - If the focus indicator blinks, the camera is not in focus.

5 Press the shutter button all with way down to start live composite photography.
  - The combined image will be displayed in the monitor with each exposure.

6 Press the shutter button again to stop shooting.
  - View the changing result in the monitor and press the shutter button to end shooting once the desired result is achieved.
  - The maximum length of composite shooting is 3 hours. However, the available shooting time will vary depending on shooting conditions, and charging state of the camera.

- There are limits on the available ISO sensitivity settings.
- To reduce blur caused by camera shake, fix the camera securely to a tripod and use a remote shutter release controlled via OI.Share (P. 127).
- During shooting, there are limits on the settings for the following functions.
    Sequential shooting, self-timer shooting, time lapse shooting, image stabilizer, etc.
- [Image Stabilizer] (P. 80) turns off automatically.

Shooting with touch screen operations

Tap ![icon] to cycle through touch screen settings.
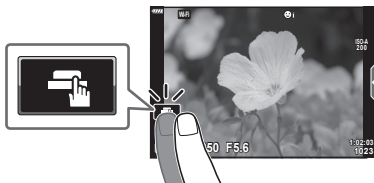
![icon]	Tap a subject to focus and automatically release the shutter. This feature is not available in movie mode and during bulb, time, or composite photography.
![icon]	Touch screen operations are disabled.
![icon]	Tap to display an AF target and focus on the subject in the selected area. Photographs can be taken by pressing the shutter button.

■ Previewing the subject (![icon])

1 Tap the subject in the display.
   - An AF target will be displayed.
   - Use the slider to choose the size of the frame.
   - Tap ![icon] to turn off the display of the AF target.
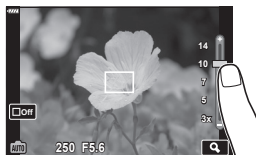
2 Tap ![icon] to zoom in at the frame position.
   - Use your finger to scroll the display when the picture is zoomed in.
   - Tap ![icon] to cancel the zoom display.
   - You cannot resize or zoom in on the target in movie mode.
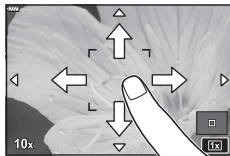
- The situations in which touch screen operations are not available include the following. Panorama, one touch WB, while buttons or dials are in use, etc.
- Do not touch the display with your fingernails or other sharp objects.
- Gloves or monitor covers may interfere with touch screen operation.
- You can disable the touch screen operation. ☞ [Touchscreen Settings] (P. 119)

Recording movies

Recording movies in photo shooting modes

The ◉ button can be used for movie recording even when the mode dial is not in the 🎬 position.

1 Press the ◉ button to begin recording.

- Movie you are recording will be displayed on the monitor.
- If you put your eye to the viewfinder, movie you are recording will be displayed in the viewfinder.
- You can change the focus location by tapping the screen while recording.
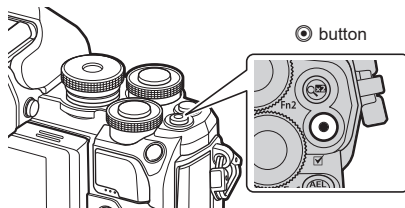
◉ button

2 Press the ◉ button again to end recording.

- The sound of touch operations and button operations may be recorded.

- CMOS image sensors of the type used in the camera generate a so-called "rolling shutter" effect that can cause distortion in pictures of moving objects. This distortion is a phenomenon that occurs in pictures of fast-moving subjects or if the camera is moved during shooting.
- If the size of the movie file being recorded exceeds 4 GB, the file will be split automatically. (Depending on shooting conditions, movies under 4 GB in size may be split into multiple files.)
- When recording movies, use an SD card that supports an SD speed class of 10 or higher.
- If the camera is used for extended periods, the temperature of the image pickup device will rise and noise and colored fog may appear in images. Turn off the camera for a short time. Noise and colored fog may also appear in images recorded at high ISO sensitivity settings. If the temperature rises further, the camera will turn off automatically.
- When using a Four Thirds system lens, the AF will not operate while recording movies.
- The ◉ button cannot be used to record movies in the following instances:
  While shutter the button is pressed halfway; during bulb, time, composite, sequential or time lapse photography; or when e-portrait, handheld starlight, or backlight HDR is selected in **SCN** mode or keystone compensation, panorama, live time, multiple exposure, or HDR is selected in **AP** mode

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- Some settings, such as AF mode, can be set separately for movies and photographs.
  ☞ "Using the Video Menu" (P. 107)

Recording movies in movie mode

When the mode dial is rotated to n (movie mode), 4K movies and other types of movies can be recorded.
The effects available in **P**, **S**, **A**, and **M** modes can be applied to movies.
☞ "Choosing an Exposure Mode" (P. 79)

1 Rotate the mode dial to n.
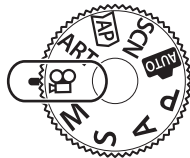
2 Use HI to highlight movie mode.
   • Some modes offer additional options that can be accessed using G.

3 Press the Q button to select the highlighted mode.
   • Press the ⊡ button to choose a different movie mode. If additional options are displayed, press F.

4 Press the ⊚ button to begin recording.
   • Press the ⊚ button again to end recording.

   • A beep does not sound when the camera focuses in movie mode.

%
   • Touch controls can also be used.

■ Movie Mode Options

Movie mode	Description	☞
Standard	Shoot standard movies, or shoot movies with selected effects.	55
4K	Shoot 4K movies.	—
Clips	Create a single movie file including multiple short movies.	57
High-speed	Record slow-motion movies. Sound will not be recorded.	60

   • The picture mode art filter options are not available in [4K] mode.
   • Use UHS-I or UHS-II memory card with a UHS Speed Class of 3 or better when shooting in [4K] mode.

■ Movie Effects

1   Highlight [Standard] in the movie mode option (P. 54) and press the ⊛ button.

2   Press the ◉ button to begin recording.

3   Tap the on-screen icon of the effect you wish to use.
    • Tap the display to add effects during shooting.
    • Some effects can be added by tapping the display before starting recording.

Movie effect

Movie effect	Description
Art Fade	Films with the selected picture mode effect. The fade effect is applied to the transition between scenes.
Old Film	Randomly applies damage and dust-like noise similar to old movies.
Multi Echo	Applies an after-image effect. After-images will appear behind moving objects.
One Shot Echo	Applies an after-image for a short time after you tap the icon. The after-image will disappear automatically after a while.
Movie Tele-converter	Zooms in on an area of the image without using the lens zoom. The selected position of the image can be zoomed in even while the camera is kept fixed.

4   Press the ◉ button again to end recording.

• The INFO button also controls the display of shooting information during movie recording. Note, however, that pressing the INFO button during recording cancels all movie effects except movie tele-converter.

Art Fade

Tap the icon. The effect will be applied gradually when you tap the icon of a picture mode.
• Movies shot in partial color use the color selected in **ART** mode.

Old Film

Tap the icon for the effect to be applied. Tap again to cancel the effect.

Multi Echo

Tap the icon for the effect to be applied. Tap again to cancel the effect.

One Shot Echo

Each tap of the icon adds the effect.

Movie Tele-converter

1 Tap the icon to display the zoom frame.
   • You can change the position of the zoom frame by tapping the screen or using $\triangle \triangledown \triangleleft \triangleright$.
   • Press and hold the ⊛ button to return the zoom frame to a central position.

2 Tap 🔍 to zoom in on the area in the zoom frame.
   • Tap 🔍 to return to the zoom frame display.

3 Tap ☐Off or press the ⊛ button to cancel the zoom frame and exit Movie Tele-converter mode.

• The 2 effects cannot be applied simultaneously.
• Some effects may not be available depending on the picture mode.
• The sound of touch operations and button operations may be recorded.
• The frame rate may drop if an art filter or a movie effect is used.

■ Creating Movies from Clips

You can create a single movie file including multiple short movies (clips). Clips can be split into multiple groups ("My Clips"). You can also add still pictures to the My Clips movie.

Recording Clips

1 Highlight [Clips] in the movie mode option (P. 54).

2 Press ▽, use ◁▷ to choose the clip length, and press the ⊛ button.
- Three movie quality (frame size and rate) options are available via live controls (P. 78).

3 Press the ◉ button to start shooting.
- Shooting ends automatically when the selected recording time is reached.
- If you press the ◉ button during shooting, movie recording will continue for the length of time the button was pressed (maximum 16 seconds).
- The new clip is added to My Clips.

Added to My Clips.

00:04 MOV ▶ FHD N 30p

Set OK

△	Plays back My Clips from the beginning.
▽	Changes My Clips to save the clip to and the position to add the clip to. Use ◁▷ to change the position to add the clip to in the My Clips.
⊛	Prepare to record the next clip.
🗑	Deletes the shot clip.

4 Press the ◉ button to shoot the next clip.
- The confirmation screen will disappear and shooting of the next clip will start.
- The new clip is added to the same My Clips group as the previous clip.
- Movies recorded at different frame sizes or rates are saved to different My Clips groups.

Creating new My Clips
Press ▽ in Step 3.
Use △▽ to move the clip to 📹 and press the ⊛ button.

Removing a clip from My Clips
Press ▽ in Step 3.
Move a clip to 🎥 using △▽◁▷, and press the ⊛ button.
- The clip removed from My Clips will be a normal movie file.

Move a clip within a My Clips folder.

11:24 MOV ▶ FHD N 30p

Back MENU   Set OK
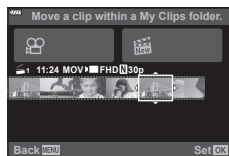
Playback

You can play back the files in My Clips consecutively.

1 Press the ► button and select an image marked 🎬.

2 Press the ⊛ button and select [Play My Clips] using △ ▽. Then press the ⊛ button again.
   • The files in My Clips will play back consecutively.
   • Press the ⊛ button to end the consecutive playback.

Editing "My Clips"

You can create a single movie file from My Clips.
The shot clips are stored in My Clips. You can add movie clips and still pictures to My Clips (P. 99). You can also add screen transition effects and art filter effects.

1 Press the ► button and then rotate the rear dial to play back My Clips.

Single-frame   Index display   My Clips playback*   Calendar display
playback

* After pressing the ► button, you can also view the My Clips playback display by highlighting an item marked with 🎬, pressing the ⊛ button, and selecting [See all My Clips] from the menu that appears.

2 Use △ ▽ to select My Clips and ◁ ▷ to select a clip, and press the ⊛ button.
   • The clip menu will be displayed.

Play My Clips	Plays back the files in My Clips in order, starting from the beginning.
Play Movie	Plays back the selected clips as movie.
Export My Clips	Exports the files in My Clips as a movie file.
Rearrange Order	Moves or adds files in My Clips.
Preset Destination	From the next time you shoot, movies shot in the same settings will be added to this 🎬 My Clips.
Delete My Clips	Deletes all unprotected files from My Clips.
Erase	Select [Yes] and press the ⊛ button to delete the clip.

3 With the My Clips you want for the movie selected, highlight [Export My Clips] and press the ⊛ button.

4 Select an item using △ ▽ and press the ⊛ button.

Clip Effects	You can apply 6 types of art effects.
Transition Effect	You can apply fade effects.
BGM	You can set [Happy Days] or [Off].
Recorded Clip Volume	When [BGM] is set to [Happy Days], you can set a volume for sounds recorded in the movie.
Recorded Clip Sound	By setting to [On], you can create a movie with the recorded sound. This setting is only available when [BGM] is set to [Off].
Preview	You can preview the files of the edited My Clips in order, starting from the first file.

5 When you have finished the editing, select [Begin Export] and press the ⊛ button.
  • The combined album is saved as a single movie.
  • Exporting a movie may take some time.
  • The maximum length for My Clips is 15 minutes and the maximum file size is 4 GB.

• It may take a while for My Clips to display after taking out, inserting, erasing, or protecting the card.
• You can record a maximum of 99 My Clips and a maximum of 99 cuts per clip. The maximum values may vary depending on the file size and length of My Clips.
• You cannot add movies other than clips to My Clips.

BGM other than [Happy Days]
To use BGM other than [Happy Days], record data that you have downloaded from the Olympus website onto the card and select it as [BGM] in Step 4. Visit the following website for the download.
http://support.olympus-imaging.com/bgmdownload/

■ Recording Slow Motion Movies

Record slow-motion movies. Footage shot at 120 fps plays back at 30 fps; quality is equivalent to [HD].

1 Highlight [High-speed] in the movie mode option (P. 54) and press the ⊛ button.

2 Press the ⏺ button to start shooting.
  • Press the ⏺ button again to end shooting.

• Focus and exposure are fixed at the start of recording.
• Recording can continue for up to 20 seconds.
• Sound will not be recorded.

Reducing camera operating sounds when shooting a movie

You can prevent the camera from recording operating sounds that occur due to camera operations while shooting.

Tap the silent shooting tab to display the function items.

After tapping an item, tap the displayed arrows to select the settings.

Silent shooting tab

• Electronic zoom*, recording volume, aperture, shutter speed, exposure compensation, ISO sensitivity
  * Only available with power zoom lenses
• The options available vary with the shooting mode.

Using various settings

Controlling exposure (Exposure ✕)

The exposure selected automatically by the camera can be altered to suit your artistic intent. Choose positive values to make pictures brighter, negative values to make them darker. Exposure compensation can be adjusted by up to ±5.0 EV.

Negative (–)   No compensation (0)   Positive (+)

- Use the front dial to adjust the exposure compensation.
- Exposure compensation is not available in AUTO, **M**, or **SCN** mode or when Live Time or panorama is selected in AP mode.
- Only values of up to ±3 EV are reflected in the live view display in the monitor or viewfinder. If the exposure exceeds ±3.0 EV, the exposure bar will begin flashing.
- Movies can be corrected in a range up to ±3.0 EV.

  ✍
- The role of the front/rear dial can be changed in the ✿ custom menus. ☞ [Dial Function] (P. 114)

Locking the exposure (AE Lock)

You can lock the exposure by pressing the **AEL/AFL** button. Use this when you want to adjust the focus and exposure separately or when you want to shoot several images at the same exposure.

- If you press the **AEL/AFL** button once, the exposure is locked and AEL is displayed. ☞ "AEL/AFL" (P. 120)
- Press the **AEL/AFL** button once again to release the AE Lock.
- The lock will be released if you operate the mode dial, **MENU** button, or ⊛ button.
- If another role is assigned to the **Fn1** button, choose [AEL] (P. 89).

Digital Zoom (Digital Tele-converter)

This option takes a crop at the center of the frame the same dimensions as the size option currently selected for image quality and zooms it in to fill the display. The zoom ratio increases by about 2×. This allows you to zoom in past the lens' maximum focal length, making it a good choice when you are unable to switch lenses or find it difficult to get any closer to your subject.

- Press the Q button to set the digital teleconverter to [On].
- Q is displayed on the monitor.
- To exit digital zoom, press the Q button again.
- Digital zoom is not available when multiple exposure, panorama, or keystone compensation is selected in AP mode or when [Standard] is selected in movie mode.
- When a RAW image is displayed, the area visible in the monitor is indicated by a frame.
- AF target drops.
- If another role is assigned to the **Fn2** button, choose [Q] (P. 89).

Choosing an AF Target Mode (AF target settings)

The frame showing the location of the focus point is referred to as the "AF target". You can choose the size of the AF target. You can also select Face Priority AF (P. 64).

1 Press ◁ to display the AF target.

2 Select [[▪] (Single Target)] or [[⊞] (9-Target Group)] using the front dial.
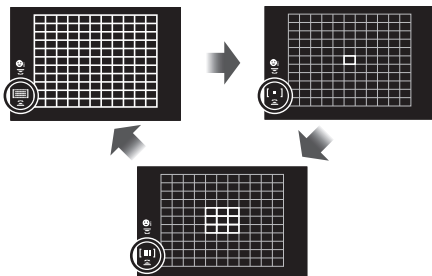
[⊞] **All Targets**	The camera automatically chooses from the full set of focus targets.
[▪] **Single Target**	You can choose a single AF target.
[⊞] **9-Target Group**	The camera automatically chooses from the targets in the selected nine-target group.

- The single target mode is automatically applied in movie shooting if the group target mode is set.
- When using a Four Thirds system lens, the camera automatically switches to single target mode.

Setting the AF target

You can position the target over your subject.

1 Press ◁ to display the AF target.
   - If [[⊞] (All Targets)] is selected, select [[▪] (Single Target)] or [[⊞] (9-Target Group)] using the front dial.

2 Use △ ▽ ◁ ▷ to choose a focus area.

- The size and number of the AF targets changes with the aspect ratio (P. 76) and the option selected for [Digital Tele-converter] (P. 103).

✎
- Touch controls can also be used.

Face priority AF/Eye priority AF

The camera automatically detects and focuses on the faces or eyes of portrait subjects. When digital ESP metering is used, exposure will be weighted according to the value metered for the face.

1 Press ◁ to display the AF target.

2 Select an option using the rear dial.
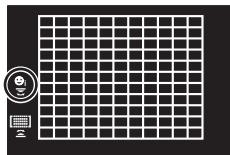
☺	**Face Priority On**	The camera detects and focuses on faces.
☺OFF	**Face Priority Off**	Face priority AF off.
☺ᵢ	**Face & Eye Priority On**	The camera detects faces and focuses on the eye closest to the camera.

3 Point the camera at your subject.
• If a face is detected, it will be indicated by a white frame.

4 Press the shutter button halfway to focus.
• When the camera focuses on the face in the white frame, the frame will turn green.
• If the camera is able to detect the subject's eyes, it will display a green frame over the selected eye. (eye priority AF)

5 Press the shutter button the rest of the way down to shoot.
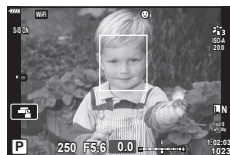
• Depending on the subject and the art filter setting, the camera may not be able to correctly detect the face.
• When set to [☒ (Digital ESP metering)] (P. 82), metering is performed with priority given to faces.

🖉

• Face priority is also available in [MF] (P. 75). Faces detected by the camera are indicated by white frames.

Changing ISO sensitivity (ISO)

Select a value according to subject brightness. Higher values let you photograph darker scenes but also increase image "noise" (mottling). Select [AUTO] to let the camera adjust sensitivity according to lighting conditions.

1 Press △.

2 Rotate the front dial to choose an option.

AUTO	Sensitivity is adjusted automatically according to shooting conditions. Use [ISO-Auto Set] (P. 116) in ✿ Custom Menu D1 to choose the maximum sensitivity selected by the camera and the shutter speed at which auto sensitivity control takes effect.
LOW, 200–25600	Choose a value for ISO sensitivity. ISO 200 offers a good balance between noise and dynamic range.

Using a flash (Flash photography)

The flash can be set manually as required. The flash can be used for flash photography in a variety of shooting conditions.

1 Rotate the **ON/OFF** lever to **↯UP** to raise the flash.

ON/OFF lever
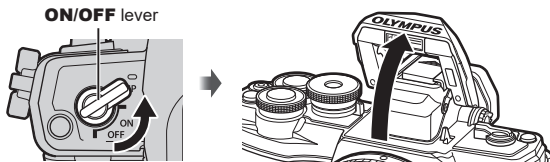
2 Press ▷.

3 Select an item using the front dial and press the ⊛ button.
   - The options available and the order in which they are displayed vary depending on the shooting mode. ☞ "Flash modes that can be set by shooting mode" (P. 67)

↯	**Flash**	The flash fires regardless of the light conditions. • Shutter speed can be set to values between that selected for [↯ Slow Limit] (P. 124) and [↯ X-Sync.] (P. 124) in ✿ Custom Menu **◨**.
↯◉	**Red-eye reduction flash**	The flash fires so that the red-eye phenomenon is reduced.
⊛	**Flash off**	The flash does not fire.
↯◉SLOW	**Slow synchronization (1st curtain)/Red-eye reduction flash**	The slow synchronization is combined with the red-eye reduction flash.
↯SLOW	**Slow synchronization (1st curtain)**	The flash fires with slow shutter speeds to brighten dimly-lit backgrounds.
↯SLOW2	**Slow synchronization (2nd curtain)**	The flash fires immediately before the shutter closes to create trails of light behind moving light sources.
↯FULL, ↯1/4 etc.	**Manual flash**	For users who prefer manual operation. Press the **INFO** button and use △ ▽ to adjust flash output.

- In [↯◉ (Red-eye reduction flash)], after the pre-flashes, it takes about 1 second before the shutter is released. Do not move the camera until shooting is complete.
- [↯◉ (Red-eye reduction flash)] may not work effectively under some shooting conditions.
- When the flash fires, the shutter speed is set to 1/250 seconds or slower. When shooting a subject against a bright background with the flash, the background may be overexposed.
- In the silent mode (P. 69), the shutter speed when the flash fires is set to 1/20 seconds or slower.

2

Shooting

Optional Flash Units

When using optional flash units, be sure the built-in flash has been securely restored to its housing.

Flash modes that can be set by shooting mode

Shooting mode	Monitor	Flash mode	Flash timing	Conditions for firing the flash	Shutter speed limit
P/A	⚡	Flash	1st curtain	Always fires	30 sec. – 1/250 sec.*
	⚡◉	Red-eye reduction			1/30 sec. – 1/250 sec.*
	⚡	Flash off	—	—	—
	⚡◉SLOW	Slow synchronization (red-eye reduction flash)	1st curtain	Always fires	60 sec. – 1/250 sec.*
	⚡SLOW	Slow Synchronization (1st curtain)			
	⚡SLOW2	Slow synchronization (2nd curtain)	2nd curtain		
S/M	⚡	Flash	1st curtain	Always fires	60 sec. – 1/250 sec.*
	⚡◉	Red-eye reduction flash			
	⚡	Flash off	—	—	—
	⚡SLOW2	Slow synchronization (2nd curtain)	2nd curtain	Always fires	60 sec. – 1/250 sec.*

- Only ⚡ and ⚡ can be set in 🅐🆄🆃🅾 mode.
* The shutter speed is 1/200 seconds when using a separately sold external flash. For the silent mode, the shutter speed is 1/20 seconds.

Minimum range

The lens may cast shadows over objects close to the camera, causing vignetting, or the flash may be too bright even at minimum output.

Lens	Approximate distance at which vignetting occurs
14-42mm f3.5-5.6 II R	1 m
ED 14-42mm f3.5-5.6 EZ	0.5 m
ED 40-150mm f4.0-5.6 R	0.9 m
ED 14-150mm f4.0-5.6 II	0.5 m

- External flash units can be used to prevent vignetting. To prevent photographs from being overexposed, select **A** or **M** mode, and choose a high aperture value or reduce ISO sensitivity.

Performing the sequential/self-timer shooting

Adjust settings for burst or self-timer photography. Choose an option according to your subject.

1 Press the ☐ⱼ☉ (▽) button.

2 Highlight one of the following options using ◁▷.

☐/ ♦☐/ ♥☐	**Single**	1 frame is taken at a time when the shutter button is pressed.
☐ₕ/ ♥☐ₕ	**Sequential High**	With ☐ₕ, pictures are taken at up to about 8.5 frames per second (fps) while the shutter button is pressed all the way down. With ♥☐ₕ, pictures are taken at up to about 14 fps. Focus, exposure, and white balance are fixed at the values for the first shot in each series.
☐ₗ/ ♦☐ₗ/ ♥☐ₗ	**Sequential Low**	Pictures are taken at up to about 4.8 frames per second (fps) while the shutter button is pressed all the way down. Focus and exposure are fixed according to the options selected for [◧AF Mode] (P. 75) and [AEL/AFL] (P. 120).
☉12s/ ♦☉12s/ ♥☉12s	**☉ 12 sec**	Press the shutter button halfway to focus, the rest of the way down to start the timer. First, the self-timer lamp lights up for approximately 10 seconds, then it blinks for approximately 2 seconds and the picture is taken.
☉2s/ ♦☉2s/ ♥☉2s	**☉ 2 sec**	Press the shutter button halfway to focus, the rest of the way down to start the timer. The self-timer lamp blinks for approximately 2 seconds, and then the picture is taken.
☉C/ ♦☉C/ ♥☉C	**Custom Self-timer**	Press the **INFO** button to set [☉ Timer], [Number of Frames], and [Interval Length]. Use ◁▷ to highlight items and △▽ to choose a value.

Items marked with ♦ reduce the slight blur caused by the movement of the shutter.
Items marked with ♥ use the electronic shutter. Use these with shutter speeds faster than 1/4000 seconds, or in settings where the sound of the shutter would be unwelcome.

3 Press the ⓞ button.

• Fix the camera securely on a tripod for self-timer shooting.
• If you stand in front of the camera to press the shutter button when using the self-timer, the picture may be out of focus.
• When you are using ☐ₗ, ♦☐ₗ or ♥☐ₗ, live view is displayed. In ☐ₕ or ♥☐ₕ, the display shows the last photograph taken during the sequential shooting.
• The speed of sequential shooting varies depending on the lens you are using and the focus of the zoom lens.
• During sequential shooting, if the battery level icon blinks due to low battery, the camera stops shooting and starts saving the pictures you have taken on the card. The camera may not save all of the pictures depending on how much battery power remains.

✎
• To cancel the activated self-timer, press ▽.

The Electronic Shutter (Silent[♥])

Take pictures using the electronic shutter. Use for shutter speeds faster than 1/4000 s or in settings where the sound of the shutter would be unwelcome. The electronic shutter can be used in single-frame mode and self-timer modes and for frame rates as high as about 14 fps in sequential shooting modes. This setting is only available in **P**/**A**/**S**/**M**/**ART** modes.

• When the flash fires, the shutter speed is set to 1/20 seconds or slower.
• By default, [■))]/[AF Illuminator]/[Flash Mode] is disabled in the [Silent[♥]] mode. Each item can be enabled in [Silent[♥]Settings].

1 Press the ⬛⟲ (▽) button.

2 Highlight one of the options marked with ♥ using ◁▷.

3 Press the ⊛ button.
  • When the shutter is released, the monitor screen will go dark for a moment. No shutter sound will be emitted.

• The desired results may not be achieved under flickering light sources such as fluorescent or LED lamps or if the subject moves abruptly during shooting.
• Note that due to the electronic shutter, the subject may appear to be distorted in photographs if camera moves quickly during shooting or when shooting fast-moving subjects.

Calling shooting options

■ Live control

You can use live control to select the shooting function while checking the effect on the screen.

Live control screen

Functions

WB Auto

Settings

■ Available settings

Picture mode*1 ....P. 72
ISO sensitivity*1 ....P. 65
White balance*1 ....P. 73
AF mode*1 ....P. 75
Aspect ratio...P. 76

*1 Available in movie mode.
*2 Available in **SCN** mode.
*3 Available in **ART** mode.

□ ◄i:-*1 ....P. 76
□ ◄i:-*1 ....P. 77
Movie (exposure) mode*1 ....P. 79
Scene mode*2 ....P. 29
Art filter mode*3....................................P. 42

1 Press ⊛ to display the live control.
• To hide the live control, press ⊛ again.

2 Use △ ▽ to highlight the desired function and ◁ ▷ to highlight a setting, and then press the ⊛ button.
• You can use the front dial or rear dial to select a setting.
• The selected settings take effect automatically if no operations are performed for about 8 seconds.

Displays the selected function name

Cursor

△
▽
or
⊚

Cursor

◁ ▷ or ⊚
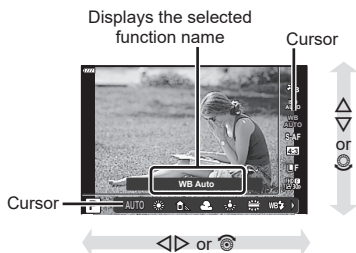
• Some items are not available in some shooting modes.

✍
• For the default settings of each option, refer to "Defaults" (P. 156).

■ LV super control panel

Other shooting options can be accessed via the LV super control panel, which lists the options selected for the following shooting settings.
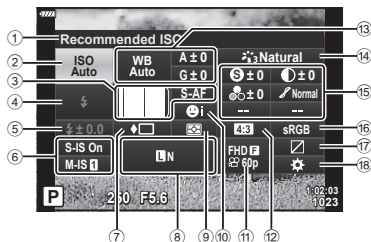
Settings that can be modified using LV super control panel

① Currently selected option
② ISO sensitivity ....P. 65
③ ⚫ AF mode ....P. 75
   AF target ....P. 63
④ Flash mode ....P. 66
⑤ Flash intensity control ....P. 80
⑥ Image stabilizer...............................P. 80
⑦ Sequential shooting/Self-timer........P. 68
⑧ ⚫ ◀┊▪ ....P. 76
⑨ Metering mode...............................P. 82
⑩ Face priority....................................P. 64
⑪ ⏺ ◀┊▪ ....P. 77
⑫ Aspect ratio.....................................P. 76
⑬ White balance ....P. 73
   White balance compensation..........P. 81

⑭ Picture mode...................................P. 72
⑮ Sharpness ◎*1................................P. 82
   Contrast ◑*1....................................P. 83
   Saturation ◎*1................................P. 83
   Gradation ✎*1..................................P. 84
   Color filter ◉*1 ....P. 85
   Monochrome color ◉*1...................P. 85
   Effect ◉*1..P. 86
   Color ◎*1*2......................................P. 44
   Color/Vivid ⓢ*1*3 ....P. 72
   Effect*1 ....P. 42
⑯ Color space.....................................P. 87
⑰ Highlight & shadow control ....P. 88
⑱ Button function assignment ....P. 89

*1 The display may differ when Art Filter is selected for picture mode.
*2 Displayed when Partial Color is set.
*3 Displayed when Color Creator is set.

1 Press the 🔲 button in **P**/**A**/**S**/**M** modes.
   - The LV super control panel will be displayed.
   - In 🅰🆄🆃🅾, **ART**, **SCN**, and 🅰🅿 modes, the display of the LV super control panel is controlled via [⚫Control Settings] (P. 115).
   - The LV super control panel is not displayed in movie mode.

Cursor
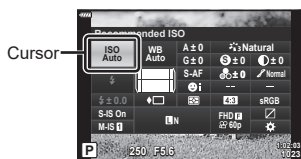
2 Highlight an item using △▽◁▷ and press the ㊟ button.

3 Use ◁▷ to highlight an option.

✎
   - Settings can also be adjusted using the dials or touch controls.
   - For the default settings of each option, refer to "Defaults" (P. 156).

Processing options (Picture Mode)

You can select a picture mode and make individual adjustments to contrast, sharpness, and other parameters (P. 82–86). Changes to each picture mode are stored separately.

1 Press the ⊛ button and use △ ▽ to highlight Picture Mode.

2 Highlight an option using ◁▷ and press the ⊛ button.

Picture Mode

■ Picture mode options

🐾₁	**i-Enhance**	The camera adjusts colors and contrast for optimal results according to the type of subject.
🐾₂	**Vivid**	Choose for vivid colors.
🐾₃	**Natural**	Choose for natural colors.
🐾₄	**Muted**	Choose for pictures that will later be retouched.
🐾₅	**Portrait**	Enhance skin tones.
Ⓜ	**Monochrome**	Record pictures in monochrome. You can apply color filter effects and choose a tint.
Ⓒ	**Custom**	Adjust picture mode parameters to create a custom version of a selected picture mode.
🖼	**e-Portrait**	Smooth complexions.
Ⓢ	**Color Creator***1	Adjust hue and color to suit your creative intent.
ART 1	**Pop Art**	Uses Art Filter settings. Art effects can also be used.
ART 2	**Soft Focus**	
ART 3	**Pale&Light Color**	
ART 4	**Light Tone**	
ART 5	**Grainy Film**	
ART 6	**Pin Hole**	
ART 7	**Diorama**	
ART 8	**Cross Process**	
ART 9	**Gentle Sepia**	
ART 10	**Dramatic Tone**	
ART 11	**Key Line**	
ART 12	**Watercolor**	
ART 13	**Vintage**	
ART 14	**Partial Color***2	
ART 15	**Bleach Bypass**	
ART 16	**Instant Film**	

*1 After choosing Color Creator using the ◁▷ buttons, press the **INFO** button and use the front dial to adjust hue and the rear dial to adjust saturation.

*2 After choosing Partial Color using ◁▷, press the **INFO** button to display the color ring (P. 44).

Adjusting color (WB (white balance))

White balance (WB) ensures that white objects in images recorded by the camera appear white. [AUTO] is suitable in most circumstances, but other values can be selected according to the light source when [AUTO] fails to produce the desired results or you wish to introduce a deliberate color cast into your images.

1 Press the ⊛ button and use △ ▽ to highlight White Balance.

2 Highlight an option using ◁▷ and press the ⊛ button.

White Balance

WB mode		Color temperature	Light conditions
Auto white balance	AUTO	—	For most light conditions (when there is a white portion framed on the monitor). Use this mode for general use.
Preset white balance	☀	5300 K	For shooting outdoors on a clear day, or to capture the reds in a sunset or the colors in a fireworks display
	☁	7500 K	For shooting outdoors in the shadows on a clear day
	☁	6000 K	For shooting outdoors on a cloudy day
	☼	3000 K	For shooting under a tungsten light
	☰	4000 K	For shooting under a fluorescent light
	WB⚡	5500 K	For flash shooting
One-touch white balance	⚘₁/ ⚘₂/ ⚘₃/ ⚘₄	Color temperature set by one-touch WB	Press the **INFO** button to measure white balance using a white or gray target when using a flash or other light source of an unknown type or when shooting under mixed lighting. ☞ "One-touch white balance" (P. 74)
Custom white balance	CWB	2000 K – 14000 K	After pressing the **INFO** button, use △ ▽ ◁▷ to select a color temperature and then press the ⊛ button.

One-touch white balance

Measure white balance by framing a piece of paper or other white object under the lighting that will be used in the final photograph. This is useful when shooting a subject under natural light, as well as under various light sources with different color temperatures.

1 Select [🔄1], [🔄2], [🔄3], or [🔄4] (one-touch white balance 1, 2, 3, or 4) and press the **INFO** button.

2 Photograph a piece of colorless (white or gray) paper.
   • Frame the paper so that it fills the display and no shadows fall it.
   • The one-touch white balance screen appears.

3 Select [Yes] and press the ⊛ button.
   • The new value is saved as a preset white balance option.
   • The new value is stored until one-touch white balance is measured again. Turning the power off does not erase the data.

Choosing a focus mode (AF Mode)
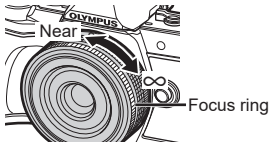
You can select a focusing method (focus mode). You can choose separate focusing methods for still photography mode and movie mode.

1 Press the ⊛ button and use △ ▽ to highlight AF Mode.

AF Mode

2 Highlight an option using ◁▷ and press the ⊛ button.

S-AF (Single AF)	The camera focuses once when the shutter button is pressed halfway. When the focus is locked, a beep sounds, and the AF confirmation mark and the AF target mark light up. This mode is suitable for taking pictures of still subjects or subjects with limited movement.
C-AF (Continuous AF)	The camera repeats focusing while the shutter button remains pressed halfway. When the subject is in focus, the AF confirmation mark lights up on the monitor and the beep sounds when the focus is locked at the first time. Even if the subject moves or you change the composition of the picture, the camera continues trying to focus. • When using a Four Thirds system lens, this setting will change to [S-AF].
MF (Manual focus)	This function allows you to manually focus on any position by operating the focus ring on the lens. Near — Focus ring
S-AF+MF (Simultaneous use of S-AF mode and MF mode)	After pressing the shutter button halfway to focus in [S-AF] mode, you can turn the focus ring to fine-adjust focus manually.
C-AF+TR (AF Tracking)	Press the shutter button halfway to focus; the camera then tracks and maintains focus on the current subject while the shutter button is held in this position. • The AF target is displayed in red if the camera can no longer track the subject. Release the shutter button and then frame the subject again and press the shutter button halfway. • When using a Four Thirds system lens, this setting will change to [S-AF].

- The camera may be unable to focus if the subject is poorly lit, obscured by mist or smoke, or lacks contrast.
- When using a Four Thirds system lens, AF will not be available during movie recording.
- AF mode is unavailable when the lens MF focus clutch is set to MF.

Setting the image aspect

Choose the ratio of width to height for pictures according to your intent or your goals for printing or the like. In addition to the standard aspect (width-to-height) ratio of [4:3], the camera offers settings of [16:9], [3:2], [1:1], and [3:4].

1 Press the ⊛ button and use △ ▽ to highlight Image Aspect.

2 Use ◁ ▷ to choose a value and press the ⊛ button.

Image Aspect

- Image aspect can only be set for still images.
- JPEG images cropped to the selected aspect ratio are saved. RAW images are not cropped and are saved with the selected aspect ratio information.
- When RAW images are played back, the selected aspect ratio is shown by a frame.

Selecting image quality (Still image quality, ◻◀⁚⁃)

You can set an image quality mode for still images. Select a quality suitable for the application (such as for processing on PC, use on website etc.).

1 Press the ⊛ button and use △ ▽ to highlight (Still image quality, ◻◀⁚⁃).

Still Image Quality

2 Highlight an option using ◁ ▷ and press the ⊛ button.
- Choose from JPEG (☐F, ☐N, Ⓜ️N, and Ⓢ️N) and RAW modes. Choose a JPEG+RAW option to record both a JPEG and a RAW image with each shot. JPEG modes combine image size (☐, Ⓜ️, and Ⓢ️) and compression ratio (SF, F, N, and B).
- When you want to select a combination other than ☐F, ☐N, Ⓜ️N, and Ⓢ️N, change the [◀⁚⁃ Set] (P. 117) settings in Custom Menu.

RAW image data

RAW images consist of unprocessed image data to which settings such as exposure compensation and white balance have yet to be applied. They serve as raw data for images that will be processed after shooting. RAW image files:
- Have the extension ".orf"
- Cannot be viewed on other cameras
- Can be viewed on computers using Olympus Workspace photo editing software
- Can be saved in JPEG format using the [RAW Data Edit] (P. 108) retouch option in the camera menus
☞ "Retouching Pictures (Edit)" (P. 108)

Selecting image quality (Movie quality, Ω◀⋮-)

Choose the image quality options available for movie recording. When choosing an option, consider how the movie will be used: for example, are you planning to process it on a computer, or is it intended for upload to a website?

1 Press the ⊛ button and use $\triangle \nabla$ to highlight (Movie quality, Ω◀⋮-).

2 Use $\triangleleft \triangleright$ to choose a value and press the ⊛ button.

Movie Quality

◼ Available Movie Quality Options

The options available for movie quality vary with the movie mode (P. 54) and the options selected for [Video Frame Rate] and [Video Bit Rate] in the video menu (P. 107).

The following options are available when [Standard] is selected for movie mode or the mode dial is rotated to a position other than Ω:

Video Frame Rate	Video Bit Rate	Movie quality
30p	Super Fine	1920×1080 Super Fine 60p
		1920×1080 Super Fine 30p
		1280×720 Super Fine 30p
	Fine	1920×1080 Fine 60p
		1920×1080 Fine 30p
		1280×720 Fine 30p
	Normal	1920×1080 Normal 60p
		1920×1080 Normal 30p
		1280×720 Normal 30p
25p	Super Fine	1920×1080 Super Fine 50p
		1920×1080 Super Fine 25p
		1280×720 Super Fine 25p
	Fine	1920×1080 Fine 50p
		1920×1080 Fine 25p
		1280×720 Fine 25p
	Normal	1920×1080 Normal 50p
		1920×1080 Normal 25p
		1280×720 Normal 25p

Video Frame Rate	Video Bit Rate	Movie quality
24p	Super Fine	FHD SF 24p 1920×1080 Super Fine 24p
		HD SF 24p 1280×720 Super Fine 24p
	Fine	FHD F 24p 1920×1080 Fine 24p
		HD F 24p 1280×720 Fine 24p
	Normal	FHD N 24p 1920×1080 Normal 24p
		HD N 24p 1280×720 Normal 24p

The following options are available when [4K] is selected for movie mode:

Video Frame Rate	Video Bit Rate	Movie quality
30p	Not selectable	4K 30p 3840×2160 30p
25p		4K 25p 3840×2160 25p
24p		4K 24p 3840×2160 24p

The following options are available when [Clips] is selected for movie mode:

Video Frame Rate	Video Bit Rate	Movie quality
30p	Not selectable	FHD N 60p 1920×1080 Normal 60p
		FHD N 30p 1920×1080 Normal 30p
		HD N 30p 1280×720 Normal 30p
25p		FHD N 50p 1920×1080 Normal 50p
		FHD N 25p 1920×1080 Normal 25p
		HD N 25p 1280×720 Normal 25p
24p		FHD N 24p 1920×1080 Normal 24p
		HD N 24p 1280×720 Normal 24p

The following option is available when [High-speed] is selected for movie mode:

Video Frame Rate	Video Bit Rate	Movie quality
Not selectable		HD HS 120fps 1280×720 HighSpeed 120fps

- Movies are stored in MPEG-4 AVC/H.264 format. The maximum size of individual file is limited to 4 GB. The maximum recording time of individual movie is limited to 29 minutes.
- Depending on the type of card used, recording may end before the maximum length is reached.

Choosing an Exposure Mode

You can create movies that take advantage of the effects available in **P**, **A**, **S**, and **M** modes. This option takes effect when the mode dial is rotated to n.

1 Rotate the mode dial to n.

2 Press the ⊛ button and use △▽ to highlight movie (exposure) mode.

3 Use ◁▷ to choose a value and press the ⊛ button.

Movie (exposure) mode

P	Optimal aperture is set automatically according to the brightness of the subject. Use the front dial (⟳) or rear dial (⟲) to adjust exposure compensation.
A	Depiction of background is changed by setting the aperture. Use the front dial (⟳) to adjust exposure compensation and rear dial (⟲) to adjust aperture.
S	Shutter speed affects how the subject appears. Use the front dial (⟳) to adjust exposure compensation and rear dial (⟲) to adjust shutter speed. Shutter speed can be set to values between 1/24 s and 1/4000 s.
M	Aperture and shutter speed can be manually set. Use the front dial (⟳) to select aperture value and the rear dial (⟲) to select shutter speed. Shutter speed can be set to values between 1/24 s and 1/4000 s. ISO sensitivity can only be set manually to values between 200 and 6400.

• Blurred frames caused by such factors as the subject moving while the shutter is open can be reduced by selecting the fastest available shutter speed.
• The low end of the shutter speed changes according to the frame rate of the movie record mode.
• Excessive camera shake may not be compensated enough.
• When the inside of the camera becomes hot, shooting is automatically stopped to protect the camera.
• With some art filters, [C-AF] function is limited.

2

Shooting

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Adjusting flash output (Flash intensity control)

Flash output can be adjusted if you find that your subject to appears overexposed, or is underexposed even though the exposure in the rest of the frame is just right.

1 Press the 🔽 button in **P**/**A**/**S**/**M** modes.
   - In 🅰️, **ART**, **SCN**, and 🔼 modes, the display of the LV super control panel is controlled via [📷Control Settings] (P. 115).

2 Use △▽◁▷ to select [🔼], then press the Ⓞ button.

3 Use ◁▷ to choose a value and press the Ⓞ button.
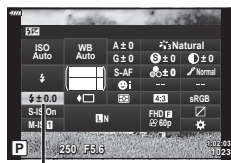
Flash intensity control

- This setting has no effect when the flash control mode for the external flash unit is set to MANUAL.
- Changes to flash intensity made with the external flash unit are added to those made with the camera.

Reducing camera shake (Image Stabilizer)

You can reduce the amount of camera shake that can occur when shooting in low light situations or shooting with high magnification.
The image stabilizer starts when you press the shutter button halfway.

1 Press the 🔽 button in **P**/**A**/**S**/**M** modes.
   - In 🅰️, **ART**, **SCN**, and 🔼 modes, the display of the LV super control panel is controlled via [📷Control Settings] (P. 115).

2 Use △▽◁▷ to select [📷Image Stabilizer] or [🎬Image Stabilizer], then press the Ⓞ button.

3 Highlight an option using ◁▷ and press the Ⓞ button.
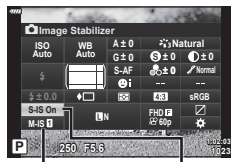
🎬Image Stabilizer   📷Image Stabilizer

Still picture (S-IS)	S-IS Off	Image stabilizer is off.
	S-IS On	The camera detects the panning direction and applies the appropriate image stabilization.
Movie (M-IS)	M-IS Off	Image stabilizer is off.
	M-IS **1**	The camera uses both sensor shift (VCM) and electronic correction.
	M-IS **2**	The camera uses sensor shift (VCM) correction only. Electronic correction is not used.

- The image stabilizer cannot correct excessive camera shake or camera shake that occurs when the shutter speed is set to the slowest speed. In these cases, it is recommended that you use a tripod.
- When using a tripod, set [📷Image Stabilizer]/[🎬Image Stabilizer] to [S-IS Off]/[M-IS Off].
- When using a lens with an image stabilization function switch, priority is given to the lens side setting.
- You may notice an operating sound or vibration when the image stabilizer is activated.

Using lenses other than Micro Four Thirds/Four Thirds System lenses

You can use focal length information to reduce camera shake when shooting with lenses that are not Micro Four Thirds or Four Thirds system lenses.

• Press the **INFO** button while [☐Image Stabilizer] or [🎥Image Stabilizer] is selected, use △▽◁▷ to highlight a focal length, and press the ⊛ button.
• Choose a focal length between 0.1 mm and 1000.0 mm.
• Choose the value that matches the one printed on the lens.
• Selecting [Reset] (Basic) in Shooting Menu 1 does not reset the focal length.

Making fine adjustments to white balance (WB Compensation)

You can set and finely adjust the compensation values for both auto white balance and preset white balance.
Before proceeding, choose a white balance option to which to make fine adjustments.
☞ "Adjusting color (WB (white balance))" (P. 73)

1 Press the ◳ button in **P/A/S/M** modes.
   • In 🅰🆄🆃🅾, **ART**, **SCN**, and AP modes, the display of the LV super control panel is controlled via [☐Control Settings] (P. 115).

2 Highlight white balance compensation using △▽◁▷ and press the ⊛ button.

3 Use ◁▷ to choose an axis.

4 Choose a value using △▽ and press the ⊛ button.

WB
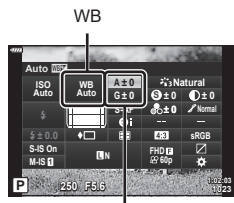
White balance compensation

For compensation on the A axis (Red-Blue)

Move the bar in the + direction to emphasize red tones and in the – direction to emphasize blue tones.

For compensation on the G axis (Green-Magenta)

Move the bar in the + direction to emphasize green tones and in the – direction to emphasize magenta tones.

• Selecting [Reset] (Basic) in Shooting Menu 1 does not reset the values selected.

Choosing how the camera measures brightness (Metering)

You can choose how the camera meters subject brightness.

1 Press the ⬛↲ button in **P/A/S/M** modes.
- In 🅰🆄🆃🅾, **ART**, **SCN**, and 🆃🅿 modes, the display of the LV super control panel is controlled via [⬛Control Settings] (P. 115).

2 Use △ ▽ ◁ ▷ to select [Metering], then press the ⊛ button.

3 Highlight an option using ◁ ▷ and press the ⊛ button.

Metering

▨	**Digital ESP metering**	Meters exposure in 324 areas of the frame and optimizes exposure for the current scene or portrait subject (if an option other than [OFF] is selected for [☺Face Priority]). This mode is recommended for general use.
⊙	**Center weighted averaging metering**	Provides the average metering between the subject and the background lighting, placing more weight on the subject at the center.
·⊡·	**Spot metering**	Meters a small area (about 2% of the frame) with the camera pointed at the object you wish to meter. Exposure will be adjusted according to the brightness at the metered point.
·⊡·HI	**Spot metering (highlight)**	Increases spot metering exposure. Ensures bright subjects appear bright.
·⊡·SH	**Spot metering (shadow)**	Lowers spot metering exposure. Ensures dark subjects appear dark.

Making fine adjustments to sharpness (Sharpness)

Adjust image sharpness. Outlines can be emphasized for a sharp, clear picture. Settings are stored separately for each picture mode.
- Adjustments may not be available depending on the shooting mode (P. 25).

1 Press the ⬛↲ button in **P/A/S/M** modes.
- In 🅰🆄🆃🅾, **ART**, **SCN**, and 🆃🅿 modes, the display of the LV super control panel is controlled via [⬛Control Settings] (P. 115).

Sharpness

2 Use △ ▽ ◁ ▷ to select [Sharpness], then press the ⊛ button.

3 Adjust sharpness using ◁ ▷ and press the ⊛ button.
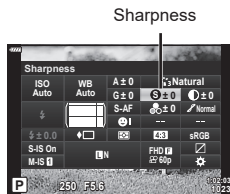
Making fine adjustments to contrast (Contrast)

Adjust image contrast. Increasing contrast heightens the difference between bright and dark areas for a harder, more well-defined picture. Settings are stored separately for each picture mode.
- Adjustments may not be available depending on the shooting mode (P. 25).

Contrast

1 Press the ⏺ button in P/A/S/M modes.
- In 🅰🅾🆃🅾, **ART**, **SCN**, and AP modes, the display of the LV super control panel is controlled via [🖿Control Settings] (P. 115).

2 Use △▽◁▷ to select [Contrast], then press the ⊛ button.

3 Adjust contrast using ◁▷ and press the ⊛ button.
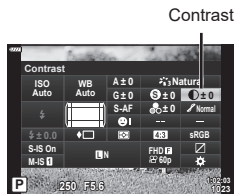
Making fine adjustments to saturation (Saturation)

Adjust color saturation. Increasing saturation makes pictures more vivid. Settings are stored separately for each picture mode.
- Adjustments may not be available depending on the shooting mode (P. 25).

Saturation

1 Press the ⏺ button in P/A/S/M modes.
- In 🅰🅾🆃🅾, **ART**, **SCN**, and AP modes, the display of the LV super control panel is controlled via [🖿Control Settings] (P. 115).

2 Use △▽◁▷ to select [Saturation], then press the ⊛ button.

3 Adjust saturation using ◁▷ and press the ⊛ button.

Making fine adjustments to tone (Gradation)

Adjust color brightness and shading. Bring pictures closer to what you envisage by, for example, brightening the entire picture. Settings are stored separately for each picture mode.

• Adjustments may not be available depending on the shooting mode (P. 25).

1 Press the ◲ button in P/A/S/M modes.

   • In 🄰, **ART**, **SCN**, and 🄐🄟 modes, the display of the LV super control panel is controlled via [🄲Control Settings] (P. 115).

Gradation

2 Use △ ▽ ◁▷ to select [Gradation], then press the ⊛ button.

3 Adjust tone using ◁▷ and press the ⊛ button.

AUTO: Auto	Divides the image into detailed regions and adjusts the brightness separately for each region. This is effective for images with areas of large contrast in which the whites appear too bright or the blacks appear too dark.
NORM: Normal	Use the normal mode for general uses.
HIGH: High Key	Uses a tone suitable for a bright subject.
LOW: Low Key	Uses a tone suitable for a dark subject.

Applying filter effects to monochrome pictures (Color Filter)

Color filter effects can be added when [Monochrome] is selected for picture mode (P. 72). Depending on the color of the subject, color filter effects can make subjects brighter or enhance contrast. Orange adds more contrast than yellow, red more contrast than orange. Green is a good choice for portraits and the like.

Picture Mode

1 Press the ⊿ button in P/A/S/M modes.
- In 🄰, ART, SCN, and AP modes, the display of the LV super control panel is controlled via [🄰Control Settings] (P. 115).

2 Use △ ▽ ◁ ▷ to select [Color Filter], then press the ⊛ button.

3 Highlight an option using ◁ ▷ and press the ⊛ button.
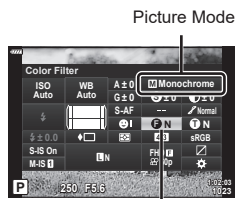
Color Filter

N:None	Creates a normal black and white image.
Ye:Yellow	Reproduces clearly defined white cloud with natural blue sky.
Or:Orange	Slightly emphasizes colors in blue skies and sunsets.
R:Red	Strongly emphasizes colors in blue skies and brightness of crimson foliage.
G:Green	Strongly emphasizes colors in red lips and green leaves.

Adjusting the tone of a monochrome image (Monochrome Color)

Add a tint to black-and-white pictures in the [Monochrome] picture mode (P. 72).

Picture Mode

1 Press the ⊿ button in P/A/S/M modes.
- In 🄰, ART, SCN, and AP modes, the display of the LV super control panel is controlled via [🄰Control Settings] (P. 115).

2 Use △ ▽ ◁ ▷ to select [Monochrome Color], then press the ⊛ button.

3 Use ◁ ▷ to choose a value and press the ⊛ button.
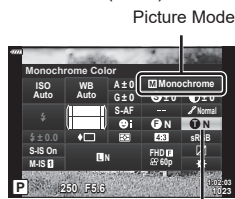
Monochrome Color

N:Normal	Creates a normal black and white image.
S:Sepia	Shoot in sepia-tinted monochrome.
B:Blue	Shoot in blue-tinted monochrome.
P:Purple	Shoot in purple-tinted monochrome.
G:Green	Shoot in green-tinted monochrome.

Adjusting i-Enhance effects (Effect)

Choose the strength of the i-Enhance effect when [i-Enhance] is selected for picture mode (P. 72).

1 Press the 🔽 button in P/A/S/M modes.
  - In 🅰️, **ART**, **SCN**, and 🆎 modes, the display of the LV super control panel is controlled via [⬛Control Settings] (P. 115).

2 Use △ ▽ ◁ ▷ to select [Effect], then press the 🆗 button.

3 Adjust the effect using ◁ ▷ and press the 🆗 button.

Picture Mode
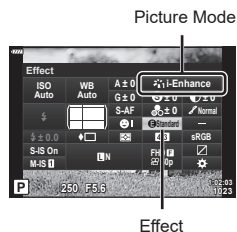
Effect

ⓔLow (Effect: Low)	Adds a low i-Enhance effect to images.
ⓔStandard (Effect: Standard)	Adds an i-Enhance effect between "low" and "high" to images.
ⓔHigh (Effect: High)	Adds a high i-Enhance effect to images.

Setting the color reproduction format (Color Space)

You can select a format to ensure that colors are correctly reproduced when shot images are regenerated on a monitor or using a printer. This option is equivalent to the [Color Space] (P. 117) in Custom Menu.

1 Press the ⟲ button in **P**/**A**/**S**/**M** modes.
   • In 🄰🅄🅃🅞, **ART**, **SCN**, and 🄐🄿 modes, the display of the LV super control panel is controlled via [■Control Settings] (P. 115).

2 Use △ ▽ ◁ ▷ to select [Color Space], then press the ⊛ button.

3 Select a color format using ◁ ▷ and press the ⊛ button.

Color Space

sRGB	The established color space standard for Windows systems. It is widely supported across displays, printers, digital cameras, and computer applications. This setting is recommended in most circumstances.
AdobeRGB	A color space standard defined by Adobe Systems Inc. It can reproduce a wider gamut of colors than sRGB. Accurate color reproduction is available only with software and devices (displays, printers, and the like) that support this standard. An underscore ("_") appears at the beginning of the file name (e.g., "_xxx0000.jpg").

• [AdobeRGB] is not available in 🄰🅄🅃🅞 (P. 28), **ART** (P. 42), **SCN** (P. 29), 🄐🄿 (P. 32), or the movie mode (P. 54).

Changing the brightness of highlights and shadows (Highlight&Shadow Control)

Adjust brightness separately for highlights, mid-tones, and shadows. You gain greater control over exposure than you would with exposure compensation alone. You can selectively make highlights darker or shadows brighter.

1 Press the ⚡ button in P/A/S/M modes.
   • In ᴬᵁᵀᴼ, ART, SCN, and ᴬᴾ modes, the display of the LV super control panel is controlled via [◯Control Settings] (P. 115).

2 Use △▽◁▷ to select [Highlight&Shadow Control], then press the ⊛ button.

3 Adjust brightness in shadows with ◁▷ and in highlights with △▽.
   • Settings can be reset by pressing and holding the ⊛ button.
   • Press the INFO button to view the mid-tone adjustment display.

4 Press the ⊛ button to save settings.
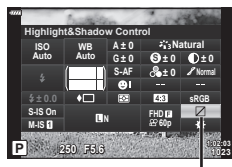
Highlight&Shadow Control
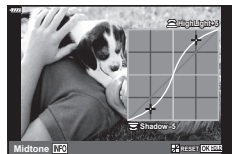
Assigning functions to buttons (Button Function)

Other roles can be assigned to buttons in place of their existing functions.

■ Customizable Controls

Button	Default
[Fn1] Function	**AEL/AFL** (AEL/AFL)
[Fn2] Function	▣ (Digital Tele-converter)

To change the function assigned to a button, follow the steps below.

1 Press the ▼ button in **P**/**A**/**S**/**M** modes.
  • In **AUTO**, **ART**, **SCN**, and **AP** modes, the display of the LV super control panel is controlled via [▢ Control Settings] (P. 115).

2 Use △ ▽ ◁ ▷ to select [Button Function], then press the ⊛ button.
  • The custom menu [Button Function] item will be displayed.
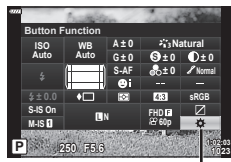
Button Function

3 Use △ ▽ to highlight the desired button and press ▷.

4 Use △ ▽ to highlight the desired function and press the ⊛ button.

5 Press the ⊛ button again to exit.

✎
  • The functions assigned to the buttons may be unavailable in some modes.
  • The options available vary with the current mode.

■ **Available Roles**

🔒 **(AEL/AFL)**	Press the button to use AE lock or AF lock. The function changes according to the [AEL/AFL] (P. 120) setting. When AEL is selected, press the button once to lock the exposure and display AEL on the monitor. Press the button again to cancel the lock.
◎ **(Preview)**	Aperture is stopped down to the selected value while the button is pressed.
🔄 **(One-touch white balance)**	Press the shutter button while the button is pressed to acquire a white balance value (P. 74). Highlight the desired number and press the ⊛ button to save the value.
[···] **(AF Area Select)**	Press the button to choose the AF target (P. 63).
MF	Press the button to select [MF] mode. Press the button again to restore the previously selected AF mode. Hold the button and rotate the front or rear dial to choose a focus mode.
🔲 **(Exposure compensation)**	Press the button to adjust exposure compensation. In **P**, **A**, **S**, **ART**, AP, and movie modes, you can adjust exposure compensation by pressing the button and using ◁▷ or the front or rear dial to choose the desired value. In **M** mode, you can adjust shutter speed or aperture by pressing the button and using △▽◁▷ or the front or rear dial to choose the desired values.
◲ **(Digital Tele-converter)**	Press the button to turn digital zoom [On] or [Off] (P. 103).
◻ **(Magnify)**	Press the button to display the magnification frame and press it again to magnify the image. Press and hold the button to cancel magnified display.
Peaking	Press the button to turn on and off the peaking display. When peaking is displayed, histogram and highlight/ shadow display are not available (P. 120).
🔲 **(Switch 🔲 Lock)**	Press and hold the button to enable and disable touch screen operation.

■ Zoom frame AF/Zoom AF (Super Spot AF)

You can zoom in on a portion of the frame when adjusting focus. Choosing a high zoom ratio allows you to use autofocus to focus on a smaller area than is normally covered by the AF target. You can also position the focus target more precisely. Press and hold the button to which [Q] has been assigned to cycle through the displays as follows:

Shooting display   Zoom frame AF display   Zoom AF display

Press and hold / ⊛
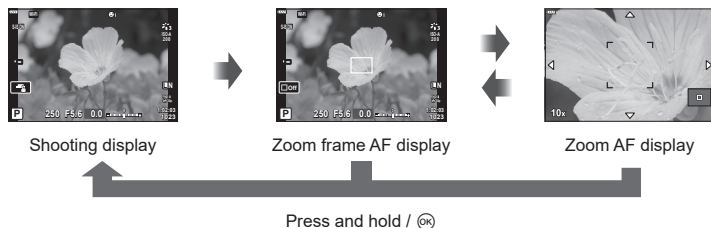
1 Assign [Q] to the **Fn1** or **Fn2** button.
   • To use Super Spot AF, you must first assign [Q] to the **Fn1** or **Fn2** button (P. 89).

2 Press the button to which [Q] has been assigned to display the zoom frame.
   • If the subject has been focused using autofocus immediately before the button is pressed, the zoom frame will be displayed at the current focus position.
   • Use △ ▽ ◁ ▷ to position the zoom frame.
   • Press the **INFO** button and use △ ▽ to choose the zoom ratio. (×3, ×5, ×7, ×10, ×14)

3 Press the assigned button again to zoom in on the zoom frame.
   • Use △ ▽ ◁ ▷ to position the zoom frame.
   • You can change the zoom ratio by rotating the front dial (☺) or rear dial (☺).

4 Press the shutter button halfway to initiate autofocus.
   • The camera will focus using the subject in the frame at the center of the screen. Use △ ▽ ◁ ▷ to choose a different focus position.

• Zoom is visible only in the monitor and has no effect on the resulting photographs.
• Press and hold the assigned button or press the ⊛ button to end zoom and exit the zoom frame AF display.
• When you are using a Four Thirds system lens, the AF will not operate with during zoom display.
• While zoomed in, a sound is made by the IS (Image Stabilizer).

✐

• Touch controls can also be used.

Information display during playback

Playback image information

Simplified display

Overall display

Switching the information display

You can switch the information displayed during playback by pressing the **INFO** button.

INFO button

INFO

INFO

Simplified display

INFO

Image only

INFO

Overall display
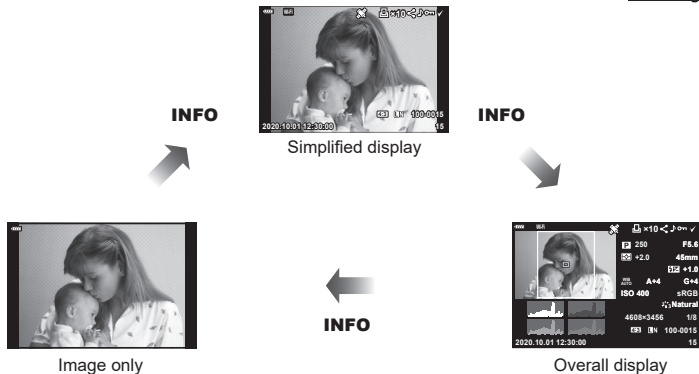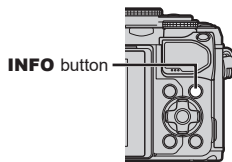
• You can add histogram, highlight & shadow, and Light Box to the information displayed during playback. ☞ [▶ Info] (P. 121)

Viewing photographs and movies

1 Press the ▶ button.
- A photograph or movie will be displayed.
- Select the desired photograph or movie using the front dial (⏱) or arrow pad.
- To return to shooting mode, press the shutter button halfway or press the ▶ button.

Front dial

Displays the previous frame   Displays the next frame

▶ button

Still image

Movie

Rear dial (☉)	Zoom in (☉)/Index (☉)
Front dial (⏱)	Previous (⏱)/Next (⏱) Operation also available during close-up playback.
Arrow pad (△▽◁▷)	Single-frame playback: display the next frame (▷)/display the previous frame (◁)/jump ahead 10 frames (▽)/jump back 10 frames (△) Close-up playback: Changing the close-up position You can display the next frame (▷) or the previous frame (◁) during close-up playback by pressing the **INFO** button. Press the **INFO** button again to display a zoom frame and use △▽◁▷ to change its position. Index/My Clips/calendar playback: Highlight image
INFO button	View image info
☑ button	Select picture (P. 98)
Fn2 button	Protect picture (P. 97)
🗑 button	Delete picture (P. 98)
⊛ button	View menus (in calendar playback, press this button to exit to single-frame playback)

Finding Pictures Quickly (Index and Calendar Playback)

- In single-frame playback, rotate the rear dial to ▦ (🔍) for index playback. Rotate further for My Clips playback and further still for calendar playback.
- Turn the rear dial to 🔍 (🔍) to return to single-frame playback.

| Single-frame playback | Index display | My Clips playback*1 | Calendar display |
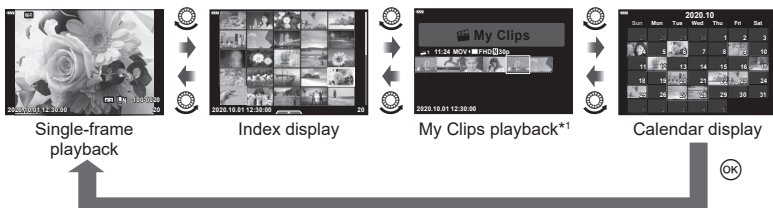
*1 If one or more My Clips have been created, it will be displayed here (P. 57).
- You can change the number of frames for index display. ☞ [▦ Settings] (P. 122)

Zooming In (Playback Zoom)

In single-frame playback, turn the rear dial to 🔍 (🔍) to zoom in. Turn to ▦ (🔍) to return to single-frame playback.

| Single-frame playback | 2× zoom | 14× zoom |
| | | Close-up playback |
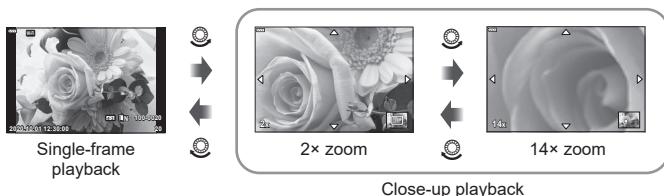
Rotating Pictures (Rotate)

Choose whether to rotate photographs.

1 Play the photograph back and press the ⊛ button.

2 Select [Rotate] and press the ⊛ button.

3 Press △ to rotate the image counterclockwise, ▽ to rotate it clockwise; the image rotates each time the button is pressed.
- Press the ⊛ button to save settings and exit.
- The rotated image is saved in its current orientation.
- Movies and protected images cannot be rotated.

$\widehat{Q}$-
- The camera can be configured to automatically rotate portrait-orientation pictures during playback. ☞ [▶] Playback Menu > [⬚] (P. 108)
  [Rotate] is not available when [Off] is selected for [⬚].

Viewing images as a slideshow (Slide Show)

This function displays images stored on the card one after another.

1 Press the ⊛ button in the playback display.

2 Select [⯐] and press the ⊛ button.
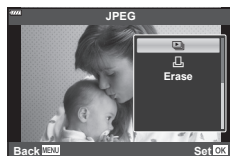
3 Adjust settings.

Start	Start the slideshow. Images are displayed in order, starting with the current picture.
BGM	Set [Happy Days] or [Off].
Slide	Set the type of data to be played back.
Slide Interval	Choose the length of time each slide is displayed from 2 to 10 seconds.
Movie Interval	Select [Full] to play back full length of each movie clip in the slideshow or [Short] to play back only the opening portion of each movie clip.

4 Select [Start] and press the ⊛ button.
   - The slideshow will start.
   - Press △ ▽ during the slideshow to adjust the overall volume of the camera speaker. Press ◁ ▷ while the volume adjustment indicator is displayed to adjust the balance between the sound recorded with the image or movie and background music.
   - Press the ⊛ button to stop the slideshow.

BGM other than [Happy Days]
To use BGM other than [Happy Days], record data that you have downloaded from the Olympus website onto the card and select it as [BGM] in Step 3. Visit the following website for the download.
http://support.olympus-imaging.com/bgmdownload/

Watching movies

Select a movie and press the ⊛ button to display the playback menu. Select [Play Movie] and press the ⊛ button to begin playback. Fast-forward and rewind using ◁/▷. Press the ⊛ button again to pause playback. While playback is paused, use △ to view the first frame and ▽ to view the last frame. Use ◁▷ or the front dial (☜) to view previous or next frame. Press the **MENU** button to end playback.

• Use △ ▽ to adjust the volume during movie playback.

For movies of 4 GB or larger

If the movie was automatically split into multiple files, pressing ⊛ will display a menu containing the following options:

[Play from Beginning]: Plays back a split movie all the way through
[Play Movie]:   Plays back files separately
[Delete entire ♔]:   Deletes all parts of a split movie
[Erase]:   Deletes files separately

• We recommend using the latest version of Olympus Workspace to play back movies on a computer. Before launching the software for the first time, connect the camera to the computer.

Protecting Pictures (O-n)

Protect images from accidental deletion. Display an image you wish to protect and press ⊛ to display the playback menu. Select [O-n] and press ⊛, and then press △ or ▽ to protect the image. Protected images are shown by a O-n (protect) icon. Press △ or ▽ to remove protection. You can also protect multiple selected images. ☞ "Selecting Multiple Pictures (O-n, Erase Selected, Share Order Selected)" (P. 98)

O-n (protect) icon

• Formatting the card erases all data including protected images.

✍

• You can also protect the current picture by pressing the **Fn2** button. The **Fn2** button cannot be used to protect pictures when assigned the [Q] role. Choose a role other than [Q] before attempting to protect pictures (P. 89).

Deleting Pictures (Erase)

Display an image you want to delete and press the 🗑 button. Select [Yes] and press the ⊛ button.
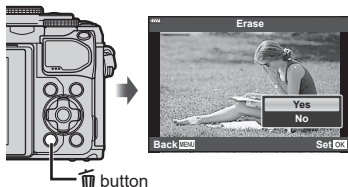
🗑 button

Selecting Multiple Pictures (O¬, Erase Selected, Share Order Selected)

You can select multiple images for [O¬], [Erase Selected] or [Share Order Selected].
Press the ⊛ (☑) button on the index display screen (P. 95) to select an image; a ✔ icon will appear on the image. Press the ⊛ (☑) button again to cancel the selection.
Press the ⊛ button to display the menu, and then select from [O¬], [Erase Selected] or [Share Order Selected].

Setting a transfer order on images (Share Order)

You can select images you want to transfer to a smartphone in advance. You can also browse the images included in the share order. When playing back images you want to transfer, press the ⊛ button to display the playback menu. After selecting [Share Order] and pressing the ⊛ button, press △ or ▽ to set a share order on an image and display ⦉. To cancel a share order, press △ or ▽.
You can select images you want to transfer in advance and set a share order all at once. ☞ "Selecting Multiple Pictures (O¬, Erase Selected, Share Order Selected)" (P. 98), "Transferring images to a smartphone" (P. 127)
• You can set a share order on 200 frames.
• Share orders cannot include RAW images.

Adding Audio to Pictures (ᵩ)

Audio can be added to still images (up to 30 sec. long).

1 Display the image to which you want to add audio and press the ⊛ button.
- Audio recording is not available with protected images.
- Audio can also be added to pictures using the [Edit] option in the playback menu. Use [Edit] > [Sel. Image] to select the picture, then press the ⊛ button and select [ᵩ].

2 Select [ᵩ] and press the ⊛ button.
- To exit without adding audio, select [No].

3 Select [ᵩ Start] and press the ⊛ button to begin recording.

4 Press the ⊛ button to end recording.
- Images recorded with audio are indicated by a ♪ icon.
- To delete recorded audio, select [Erase] in Step 3.
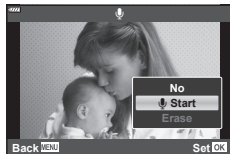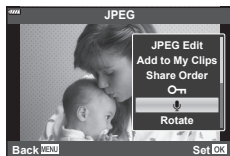
Audio Playback (Play ♪)

If an audio recording is available for the current picture, pressing the ⊛ button will display audio playback options. Highlight [Play ♪] and press the ⊛ button to begin playback. To end playback, press the ⊛ or **MENU** button. During playback, you can press △ ▽ to raise or lower the volume.

Adding still pictures to My Clips (Add to My Clips)

You can also select still pictures and add them to My Clips.
Display the still picture you wish to add and press the ⊛ button to display the menu.
Select [Add to My Clips] and press the ⊛ button. Using △ ▽ ◁ ▷, select My Clips and the order in which you wish to add the pictures, then press the ⊛ button.
- RAW pictures are added to My Clips as low-resolution preview images.

Using the touch screen

You can use the touch screen to manipulate images.

■ Full-frame playback

Displaying the previous or next image
• Slide your finger to the left to view the next image, and right to view the previous image.

Magnify
• Lightly tap the screen to display the slider and [▦].
• Slide the bar up or down to zoom in or out.
• Slide your finger to scroll the display when the picture is zoomed in.
• Tap [▦] to display index playback.
  Tap [▦] for calendar playback and My Clips playback.

■ Index/My Clips/Calendar playback

Displaying the previous or next page
• Slide your finger up to view the next page, and down to view the previous page.
• Tap [▦] or [▦] to switch the number of images displayed. ☞ [☐ Settings] (P. 115)
• Tap [▦] several times to return to single-frame playback.
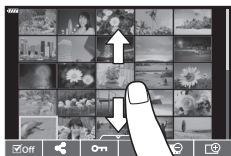
Viewing images
• Tap an image to view it full frame.

Selecting and protecting images

In single-frame playback, lightly tap the screen to display the touch menu. You can then perform the desired operation by tapping the icons in the touch menu.

☑	Select an image. You can select multiple images and delete them collectively.
←	Images you want to share with a smartphone can be set. ☞ "Setting a transfer order on images (Share Order)" (P. 98)
⊶	Protects an image.

• Do not tap the display with your fingernails or other sharp objects.
• Gloves or monitor covers may interfere with touch screen operation.

Menu functions

Basic menu operations

The menus can be used to customize the camera for ease of use and include shooting and playback options not accessible via the live control, LV super control panel, or the like.

Tab	Tab name	Description
◰₁	**Shooting Menu 1**	Photography-related items. Ready the camera for shooting or
◰₂	**Shooting Menu 2**	adjust photo settings.
◠	**Video Menu**	Items related to movie recording. Adjust basic and custom settings.
▶	**Playback Menu**	Playback- and retouch-related items.
✿	**Custom Menu**	Items for customizing the camera.
ƒ	**Setup Menu**	Items for setting the clock, choosing a language, and the like.

Functions that cannot be selected from menus

Some items may not be selectable from the menus when using the arrow pad.

- Items that cannot be set with the current shooting mode.
- Items that cannot be set because of an item that has already been set:
  Settings such as picture mode are unavailable when the mode dial is rotated to 🅰️.

---

1 Press the **MENU** button to display the menus.
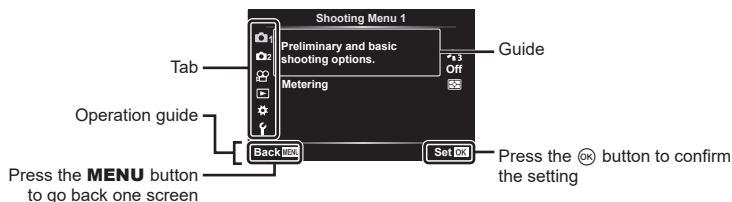
Shooting Menu 1

Tab

Operation guide

Press the **MENU** button to go back one screen

Preliminary and basic shooting options.

Metering

Back

Set

Guide

Press the ⊛ button to confirm the setting

- A guide is displayed in 2 seconds after you select an option.
- Press the **INFO** button to view or hide guides.

2 Use △ ▽ to select a tab and press the ⊛ button.

- The menu group tab appears when the ✿ Custom Menu is selected. Use △ ▽ to select the menu group and press the ⊛ button.

A. AF/MF

AEL/AFL — **S1/C2/M1**
AF Targeting Pad — **Off**
Face Priority — **☺i**
MF Assist
Reset Lens — **On**

Back — **Set**
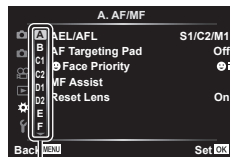
Menu group

3 Select an item using $\triangle \nabla$ and press the ⊛ button to display options for the selected item.

The current setting is displayed

Function

Shooting Menu 2	
●Image Stabilizer	S-IS On
AF Illuminator	On
●Elec. Zoom Speed	Normal
⚡	±0.0
Intrvl. Sh./Time Lapse	Off
Silent[♥]Settings	
⚡RC Mode	Off
Back MENU	Set OK

(OK)

Shooting Menu 2	
●Image Stabilizer	S-IS On
AF Illuminator	Off
●Elec. Zoom Spe	On
⚡	±0.0
Intrvl. Sh./Time Lapse	Off
Silent[♥]Settings	
⚡RC Mode	Off
Back MENU	Set OK
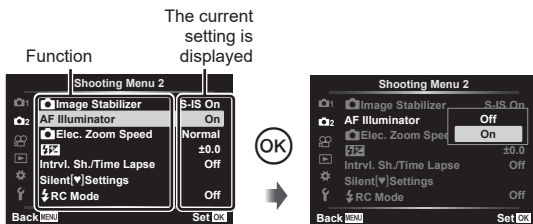
4 Use $\triangle \nabla$ to highlight an option and press the ⊛ button to select.
  • Press the **MENU** button repeatedly to exit the menu.

✎
  • For the default settings of each option, refer to "Defaults" (P. 156).

Using Shooting Menu 1/Shooting Menu 2

Shooting Menu 1	
●1 Reset	
●2 Picture Mode	☆3
🎥 Digital Tele-converter	Off
▶ Metering	▨
✿	
⚑	
Back MENU	Set OK

Shooting Menu 1

●₁ Reset (P. 102)
    Picture Mode (P. 72, 103)
    Digital Tele-converter (P. 103)
    Metering (P. 82)

Shooting Menu 2

●₂ ●Image Stabilizer (P. 80)
    AF Illuminator (P. 103)
    ●Elec. Zoom Speed (P. 104)
    ⚡ (P. 80)
    Intrvl. Sh./Time Lapse (P. 104)
    Silent[♥]Settings (P. 106)
    ⚡ RC Mode (P. 106)

Returning to default settings (Reset)

Camera settings can be easily restored to default settings. You can opt to reset almost all settings or only those directly related to photography.

1 Select [Reset] in ● Shooting Menu 1 and press the ⊛ button.

2 Highlight a reset option ([Full] or [Basic]) and press the ⊛ button.
  • To reset all settings except the time, date, and a few others, highlight [Full] and press the ⊛ button. ☞ "Defaults" (P. 156)

3 Select [Yes] and press the ⊛ button.

Processing options (Picture Mode)

You can make individual adjustments to contrast, sharpness and other parameters in [Picture Mode] (P. 72) settings. Changes to parameters are stored for each picture mode separately.

1 Select [Picture Mode] in A Shooting Menu 1 and press the @ button.
  - The camera will display the picture mode available in the current shooting mode.

```
        Shooting Menu 1
 ▣₁  Reset
 ▣₂  Picture Mode              ♦₃
 ▦   Digital Tele-converter    Off
 ▶   Metering                  ▨

 Back MENU                   Set OK
```
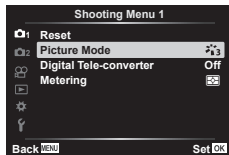
2 Select an option with △ ▽ and press the @ button.

  - Press ▷ to set the detailed options for the selected picture mode. Detailed options are not available for some picture modes.
  - Changes to contrast have no effect at settings other than [Normal].

Digital Zoom (Digital Tele-converter)

This option takes a crop at the center of the frame the same dimensions as the size option currently selected for image quality and zooms it in to fill the display. The zoom ratio increases by about 2×. This allows you to zoom in past the lens' maximum focal length, making it a good choice when you are unable to switch lenses or find it difficult to get any closer to your subject.

1 Select [On] for [Digital Tele-converter] in A Shooting Menu 1.

2 The view in the monitor will be enlarged by a factor of two.
  - The subject will be recorded as it appears in the monitor.

  - Digital zoom is not available when multiple exposure, panorama, or keystone compensation is selected in AP mode or when [Standard] is selected in movie mode.
  - When a RAW image is displayed, the area visible in the monitor is indicated by a frame.
  - AF target drops.
  - ⊞ is displayed on the monitor.

Improving Focus in Dark Surroundings (AF Illuminator)

The AF illuminator (AF assist lamp) lights to assist the focus operation in dark environments. Select [Off] to disable AF illuminator.

Choosing a Zoom Speed ($\bullet$Elec. Zoom Speed)

Choose the speed at which electronic zoom lenses can be zoomed in or out using the zoom ring during still photography.

1 Highlight [$\bullet$Elec. Zoom Speed] in $\clubsuit_2$ Shooting Menu 2 and press the $\circledR$ button.

2 Select an option with $\triangle \nabla$ and press the $\circledR$ button.

Shooting automatically with a fixed interval (Intrvl. Sh./Time Lapse)

You can set the camera to shoot automatically with a set time lapse. The shot frames can also be recorded as into a single movie. This setting is only available in **P**/**A**/**S**/**M** modes.

1 Highlight [Intrvl. Sh./Time Lapse] in $\clubsuit_2$ Shooting Menu 2 and press the $\circledR$ button.

Shooting Menu 2	
$\bullet$Image Stabilizer	S-IS On
AF Illuminator	On
$\bullet$Elec. Zoom Speed	Normal
$\boxed{\sharp\sharp}$	±0.0
Intrvl. Sh./Time Lapse	Off
Silent[♥] Settings	
$\sharp$RC Mode	Off
Back MENU	Set OK
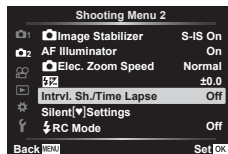
2 Select [On] and press the $\triangleright$.

3 Adjust the following settings and press the $\circledR$ button.

Number of Frames	Sets the number of frames to be shot.
Start Waiting Time	Choose how long the camera waits before starting interval timer photography and taking the first shot.
Interval Length	Choose how long the camera waits between shots once shooting has begun.
Time Lapse Movie	Choose whether to record a time-lapse movie. [Off]: The camera saves the individual shots but does not use them to create a time-lapse movie. [On]: The camera records the individual shots and also uses them to create a time-lapse movie.
Movie Settings	Choose the frame size ([Movie Resolution]) and frame rate ([Frame Rate]) for movies created using [Time Lapse Movie].

- The starting and ending times shown in the display are intended as a guide only. The actual times may vary with shooting conditions.

4 The [Off]/[On] options will be displayed once more; confirm that [On] is highlighted and press the $\circledR$ button again.
- Press the **MENU** button to exit the menus.
- A $\boxed{\text{999}}$ icon will appear in the shooting display (the icon shows the selected number of shots).

5 Shoot.

- Frames are shot even if the image is not in focus after AF. If you wish to fix the focus position, shoot in MF.
- [Rec View] (P. 112) operates for 0.5 seconds.
- If either of the time before shooting, or shooting interval is set to 1 minute 31 seconds or longer, the monitor and camera power will turn off after 1 minute. 10 seconds before shooting, the power will automatically turn on again. When the monitor is off, press the shutter button to turn it on again.
- If the AF mode (P. 75) is set to [C-AF] or [C-AF+TR], it is automatically changed to [S-AF].
- Touch operations are disabled during time lapse shooting.
- Bulb, time, and composite photography are not available during time lapse photography.
- The flash will not work if the flash charging time is longer than the interval between shots.
- If any of still pictures are not recorded correctly, the time lapse movie will not be generated.
- If there is insufficient space on the card, the time lapse movie will not be recorded.
- Time lapse shooting will be canceled if any of the following is operated:
  Mode dial, **MENU** button, ▶ button, lens release button, or connecting the USB cable.
- If you turn off the camera, time lapse shooting will be canceled.
- If there is not enough charge left on the battery, the shooting may end partway through. Make sure the battery is charged enough before shooting.
- Movies recorded with [4K] selected for [Movie Settings] > [Movie Resolution] may not display on some computer systems. More information is available on the OLYMPUS website.

4

Menu functions (Shooting menu)

Silent-Mode Options (Silent[♥]Settings)

Choose the following options when shooting in the silent mode (P. 69):
- Noise reduction on/off
- Whether or not to enable [◼))], [AF Illuminator], and [Flash Mode]

1 Highlight [Silent[♥]Settings] in ⚏₂ Shooting Menu 2 and press the ⊛ button.

	Shooting Menu 2	
📷₁	📷Image Stabilizer	S-IS On
📷₂	AF Illuminator	On
🎬	📷Elec. Zoom Speed	Normal
▶	🔄	±0.0
	Intrvl. Sh./Time Lapse	Off
✿	Silent [♥] Settings	
🔧	⚡RC Mode	Off
Back MENU		Set OK
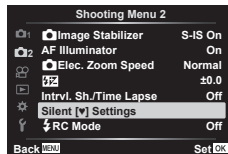
2 Select an option with △ ▽ and press ▷.

3 Adjust the following settings and press the ⊛ button.

Noise Reduction[♥]	[Auto]: Reduce noise in long exposures when shooting in the silent mode (P. 69). The sound of the shutter may be audible when noise reduction is active. [Off]: Noise reduction off.
◼)) (Beep sound)	[Allow]: Uses the settings currently selected for [◼))] in ✿ Custom Menu ⓒ₂ (P. 115). [Not Allow]: Turns off the beep sound when shooting in the silent mode.
AF Illuminator	[Allow]: Uses the settings currently selected for [AF Illuminator] in ⚏₂ Shooting Menu 2 (P. 103). [Not Allow]: Disables the AF Illuminator when shooting in the silent mode.
Flash Mode	[Allow]: Uses the current flash settings (P. 66). [Not Allow]: Disables the flash when shooting in the silent mode.

Wireless remote control flash photography (⚡ RC Mode)

You can take wireless flash photographs using the built-in flash and a special flash with a remote control function. ☞ "Wireless remote control flash photography (⚡ RC Mode)" (P. 142)

Using the Video Menu

Movie recording functions are set in the Video Menu.

	Video Menu	
◻₁	Movie ♫	On
◻₂	Recording Volume	±0
♫	♫AF Mode	C-AF
▶	♫Image Stabilizer	M-IS 1
	♫Elec. Zoom Speed	Normal
✿	Video Frame Rate	30p
✛	Video Bit Rate	Fine
Back MENU		Set OK

Option	Description	🕮
Movie ♫	[Off]: Record movies without sound. [On]: Record movies with sound. [On ♫]: Record movies with sound; wind noise reduction enabled.	—
Recording Volume	Adjust the sensitivity of the built-in microphone. Adjust the sensitivity using △ ▽ while checking the peak sound level picked up by the microphone over the previous few seconds.	—
♫AF Mode	Choose the AF mode for movie recording.	75
♫Image Stabilizer	Sets image stabilization for movie recording.	80
♫Elec. Zoom Speed	Choose the speed at which electronic zoom lenses can be zoomed in or out using the zoom ring during movie recording.	—
Video Frame Rate	Choose the frame rate for movie recording.	77
Video Bit Rate	Choose the compression ratio for movie recording.	77

• Operation sounds of the lens and camera may be recorded in a movie. To prevent it from recording, reduce the operation sounds by setting [♫AF Mode] to [S-AF] or [MF], or by minimizing the button operations of the camera.
• Sound cannot be recorded in $^{ART}_{7}$ (Diorama) mode.
• When [Movie ♫] is set to [Off], 🔇 is displayed.

4

Menu functions (Video menu)

Using the Playback Menu

Playback Menu

▶ (P. 96)

ᵔ⃝ (P. 108)

Edit (P. 108)

Print Order (P. 135)

Reset Protect (P. 111)

Connection to Smartphone (P. 126)

```
              Playback Menu
 ●₁  ▶
 ●₂  ᵔ⃝                              On
 ⌖  Edit
 ▶  Print Order
 ✿  Reset Protect
 ⸮   Connection to Smartphone

 Back MENU                        Set OK
```
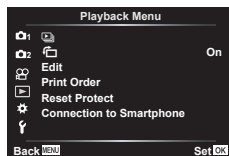
Automatically Rotating Portrait-Orientation Pictures for Playback (ᵔ⃝)

If set to [On], images in portrait orientation are automatically rotated to be displayed in the correct orientation on the playback display.

Retouching Pictures (Edit)

Create retouched versions of pictures. In the case of RAW pictures, you can adjust settings applied when the picture was taken, such as art filters. With JPEG pictures, you can make simple edits such as cropping and resizing.

1 Select [Edit] in the ▶ Playback Menu and press the ⊛ button.

2 Use △ ▽ to select [Sel. Image] and press the ⊛ button.

3 Use ◁ ▷ to select the image to be edited and press the ⊛ button.
   • [RAW Data Edit] is displayed if a RAW image is selected, and [JPEG Edit] if a JPEG image is selected. For images recorded in RAW+JPEG format, both [RAW Data Edit] and [JPEG Edit] are displayed. Select the desired option from them.

4 Select [RAW Data Edit] or [JPEG Edit] and press the ⊛ button.

RAW Data Edit	Creates a JPEG copy of a RAW image according to the selected settings. **Current:** The JPEG copy is processed using the current camera settings. Adjust the camera settings before choosing this option. Some settings such as exposure compensation are not applied. **ART BKT:** The camera creates multiple JPEG copies of each image, one for each art filter selected. Select one or more filters and apply them to one or more images.

JPEG Edit	The [JPEG Edit] menu contains the following options. **Shadow Adj:** 　Brightens a dark backlit subject. **Redeye Fix:** 　Reduces the red-eye phenomenon due to flash shooting. **⊅:** 　Crop pictures. Size the crop with the front or rear dial and position it with 　the arrow pad. **Aspect:** 　Change the aspect ratio from the standard 4:3 to [3:2], [16:9], [1:1], or 　[3:4]. After choosing an aspect ratio, use the arrow pad to position the 　crop. **Black & White:** 　Creates black and white images. **Sepia:** 　Creates sepia-toned images. **Saturation:** 　Increases the vividness of images. Adjust the color saturation checking 　the image on the screen. **⚏:** 　Converts the image size to 1280 × 960, 640 × 480, or 320 × 240. Images 　with an aspect ratio other than 4:3 (standard) are converted to the closest 　image size. **e-Portrait:** 　Compensates the skin look for smoothness. Compensation cannot be 　applied in such a case that a face cannot be detected.

5 When the settings are complete, press the ⊛ button.
   • The settings are applied to the image.

6 Select [Yes] and press the ⊛ button.
   • The edited image is stored in the card.

• Red-eye correction may not work depending on the image.
• Editing of a JPEG image is not possible in the following cases:
   When an image is processed on a PC, when there is not enough space in the card
   memory, or when an image is recorded on another camera.
• The image cannot be resized (⚏) to the larger size than the original size.
• [⊅] (trimming) and [Aspect] can only be used to edit images with an aspect ratio of 4:3
   (standard).

4

Menu functions (Playback menu)

Combining Pictures (Image Overlay)

Overlay existing RAW photos and to create a new picture. Up to 3 pictures can be included in the overlay.

The results can be modified by adjusting brightness (gain) separately for each picture.

- The overlay is saved in the format currently selected for image quality. Overlays created with [RAW] selected for image quality are saved in the [⬛N+RAW] format.
- Overlays saved in RAW format can in turn be combined with other RAW images to create overlays containing 4 or more pictures.

1 Select [Edit] in the ▶ Playback Menu and press the ⊛ button.

2 Use △▽ to select [Image Overlay] and press the ⊛ button.

3 Select the number of images to be overlaid and press the ⊛ button.

4 Use △▽◁▷ to select the RAW images and press the ⊛ button to add them to the overlay.

- The overlaid image will be displayed if images of the number specified in step 3 are selected.

5 Adjust the gain for each image to be overlaid.

- Use ◁▷ to select an image and △▽ to adjust gain.
- Gain can be adjusted in the range 0.1–2.0. Check the results in the monitor.

6 Press the ⊛ button to display the confirmation dialog. Select [Yes] and press the ⊛ button.

Creating Movie Stills (In-Movie Image Capture)

Save selected frames from 4K movies as still images.

- This option is available only with [4K] movies recorded with the camera.

1 Select [Edit] in the ▶ Playback Menu and press the ⊛ button.

2 Use △▽ to select [Sel. Image] and press the ⊛ button.

3 Use ◁▷ to select a movie and press the ⊛ button.

4 Select [Movie Edit] and press the ⊛ button.

5 Use △▽ to select [In-Movie Image Capture] and press the ⊛ button.

6 Use ◁▷ to select a frame to be saved as a still image and press the ⊛ button.

- Use △▽ or to skip multiple frames.

Trimming movies (Movie Trimming)

Cut selected footage from movies. Movies can be trimmed repeatedly to create files containing only footage you want to preserve.

• This option is available only with movies recorded with the camera.

1 Select [Edit] in the ▶ Playback Menu and press the ⊛ button.

2 Use △ ▽ to select [Sel. Image] and press the ⊛ button.

3 Use ◁ ▷ to select a movie and press the ⊛ button.

4 Select [Movie Edit] and press the ⊛ button.

5 Use △ ▽ to select [Movie Trimming] and press the ⊛ button.

6 Select [Overwrite] or [New File] and press the ⊛ button.
   • If the image is protected, you cannot select [Overwrite].

7 Choose whether the section to be deleted begins with the first frame or ends with the last frame, using ◁ ▷ to highlight the desired option and pressing the ⊛ button to select.

8 Use ◁ ▷ to choose the section to be deleted.
   • The section to be deleted is shown in red.

9 Press the ⊛ button.

Removing Protection from All Pictures (Reset Protect)

Protections of multiple images can be canceled at a time.

1 Select [Reset Protect] in the ▶ Playback Menu and press the ⊛ button.

2 Select [Yes] and press the ⊛ button.

Using the setup menu

Adjust basic camera settings. Examples include language
selection and monitor brightness. The setup menu also
contains options used during the initial setup process.

```
              Setup Menu
🗂₁  Card Setup
🗂₂  ⏰                        '--.--.-- --:--:--
    🌐                            English
    🖵                          ⚖️±0 ☀️±0
    ▶     Rec View                    0.5 sec
    ✿     Wi-Fi Settings
    🍴    Firmware

Back MENU                         Set OK
```

Option	Description	☞
Card Setup	Format the card and delete all images.	113
⏰ (Date/time setting)	Set the camera clock.	20
🌐 (Changing the display language)	Choose a language for camera menus and guides.	—
🖵 (Monitor brightness adjustment)	You can adjust the brightness and color temperature of the monitor. Color temperature adjustment is only applied to the monitor display during playback. Use ◁▷ to highlight ⚖️ (color temperature) or ☀️ (brightness) and △ ▽ to adjust the value. Press the **INFO** button to switch the saturation of the monitor between [Natural] and [Vivid] settings.	—
Rec View	Sets whether to display the captured image on the monitor after shooting, and the length of time for the display. This is useful for a brief check of the picture you have taken. You can shoot the next shot by pressing the shutter button halfway even while the captured image is displayed on the monitor. [0.3sec]–[20sec]: Sets the length of time (seconds) to display the captured image on the monitor. [Off]: The captured image is not displayed on the monitor. [Auto ▶]: Displays the captured image, and then switches to playback mode. This is useful for erasing a picture after checking it.	—
Wi-Fi Settings	Sets the wireless connection method for the camera to connect with smartphones that support wireless LAN connections.	128
Firmware	Displays the firmware versions of the camera and connected accessories. Check the versions when you inquire about the camera or accessories or when you download the software.	—

Formatting the card (Card Setup)

Cards must be formatted with this camera before first use or after being used with other cameras or computers.
All data stored on the card, including protected images, is erased when the card is formatted.
When formatting a used card, confirm there are no images that you still want to keep on the card. ☞ "Usable cards" (P. 138)

1 Select [Card Setup] in the ⚙ Setup Menu and press the ⊛ button.
   • If there is data on the card, menu items appear. Select [Format] and press the ⊛ button.

2 Select [Yes] and press the ⊛ button.
   • Formatting is performed.

Card Setup
All Erase
Format
Back MENU   Set OK
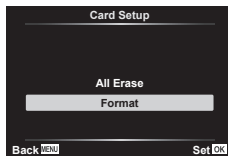
Deleting all images (Card Setup)

All images on a card can be deleted at a time. Protected images are not deleted.

1 Select [Card Setup] in the ⚙ Setup Menu and press the ⊛ button.

2 Select [All Erase] and press the ⊛ button.

3 Select [Yes] and press the ⊛ button.
   • All images are deleted.

Card Setup
All Erase
Format
Back MENU   Set OK
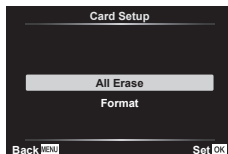
Using the custom menus

Camera settings can be customized using the ✿ Custom Menu.

Custom Menu

A   AF/MF (P. 114)
B   Button/Dial (P. 114)
C1/C2   Disp/■))/PC (P. 115)
D1/D2   Exp/ISO/BULB (P. 116)
E   ↯ Custom (P. 117)
F   ◀:-/WB/Color (P. 117)
G   Record (P. 118)
H   EVF (P. 119)
I   ⬛ Utility (P. 119)

```
                              A. AF/MF
  ⬛1  A  AEL/AFL              S1/C2/M1
  ⬛2  B  AF Targeting Pad         Off
       C1  ☺Face Priority          ☺i
       C2  MF Assist
  ▶   D1  Reset Lens              On
       D2
  ✿   E
  ?   F
  Back MENU                    Set OK
```

4
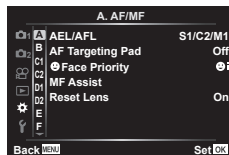
A AF/MF

MENU → ✿ → A

Option	Description	☞
AEL/AFL	Customize AF and AE lock.	120
AF Targeting Pad	If [On] is selected, the AF target can be positioned by tapping the monitor during viewfinder photography. Tap the monitor and slide your finger to position the AF target. • When set to [On], drag operation can be disabled or enabled by double-tapping the monitor. • [AF Targeting Pad] can also be used with zoom frame AF (P. 91).	—
☺Face Priority	You can select the face priority or eye priority AF mode.	64
MF Assist	When set to [On], you can automatically switch to zoom or peaking in manual focus mode by rotating the focus ring.	120
Reset Lens	When set to [Off], the focus position of the lens is not reset even when the power is turned off. When set to [On], the focus of power zoom lenses is also reset.	—

B Button/Dial

MENU → ✿ → B

Option	Description	☞
Button Function	Choose the function assigned to the selected button.	89
Dial Function	You can change the function of the front dial and rear dial.	—

U Disp/■))/PC
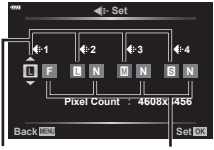
Option	Description	☞
❒Control Settings	For each shooting mode except movie, choose whether pressing the ⊛ button displays live controls or LV super controls.	70, 71
❒/Info Settings	Choose the information displayed when the **INFO** button is pressed. [▶ Info]: Choose the information displayed in full frame playback. [LV-Info]: Choose the information displayed when the camera is in shooting mode. [❒ Settings]: Choose the information displayed in index, "My Clips", and calendar playback.	121, 122
Live View Boost	[Off]: Changes to settings such as exposure compensation are reflected in the display in the monitor. [On]: Changes to settings such as exposure compensation are not reflected in the display in the monitor; instead, brightness is adjusted to bring the display as close as possible to optimal exposure.	—
Flicker reduction	Reduce the effects of flicker under some kinds of lighting, including fluorescent lamps. When flicker is not reduced by the [Auto] setting, set to [50Hz] or [60Hz] in accordance with the commercial power frequency of the region where the camera is used.	—
Displayed Grid	Select [⊞], [⊞], [⊞], [⊞], [⊠] or [▭] to display a grid on the monitor.	—
Peaking Color	Choose the color of the outlines (red, yellow, white, or black) in the focus peaking display.	120

V Disp/■))/PC
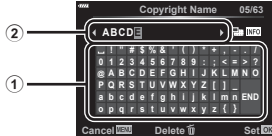
Option	Description	☞
■)) (Beep sound)	When set to [Off], you can turn off the beep sound that is emitted when the focus locks by pressing the shutter button.	—
HDMI	[Output Size]: Selecting the digital video signal format for connecting to a TV via an HDMI cable. [HDMI Control]: Select [On] to allow the camera to be operated using remotes for TVs that support HDMI control. This option takes effect when pictures are displayed on a TV.	123
USB Mode	Choose a mode for connecting the camera to a computer or printer. Choose [Auto] to display USB mode options every time the camera is connected.	—

4

Menu functions (Custom menus)

🄳1 Exp/ISO/BULB

Option	Description	📖
Exposure Shift	Adjust correct exposure separately for each metering mode. • This reduces the number of exposure compensation options available in the selected direction. • The effects are not visible in the monitor. To make normal adjustments to the exposure, perform exposure compensation (P. 61).	—
ISO-Auto Set	Choose the upper limit and default value used for ISO sensitivity when [AUTO] is selected for ISO. [High Limit]: Choose the upper limit for auto ISO sensitivity selection. [Default]: Choose the default value for auto ISO sensitivity selection.	—
Noise Filter	Choose the amount of noise reduction performed at high ISO sensitivities.	—
Noise Reduct.	This function reduces the noise that is generated during long exposures. [Auto]: Noise reduction is performed at slow shutter speeds, or when the internal temperature of the camera has risen. [On]: Noise reduction is performed with every shot. [Off]: Noise reduction off. • The time required for noise reduction is shown in the display. • [Off] is selected automatically during sequential shooting. • This function may not work effectively with some shooting conditions or subjects. • When shooting in the silent mode (P. 69), priority is given to the [Noise Reduction[♥]] setting in the [Silent[♥]Settings] menu (P. 106).	50

🄳2 Exp/ISO/BULB

Option	Description	📖
Bulb/Time Timer	Choose the maximum exposure for bulb and time photography.	50
Live Bulb	Choose the display interval during shooting. The number of update times is limited. The frequency drops at high ISO sensitivities. Choose [Off] to disable the display. Tap the monitor or press the shutter button halfway to refresh the display.	50
Live Time		50
Composite Settings	Set an exposure time to be the reference in composite photography.	51

4

Menu functions (Custom menus)

E $\frac{1}{2}$ Custom

MENU ➜ ✿ ➜ E

Option	Description	☞
$\frac{1}{2}$ X-Sync.	Choose the shutter speed used when the flash fires.	124
$\frac{1}{2}$ Slow Limit	Choose the slowest shutter speed available when a flash is used.	124
🔲+☑	When set to [On], the exposure compensation value is added to the flash compensation value.	61, 80
$\frac{1}{2}$+WB	Adjust white balance for use with a flash.	—

F ◀⁝-/WB/Color

MENU ➜ ✿ ➜ F

Option	Description	☞
◀⁝- Set	You can select the JPEG image quality mode from combinations of three image sizes and four compression rates. 1) Use ◁▷ to select a combination ([◀⁝-1] – [◀⁝-4]) and use △▽ to change. 2) Press the ⊛ button. Image size Compression rate	76, 124
WB	Set the white balance. You can also fine-tune the white balance for each mode.	73, 81
AUTO Keep Warm Color	Select [On] to preserve "warm" colors in pictures taken under incandescent lighting.	—
Color Space	You can select a format to ensure that colors are correctly reproduced when shot images are regenerated on a monitor or using a printer.	87

Menu functions (Custom menus)

EN 117

Option	Description	☞
File Name	[Auto]: Even when a new card is inserted, the file numbers are retained from the previous card. File numbering continues from the last number used or from the highest number available on the card. [Reset]: When you insert a new card, the folder numbers starts at 100 and the file name starts at 0001. If a card containing images is inserted, the file numbers start at the number following the highest file number on the card.	—
Edit Filename	Choose how image files are named by editing the portion of the filename highlighted below in gray. 　sRGB: Pmdd0000.jpg ──────── Pmdd 　Adobe RGB: _mdd0000.jpg ──────── mdd	—
Copyright Settings*	Add the names of the photographer and copyright holder to new photographs. Names can be up to 63 characters long. [Copyright Info.]: Select [On] to include the names of the photographer and copyright holder in the Exif data for new photographs. [Artist Name]: Enter the name of the photographer. [Copyright Name]: Enter the name of the copyright holder. **1)** Select characters from ① and press the ⊛ button. The selected characters appear in ②. **2)** Repeat Step 1 to complete the name, then highlight [END] and press the ⊛ button. 　• To delete a character, press the **INFO** button to place the cursor in the name area ②, highlight the character, and press 🗑. 　② ─ Copyright Name　05/63 　◀ ABCD ▶ 　① ─ keyboard 　Cancel MENU　Delete 🗑　Set OK * OLYMPUS does not accept liability for damages arising from disputes involving the use of [Copyright Settings]. Use at your own risk.	—

H EVF

Option	Description	☞
EVF Auto Switch	If [Off] is selected, the viewfinder will not turn on when you put your eye to the viewfinder. Use the |◯| button to choose the display.	—
EVF Adjust	Adjust viewfinder brightness and hue. Brightness is automatically adjusted when [EVF Auto Luminance] is set to [On]. The contrast of the information display is also adjusted automatically.	—

I 🄾 Utility

Option	Description	☞
Pixel Mapping	The pixel mapping feature allows the camera to check and adjust the image pickup device and image processing functions.	149
Level Adjust	You can calibrate the angle of the level gauge. [Reset]: Resets adjusted values to the default settings. [Adjust]: Sets the current camera orientation as the 0 position.	—
Touchscreen Settings	Activate the touch screen. Choose [Off] to disable the touch screen.	—
Sleep	The camera will enter sleep (energy saving) mode if no operations are performed for the selected period. The camera can be reactivated by pressing the shutter button halfway.	—
Certification	Display certification icons.	—

4

Menu functions (Custom menus)

AEL/AFL

MENU ➔ ✿ ➔ 🅰 ➔ [AEL/AFL]

Autofocus and metering can be performed by pressing the button to which AEL/AFL has been assigned. Choose a mode for each focus mode.

```
           S-AF AEL/AFL
              ▲
            mode1
              ▼
  ☚ Half Way :  AEL/S-AF
  ☚ Fully    :  Exposure
      AEL    :  AEL
Back MENU              Set OK
```
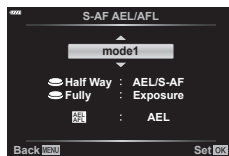
Assignments of AEL/AFL function

Mode		Shutter button pressed				AEL/AFL button	
		Halfway		All the way down		Kept pressed	
		AF	AE	AF	AE	AF	AE
S-AF	mode1	S-AF	Locked	–	–	–	Locked
	mode2	S-AF	–	–	Locked	–	Locked
	mode3	–	Locked	–	–	S-AF	–
C-AF	mode1	C-AF start	Locked	Ends	–	–	Locked
	mode2	C-AF start	–	Ends	Locked	–	Locked
	mode3	–	Locked	Ends	–	C-AF start	–
	mode4	–	–	Ends	Locked	C-AF start	–
MF	mode1	–	Locked	–	–	–	Locked
	mode2	–	–	–	Locked	–	Locked
	mode3	–	Locked	–	–	S-AF	–

Manual Focus Assist (MF Assist)

MENU ➔ ✿ ➔ 🅰 ➔ [MF Assist]

This is a focus assist function for MF. When the focus ring is rotated, the edge of the subject is enhanced or a portion of the screen display is magnified. When you stop operating the focus ring, the screen returns to the original display.

Magnify	Magnifies a portion of the screen. The portion to be magnified can be set in advance using AF target. ☞ "Setting the AF target" (P. 63)
Peaking	Displays clearly defined outlines with edge enhancement. You can choose the color of the outlines. ☞ [Peaking Color] (P. 115)

• When Peaking is in use, the edges of small subjects tend to be enhanced more strongly. This is no guarantee of accurate focusing.

🖎

• [Peaking] can be displayed using button operations. The display is switched every time the button is pressed. Assign the switching function to one of the buttons in advance using Button Function (P. 89).

Adding information displays

MENU ➡ ✿ ➡ 🅒 ➡ [🔲 /Info Settings]

▶ Info (Playback information displays)

Use [▶ Info] to add the following playback information displays. The added displays are displayed by repeatedly pressing the **INFO** button during playback. You can also choose to not show displays that appear at the default setting.

Histogram display   Highlight & Shadow display   Light box display
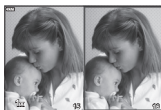
- The Highlight & Shadow display shows overexposed areas in red, underexposed areas in blue.
- Use the light box display to compare two images side-by-side. Press the 🆗 button to switch from one picture to the other.
- The base image is displayed on the right. Use the front dial to select an image and press the 🆗 to move the image to the left. The image to be compared to the image on the left can be selected on the right. To choose a different base image, highlight the right frame and press the 🆗.
- To change the zoom ratio, turn the rear dial. Press the **Fn1** button and then △ ▽ ◁ ▷ to scroll the zoomed-in area, and rotate the front dial to select between images.

LV-Info (Shooting information displays)

The histogram, Highlight & Shadow, and level gauge displays can be added to [LV-Info]. Choose [Custom1] or [Custom2] and select the displays you wish to add. The added displays are displayed by repeatedly pressing the **INFO** button during shooting. You can also choose to not show displays that appear at the default setting.

G Settings (Index/calendar display)

You can change the number of frames to be displayed on the index display and set to not display the screens that are set to be displayed by default with [G Settings]. Screens with a check can be selected on the playback screen using the rear dial.

Single-frame playback

4 frames

9, 25, or 100 frames

Index display

Calendar display
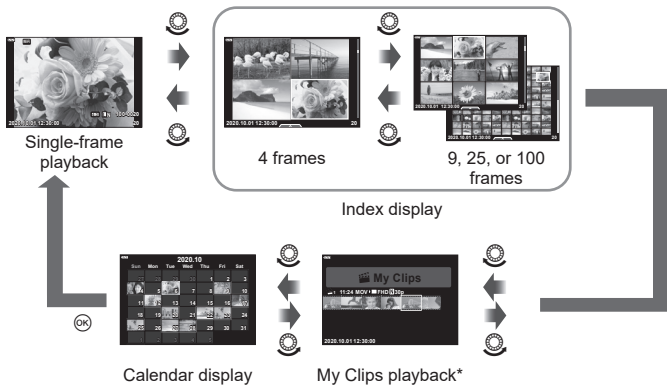
My Clips playback*

* If one or more My Clips have been created, it will be displayed here (P. 57).

Viewing camera images on TV (HDMI)

MENU ➜ ☼ ➜ 🄲 ➜ [HDMI]

Use the separately sold cable with the camera to playback recorded images on your TV. This function is available during shooting. Connect the camera to an HD TV using an HDMI cable to view high-quality images on a TV screen.

HDMI cable
(Connect to the HDMI connector on the TV.)

HDMI micro connector

Type A
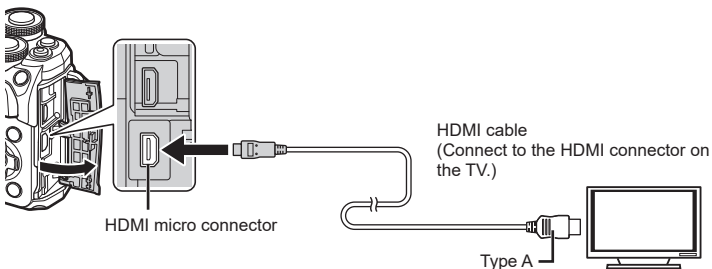
Connect the TV and camera and switch the input source of the TV.
- The camera monitor turns off when an HDMI cable is connected.
- For details on changing the input source of the TV, refer to the TV's instruction manual.
- Depending on the TV's settings, the displayed images and information may become cropped.
- If the camera is connected via an HDMI cable, you will be able to choose the digital video signal type. Choose a format that matches the input format selected with the TV.

4K	Priority is given to 4K HDMI output.
1080p	Priority is given to 1080p HDMI output.
720p	Priority is given to 720p HDMI output.
480p/576p	480p/576p HDMI output.

- Do not connect the camera to other HDMI output devices. Doing so may damage the camera.
- HDMI output is not performed while connected via USB to a computer or printer.
- When [4K] is selected, video output in shooting mode is [1080p].

Using the TV remote control

The camera can be operated by a TV remote control when connected to a TV that supports HDMI control. Select [On] for [HDMI Control]. When [On] is selected, camera controls can be used for playback only.
- You can operate the camera by following the operation guide displayed on the TV.
- During single-frame playback, you can display or hide the information display by pressing the **"Red"** button, and display or hide the index display by pressing the **"Green"** button.
- Some televisions may not support all features.

Shutter speeds when the flash fires ($\frac{1}{2}$ X-Sync./ $\frac{1}{2}$ Slow Limit)

MENU ➜ ✿ ➜ 🄴 ➜ [$\frac{1}{2}$ X-Sync.]/[$\frac{1}{2}$ Slow Limit]

You can set shutter speed conditions for when the flash fires.

Shooting mode	Flash firing shutter speed	Upper limit	Lower limit
P	The camera automatically sets the shutter speed.	[$\frac{1}{2}$ X-Sync.] setting*1	[$\frac{1}{2}$ Slow Limit] setting*2
A			
S	The set shutter speed		No lower limit
M			

*1 1/200 seconds when using a separately sold external flash.
*2 Extends up to 60 seconds when slow synchronization is set.

Combinations of JPEG image sizes and compression rates (◀⁛ Set)

MENU ➜ ✿ ➜ 🄵 ➜ [◀⁛ Set]

You can set the JPEG image quality by combining image size and compression rate.

Image size		Compression rate				Application
Name	**Pixel Count**	**SF (Super Fine)**	**F (Fine)**	**N (Normal)**	**B (Basic)**	
L(Large)	4608×3456	**L**SF	**L**F	**L**N	**L**B	Select for the print size
M(Middle)	3200×2400	**M**SF	**M**F	**M**N	**M**B	
S(Small)	1280×960	**S**SF	**S**F	**S**N	**S**B	For small prints and use on a website

Menu functions (Custom menus)

4

5 Connecting the camera to a smartphone

Use the camera's wireless LAN (Wi-Fi) feature to connect to a smartphone, where you can use the dedicated app to enhancement your enjoyment of the camera both before and after shooting. Once a connection has been established, you can download and take pictures remotely and add GPS tags to the images on the camera.
• Operation is not guaranteed on all smartphones.

Things you can do with the specified app, OLYMPUS Image Share (OI.Share)

• Download images from the camera to the smartphone
  You can load images in the camera to a smartphone.
  You can also use the smartphone to select images for download from the camera.
• Remote shooting from a smartphone
  You can remotely operate the camera and shoot using a smartphone.
For details, visit the address below:
https://app.olympus-imaging.com/oishare/

Things you can do with the specified app, Olympus Image Palette (OI.Palette)

• Beautiful image processing
  Use intuitive controls to apply impressive effects to images downloaded to your smartphone.
For details, visit the address below:
https://app.olympus-imaging.com/oipalette/

Things you can do with the specified app, OLYMPUS Image Track (OI.Track)

• Addition of GPS tags to camera images
  You can add GPS tags to images simply by transferring the GPS log saved on the smartphone to the camera.
For details, visit the address below:
https://app.olympus-imaging.com/oitrack/

• Before using the wireless LAN function, read "Using the wireless LAN function" (P. 166).
• If using the wireless LAN function in a country outside the region where the camera was purchased, there is a risk that the camera will not conform to the wireless communication regulations of that country. Olympus will not be held responsible for any failure to meet such regulations.
• As with any wireless communication, there is always a risk of interception by a third party.
• The wireless LAN function on the camera cannot be used to connect to a home or public access point.
• The transmitting/receiving antenna is located inside the grip. Keep the antenna away from metal objects whenever possible.
• During wireless LAN connection, the battery will run down faster. If the battery is running low, the connection may be lost during a transfer.
• Connection may be difficult or slow in proximity to devices that generate magnetic fields, static electricity or radio waves, such as near microwaves, cordless telephone.
• Wireless LAN cannot be used when the memory card write-protect switch is in the "LOCK" position.
• If Wi-Fi seems sluggish, try using Wi-Fi with Bluetooth disabled on the smartphone.

Adjusting Settings for Connection to a Smartphone

Start the OI.Share App installed on your smartphone.

1 Select [Connection to Smartphone] in the ▶ Playback Menu and press the
⊛ button.
  • You can also connect by tapping ⬚Wi-Fi in the monitor.

2 Following the guide displayed on the monitor, proceed with the Wi-Fi settings.
  • The SSID, password and QR code are displayed on the monitor.

SSID
Password ────

QR code ────

```
      Preparing Wi-Fi Connection    3/3

  Connecting to your
  smartphone.
  Read QR code by
  'OLYMPUS Image Share'.

  SSID     : X-XXXXX-X-XXXXXXXX
  Password : 00000000

           End Wi-Fi MENU
```
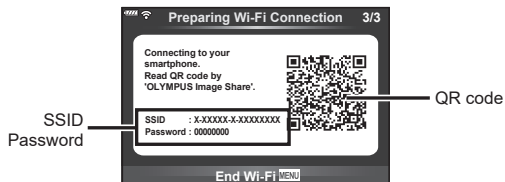
3 Tap the camera icon at the bottom of the OI.Share display.
  • An [Easy Setup] tab will be displayed.

4 Follow the on-screen instructions in OI.Share to scan the QR code and adjust
connection settings.
  • If you are unable to scan the QR code, follow the on-screen instructions in OI.Share
    to adjust settings manually.
    To connect, enter the SSID and password displayed by the camera into the Wi-Fi
    settings dialog displayed by OI.Share.
  • 📶1 will be displayed when a connection is established.

5 To end the connection, press **MENU** on the camera or tap [End Wi-Fi] on the
monitor screen.
  • You can also turn the camera off and end the connection from OI.Share.

Transferring images to a smartphone

You can select images in the camera and load them to a smartphone. You can also use the camera to select images you want to share in advance. ☞ "Setting a transfer order on images (Share Order)" (P. 98)

1 Connect the camera to a smartphone (P. 126).

- You can also connect by tapping [Wi-Fi] in the monitor.
- Once configured for connection, the camera will connect automatically.
- 📶1 will be displayed when a connection is established.
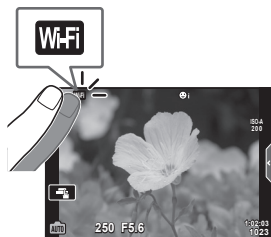
2 Launch OI.Share and tap the Image Transfer button.

- The images in the camera are displayed in a list.

3 Select the pictures you want to transfer and tap the Save button.

- When saving is completed, you can turn off the camera from the smartphone.

Shooting remotely with a smartphone

You can shoot remotely by operating the camera with a smartphone.
This is available only in [Private] (P. 128).

1 Start [Connection to Smartphone] on the camera.

- You can also connect by tapping [Wi-Fi] in the monitor.

2 Launch OI.Share and tap the Remote button.

3 Tap the shutter button to shoot.

- The image taken is saved on the memory card in the camera.

- Available shooting options are partially limited.

Adding position information to images

You can add GPS tags to images that were taken while the GPS log was saving by transferring the GPS log saved on the smartphone to the camera.
This is available only in [Private].

1 Before beginning to shoot, launch OI.Share and turn on the switch on the Add Location button to begin saving the GPS log.
   • Before beginning to save the GPS log, the camera must be connected to OI.Share once to synchronize the time.
   • You can use the phone or other apps while the GPS log is saving. Do not terminate OI.Share.

2 When shooting is complete, turn off the switch on the Add Location button. Saving the GPS log is complete.

3 Start [Connection to Smartphone] on the camera.
   • You can also connect by tapping WiFi in the monitor.

4 Transfer the saved GPS log to the camera using OI.Share.
   • GPS tags are added to the images in the memory card based on the transferred GPS log.
   • ❋ is displayed on images to which position information has been added.

   • Addition of location information can only be used with smartphones that have a GPS function.
   • Position information cannot be added to movies.

Changing the connection method

There are two ways to connect to a smartphone. With [Private] the same settings are used to connect every time. With [One-Time] different settings are used each time. You may find it convenient to use [Private] when connecting to your own smartphone and [One-Time] when transferring images to a friend's smartphone etc.
The default setting is [Private].

1 Select [Wi-Fi Settings] in the ⚑ Setup Menu and press the ⊛ button.

2 Select [Wi-Fi Connect Settings] and press ▷.

3 Select the wireless LAN connection method and press the ⊛ button.
   • [Private]: Connect to one smartphone (connects automatically using the settings after the initial connection). All OI.Share functions are available.
   • [One-Time]: Connect to multiple smartphones (connects using different connection settings each time). Only OI.Share's image transfer function is available. You can view only images that are set for share order using the camera.
   • [Select]: Select which method to use each time.
   • [Off]: The Wi-Fi function is turned off.

Changing the password

Change the password used for [Private].

1 Select [Wi-Fi Settings] in the f Setup Menu and press the ⊛ button.

2 Select [Private Password] and press ▷.

3 Follow the operation guide and press the ◉ button.
  • A new password will be set.

Cancelling a share order

Cancel share orders that are set on images.

1 Select [Wi-Fi Settings] in the f Setup Menu and press the ⊛ button.

2 Select [Reset share Order] and press ▷.

3 Select [Yes] and press the ⊛ button.

Initializing wireless LAN settings

Initializes content of [Wi-Fi Connect Settings].

1 Select [Wi-Fi Settings] in the f Setup Menu and press the ⊛ button.

2 Select [Reset Wi-Fi Settings] and press ▷.

3 Select [Yes] and press the ⊛ button.

Connecting the camera to a computer and a printer

Copying pictures to a computer

1 Turn the camera off and connect it to the computer.

Micro-USB connector

Smaller terminal

USB cable   USB port
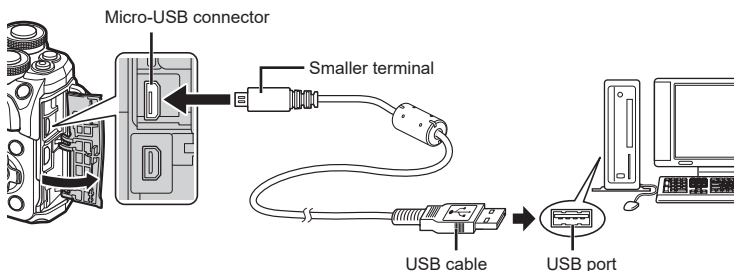
- The location of the USB port varies with the computer. For details, refer to your computer's manual.

2 Turn on the camera.
- The selection screen for the USB connection is displayed.
- If the screen is not displayed, select [Auto] for [USB Mode] (P. 115) in the camera custom menus.
- If nothing is displayed on the camera screen even after connecting the camera to the computer, the battery may be exhausted. Use a full-charged battery.

3 Press △▽ to select [Storage]. Press the ⊛ button.

USB
Storage
MTP
Print
Exit
Set ⊛
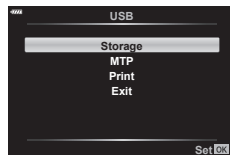
4 The computer recognizes the camera as a new device.

• If you are using Windows Photo Gallery, choose [MTP] in Step 3.
• Data transfer is not guaranteed in the following environments, even if your computer is equipped with a USB port.
   Computers with a USB port added by means of an extension card, etc., computers without a factory-installed OS, or home-built computers
• Camera controls cannot be used while the camera is connected to a computer.

Installing the PC software

Install the following software to access the camera while it is connected directly to the computer via USB.

Olympus Workspace
This computer application is used to download, view, and edit photos and movies recorded with the camera. It can also be used to update the camera firmware. The software can be downloaded from the website below. Be prepared to provide the camera serial number when downloading the software.

https://support.olympus-imaging.com/owdownload/

Connecting the camera to a computer and a printer

Direct printing (PictBridge)

By connecting the camera to a PictBridge-compatible printer with the USB cable, you can print out recorded pictures directly.

1 Connect the camera to the printer using the supplied USB cable and turn the camera on.

Micro-USB connector

Smaller terminal

USB cable   USB port
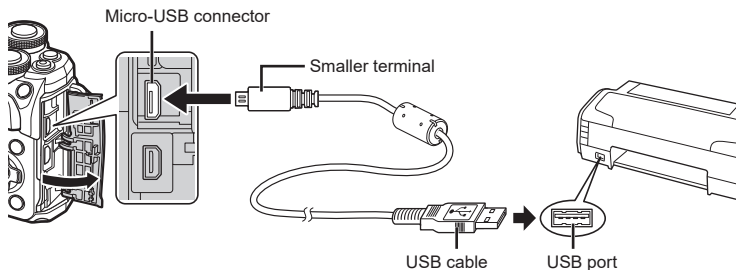
- Use a fully charged battery for printing.
- When the camera is turned on, a dialog should be displayed in the monitor prompting you to choose a host. If it is not, select [Auto] for [USB Mode] (P. 115) in the camera custom menus.

2 Use $\triangle \nabla$ to select [Print].

- [One Moment] will be displayed, followed by a print-mode selection dialog.
- If the screen is not displayed after a few minutes, disconnect the USB cable and start again from Step 1.

```
            USB
        Storage
        MTP
        Print
        Exit

                    Set OK
```
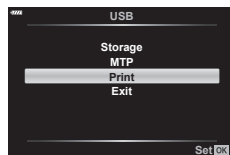
Proceed to "Custom printing" (P. 133)

- RAW images and movies cannot be printed.

Easy printing

Use the camera to display the picture you wish to print before connecting the printer via the USB cable.

1 Use ◁▷ to display the pictures you want to print on the camera.

2 Press ▷.

• The picture selection screen appears when printing is completed. To print another picture, use ◁▷ to select the image and press the ⊛ button.

Easy Print Start ▶
PC/Custom Print OK

• To exit, unplug the USB cable from the camera while the picture selection screen is displayed.
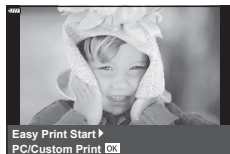
Custom printing

1 Connect the camera to the printer using the supplied USB cable and turn the camera on.

• When the camera is turned on, a dialog should be displayed in the monitor prompting you to choose a host. If it is not, select [Auto] for [USB Mode] (P. 115) in the camera custom menus.

2 Follow the operation guide to set a print option.

Selecting the print mode

Select the type of printing (print mode). The available print modes are as shown below.

Print	Prints selected pictures.
All Print	Prints all the pictures stored in the card and makes one print for each picture.
Multi Print	Prints multiple copies of one image in separate frames on a single sheet.
All Index	Prints an index of all the pictures stored in the card.
Print Order	Prints according to the print reservation you made. If there is no picture with print reservation, this is not available.

Setting the print paper items

This setting varies with the type of printer. If only the printer's STANDARD setting is available, you cannot change the setting.

Size	Sets the paper size that the printer supports.
Borderless	Selects whether the picture is printed on the entire page or inside a blank frame.
Pics/Sheet	Selects the number of pictures per sheet. Displayed when you have selected [Multi Print].

Selecting pictures you want to print

Select pictures you want to print. The selected pictures can be printed later (single-frame reservation) or the picture you are displaying can be printed right away.

PrintOK	Prints the currently displayed picture. If there is a picture that [Single Print △] reservation has already been applied to, only that reserved picture will be printed.
Single Print △	Applies print reservation to the currently displayed picture. If you want to apply reservation to other pictures after applying [Single Print △], use ◁▷ to select them.
More ▽	Sets the number of prints and other items for the currently displayed picture, and whether or not to print it. For operation, refer to "Setting printing data" in the next section.

Setting printing data

Select whether to print printing data such as the date and time or file name on the picture when printing. When the print mode is set to [All Print], select [Option Set].

⏚X	Sets the number of prints.
Date	Prints the date and time recorded on the picture.
File Name	Prints the file name recorded on the picture.
⊬	Trims the picture for printing. Use the front dial (☝) to choose the crop size and △▽◁▷ to specify the crop position.

3 Once you have set the pictures for printing and printing data, select [Print], then press the ⊛ button.
- To stop and cancel printing, press the ⊛ button. To resume printing, select [Continue].

■ **Cancelling printing**

To cancel printing, highlight [Cancel] and press the ⊛ button. Note that any changes to the print order will be lost; to cancel printing and return to the previous step, where you can make changes to the current print order, press **MENU**.

Print order (DPOF)

You can save digital "print orders" to the memory card listing the pictures to be printed and the number of copies of each print. You can then have the pictures printed at a print shop that supports DPOF or print the pictures yourself by connecting the camera directly to a DPOF printer. A memory card is required when creating a print order.

Creating a print order

1 Press the ⊛ button during playback and select [凸 (Print Order)].

2 Select [凸] or [凸ALL] and press the ⊛ button.

   Individual picture

   Press ◁▷ to select the frame that you want to set as print reservation, then press △▽ to set the number of prints.
   • To set print reservation for several pictures, repeat this step. Press the ⊛ button when all the desired pictures have been selected.

   All pictures

   Select [凸ALL] and press the ⊛ button.

3 Select the date and time format and press the ⊛ button.

No	The pictures are printed without the date and time.
Date	The pictures are printed with the shooting date.
Time	The pictures are printed with the shooting time.

   • When printing images, the setting cannot be changed between the images.

4 Select [Set] and press the ⊛ button.

• The camera cannot be used to modify print orders created with other devices. Creating a new print order deletes any existing print orders created with other devices.
• Print orders cannot include RAW images or movies.

Removing all or selected pictures from the print order

You can reset all print reservation data or just the data for selected pictures.

1 Press the ⊛ button during playback and select [ᗡ (Print Order)].

2 Select [ᗡ] and press the ⊛ button.
  • To remove all pictures from the print order, select [Reset] and press the ⊛ button. To exit without removing all pictures, select [Keep] and press the ⊛ button.

3 Press ◁▷ to select images you wish to remove from the print order.
  • Use ▽ to set the number of prints to 0. Press the ⊛ button once you have removed all the desired pictures from the print order.

4 Select the date and time format and press the ⊛ button.
  • This setting is applied to all frames with print reservation data.

5 Select [Set] and press the ⊛ button.

Connecting the camera to a computer and a printer

7 Cautions

Battery and charger

- The camera uses a single Olympus lithium-ion battery. Never use any battery other than genuine OLYMPUS batteries.
- The camera's power consumption varies widely with usage and other conditions.
- As the following consume a lot of power even without shooting, the battery will be drained quickly.
  - Performing auto focus repeatedly by pressing the shutter button halfway in shooting mode.
  - Displaying images on the monitor for a prolonged period.
  - When connected to a computer or printer.
  - Using the wireless LAN function for a prolonged period.
- When using a drained battery, the camera may turn off without the low battery warning being displayed.
- The battery will not be fully charged at the time of purchase. Charge the battery using the provided charger before use.
- Remove the batteries before putting the camera into storage for periods of a month or more. Leaving the batteries in the camera for extended periods shortens their lives, potentially rendering them unusable.
- The normal charging time using the provided charger is approximately 3 hours 30 minutes (estimated).
- Do not attempt to use chargers not specifically designated for use with the supplied battery, or to use batteries not specifically designated for use with the supplied charger.
- There is a risk of explosion if the battery is replaced with the incorrect battery type.
- Dispose of the used battery following the instructions "CAUTION" (P. 165) in the instruction manual.

Using your charger abroad

- The charger can be used in most home electrical sources within the range of 100 V to 240 V AC (50/60 Hz) around the world. However, depending on the country or area you are in, the AC wall outlet may be shaped differently and the charger may require a plug adapter to match the wall outlet.
- Do not use commercially available travel adapters as the charger may malfunction.

Usable cards

In this manual, all storage devices are referred to as "cards". The following types of SD memory card (commercially available) can be used with this camera: SD, SDHC, and SDXC. For the latest information, please visit the Olympus website.

SD card write protect switch
The SD card body has a write protect switch. Setting the switch to "LOCK" prevents data being written to the card. Return the switch to the unlock position enable writing.
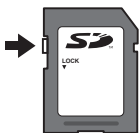
- Cards must be formatted with this camera before first use or after being used with other cameras or computers. ☞ "Formatting the card (Card Setup)" (P. 113)
- The data in the card will not be erased completely even after formatting the card or deleting the data. When discarding, destroy the card to prevent leakage of personal information.
- Access to some playback functions and the like may be restricted when the write-protect switch is in the "LOCK" position.

7

Cautions

Record mode and file size/number of storable still pictures

The file size in the table is approximate for files with a 4:3 aspect ratio.

Record mode	Image size (Pixel Count)	Compression	File format	File size (MB)	Number of storable still pictures*
RAW	4608×3456	Loss-less compression	ORF	Approx. 17.3	867
■SF	4608×3456	1/2.7	JPEG	Approx. 10.8	1326
■F		1/4		Approx. 7.5	1944
■N		1/8		Approx. 3.5	3783
■B		1/12		Approx. 2.4	5484
■SF	3200×2400	1/2.7		Approx. 5.6	2696
■F		1/4		Approx. 3.4	3905
■N		1/8	JPEG	Approx. 1.7	7395
■B		1/12		Approx. 1.2	10385
■SF	1280×960	1/2.7		Approx. 0.9	13559
■F		1/4		Approx. 0.6	18079
■N		1/8		Approx. 0.4	28713
■B		1/12		Approx. 0.3	34866

* Assumes a 16GB SD card.

• The number of storable still pictures may change according to the subject, whether or not print reservations have been made, and other factors. In certain instances, the number of storable still pictures displayed on the monitor will not change even when you take pictures or erase stored images.
• The actual file size varies according to the subject.
• The maximum number of storable still pictures displayed on the monitor is 9999.
• For the available recording time for movies, see the Olympus website.

Cautions

Interchangeable lenses

Choose a lens according to the scene and your creative intent. Use lenses designed exclusively for the Micro Four Thirds system and bearing the M.ZUIKO DIGITAL label or the symbol shown at right. With an adapter, you can also use Four Thirds System and OM System lenses. The optional adapter is required.

MICRO FOURTHIRDS

• When you attach or remove the body cap and lens from the camera, keep the lens mount on the camera pointed downward. This helps prevent dust and other foreign matter from getting inside the camera.
• Do not remove the body cap or attach the lens in dusty places.
• Do not point the lens attached to the camera toward the sun. This may cause the camera to malfunction or even ignite due to the magnifying effect of sunlight focusing through the lens.
• Be careful not to lose the body cap and rear cap.
• Attach the body cap to the camera to prevent dust from getting inside when no lens is attached.

■ Lens and camera combinations

Lens	Camera	Attachment	AF	Metering
Micro Four Thirds system lens	Micro Four Thirds system camera	Yes	Yes	Yes
Four Thirds system lens		Attachment possible with mount adapter	Yes*[1]	Yes
OM System lenses			No	Yes*[2]

*1 AF is not operational when recording movies.
*2 Accurate metering is not possible.

7

Cautions

External flash units designated for use with this camera

With this camera, you can use one of the separately sold external flash units to achieve a flash suited to your needs. The external flashes communicate with the camera, allowing you to control the camera's flash modes with various available flash control modes, such as TTL-AUTO and Super FP flash. An external flash unit specified for use with this camera can be mounted on the camera by attaching it to the camera's hot shoe. You can also attach the flash to the flash bracket on the camera using the bracket cable (optional). Refer to the documentation provided with the external flash units as well.

The upper limit of the shutter speed is 1/200 sec. when using a flash.

■ Functions available with external flash units

Optional flash	Flash control mode	GN (Guide number) (ISO100)
FL-700WR	TTL-AUTO, MANUAL, FP TTL AUTO, FP MANUAL, MULTI, RC, SL MANUAL	GN 42 (75/150 mm*[1]) GN 21 (12/24 mm*[1])
FL-900R	TTL-AUTO, AUTO, MANUAL, FP TTL AUTO, FP MANUAL, MULTI, RC, SL AUTO, SL MANUAL	GN 58 (100/200 mm*[1]) GN 27 (12/24 mm*[1])
STF-8	TTL-AUTO, MANUAL, RC*[2]	GN 8.5

*1 Maximum lens focal length at which unit can provide flash coverage (figures following slashes are 35 mm format equivalent focal lengths).

*2 Functions as commander (transmitter) only.

Cautions

Wireless remote control flash photography ($\frac{1}{2}$ RC Mode)

You can take wireless flash photographs using the built-in flash and a special flash with a remote control function. The camera can separately control each of three groups of remote flash units, and the internal flash. See the instruction manuals provided with the external flash units for details.

1 Set the remote flash units to RC mode and place them as desired.
   - Turn the external flash units on, press the MODE button, and select RC mode.
   - Select a channel and group for each external flash unit.

2 Select [On] for [$\frac{1}{2}$ RC Mode] in $\overset{\text{\tiny\bf A}}{\mathbf{2}}$ Shooting Menu 2.
   - Press the ⊛ button to exit to the RC mode display. Press the **INFO** button to cycle between LV super controls or live controls and the RC mode display.
   - Select a flash mode (note that red-eye reduction is not available in RC mode).
   - [RC] is displayed on the monitor.

```
Shooting Menu 2
     Image Stabilizer        S-IS On
     AF Illuminator               On
     Elec. Zoom Speed        Normal
                               ±0.0
     Intrvl. Sh./Time Lapse       Off
     Silent[▼]Settings
     RC Mode                     Off
Back MENU                    Set OK
```

3 Adjust the settings for each group in the RC mode display.

Group
- Select the flash control mode and adjust the flash intensity separately for each group. For MANUAL, select the flash intensity.

Adjust settings for the camera flash unit.

Flash intensity value

```
A Mode
  A   TTL    +5.0   / FP
  B   Manual 1/8         Low
  C   Off     −     Ch    1
      TTL    +3.0
  P        25  F5.6        1:02:03
                           1023
```

Flash control mode   Flash intensity
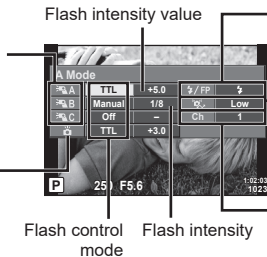
Normal flash/Super FP flash
- Switch between normal flash and Super FP flash.

Communication light level
- Set the communication light level to [HI], [MID], or [LO].

Channel
- Set the communication channel to the same channel used on the flash.

4 Rotate the **ON/OFF** lever to $\frac{1}{2}$**UP** to raise the flash.
   - After confirming that the flash has charged, take a test shot.

■ Wireless flash control range

Position the wireless flash units with their remote sensors facing the camera. The following illustration shows the approximate ranges at which the flash units can be positioned. The actual control range varies with local conditions.

- We recommend using a single group of up to three remote flash units.
- Remote flash units cannot be used for second curtain slow synchronization exposures longer than 4 seconds.
- If the subject is too close to the camera, the control flashes emitted by the camera flash may affect exposure (this effect can be reduced by reducing the output of the camera flash by, for example, using a diffuser).
- The upper limit of flash synchronization timing is 1/160 sec. when using the flash in RC mode.
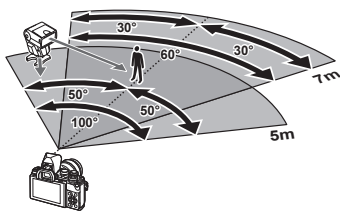
Other external flash units

Note the following when using a third-party flash unit mounted on the camera hot shoe:
- Using obsolete flash units that apply currents of more than about 250 V to the X-contact will damage the camera.
- Connecting flash units with signal contacts that do not conform to Olympus specifications may damage the camera.
- Set the Shooting mode to **M**, set the shutter speed to a value no higher than flash synchronous speed, and set ISO sensitivity to a setting other than [AUTO].
- Flash control can only be performed by manually setting the flash to the ISO sensitivity and aperture values selected with the camera. Flash brightness can be adjusted by adjusting either ISO sensitivity or aperture.
- Use a flash with an angle of illumination suited to the lens. Angle of illumination is usually expressed using 35-mm format equivalent focal lengths.

Principal Accessories

Converter lenses

Converter lenses attach to the camera lens for quick and easy fish-eye or macro photography. See the OLYMPUS website for information on the lenses that can be used.

Eyecup (EP-16)

You can switch to a large-size eyecup.

Removal

Cautions

System chart

Power Supply

BLS-50
Lithium-ion battery

BCS-5
Lithium-ion Charger

Viewfinder

EP-16
Eyecup

Dot Sight

EE-1
Dot Sight

E-M10 Mark Ⅲ S

Connection Cable
USB Cable / HDMI Cable

Case / Strap
Shoulder Strap / Camera Case / Body Jacket

Software

Olympus Workspace
Photo editing software

OLYMPUS Image Share (OI.Share)
Smartphone App

Memory Card
SD/SDHC/ SDXC/Eye-Fi
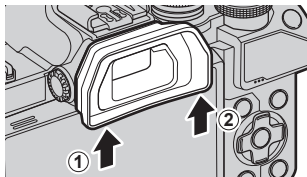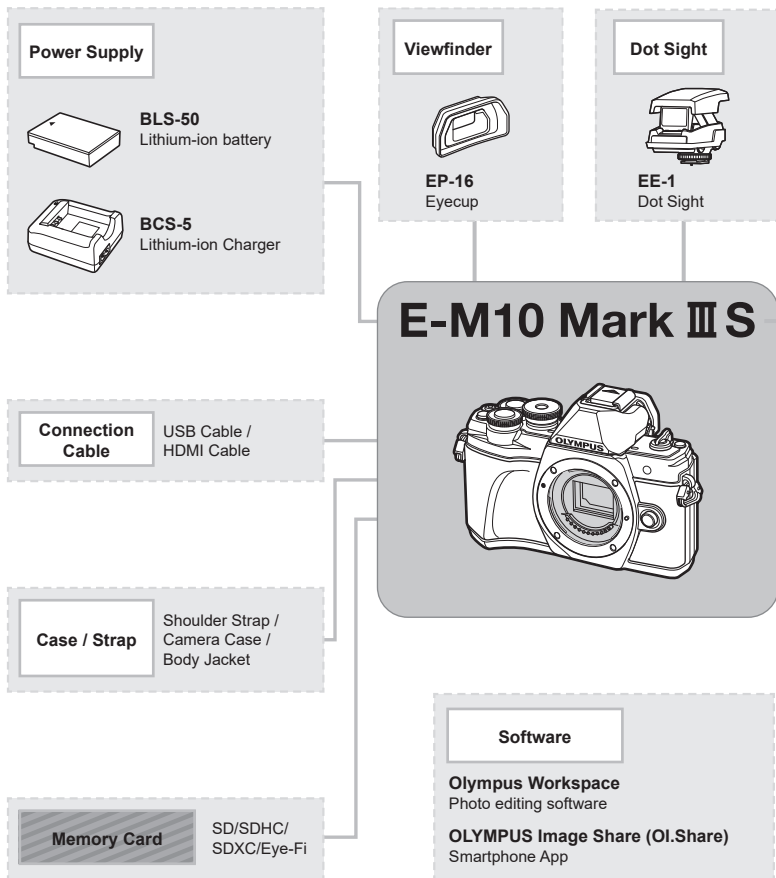
☐ : E-M10 Mark III S compatible products

▨ : Commercially available products

For the latest information, please visit the Olympus website.

*1 Not all lenses can be used with adapter. For details, refer to the Olympus Official Web Site.
*2 For compatible lens, refer to the Olympus Official Web Site.

7

Cautions

Lens		Converter Lens*²
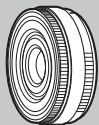
Lens

Micro Four Thirds system lenses

MMF-2/MMF-3*¹
Four Thirds Adapter

Four Thirds System Lenses

BCL-1580/BCL-0980
Body Cap Lens

Converter Lens*²

FCON-P01
Fisheye

WCON-P01
Wide

MCON-P01
Macro

MCON-P02
Macro

MC-14
Teleconverter

MC-20
Teleconverter

Flash

FL-900R
Electronic Flash

FL-700WR
Electronic Flash

STF-8
Macro Flash

7

Cautions

8 Information
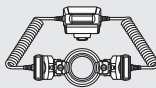
Cleaning and storing the camera

Cleaning the camera

Turn off the camera and remove the battery before cleaning the camera.
• Do not use strong solvents such as benzene or alcohol, or a chemically treated cloth.

Exterior:
• Wipe gently with a soft cloth. If the camera is very dirty, soak the cloth in mild soapy water and wring well. Wipe the camera with the damp cloth and then dry it with a dry cloth. If you have used the camera at the beach, use a cloth soaked in clean water and well wrung.

Monitor:
• Wipe gently with a soft cloth.

Lens:
• Blow dust off the lens with a commercially available blower. For the lens, wipe gently with a lens cleaning paper.

Storage

• When not using the camera for a prolonged period, remove the battery and card. Store the camera in a cool, dry place that is well ventilated.
• Insert the battery periodically and test the camera's functions.
• Remove dust and other foreign matter from the body and rear caps before attaching them.
• Attach the body cap to the camera to prevent dust from getting inside when no lens is attached. Be sure to replace the front and rear lens caps before putting the lens away.
• Clean the camera after use.
• Do not store with insect repellent.
• Avoid storing the camera in places where chemicals are treated, in order to protect the camera from corrosion.
• Mold may form on the lens surface if the lens is left dirty.
• Check each part of the camera before use if it has not been used for a long time. Before taking important pictures, be sure to take a test shot and check that the camera works properly.

Cleaning and checking the image pickup device

This camera incorporates a dust reduction function to keep dust from getting on the image pickup device and to remove any dust or dirt from the image pickup device surface with ultrasonic vibrations. The dust reduction function operates when the camera is turned on.
The dust reduction function operates at the same time as the pixel mapping, which checks the image pickup device and image processing circuitry. Since dust reduction is activated every time the camera's power is turned on, the camera should be held upright for the dust reduction function to be effective.

8

Information

Pixel Mapping - Checking the image processing functions

The pixel mapping feature allows the camera to check and adjust the image pickup device and image processing functions. Before using the pixel mapping function to ensure that it operates correctly, wait for 1 minute or longer immediately after shooting or playback.

1 In Custom Menu **I**, select [Pixel Mapping] (P. 119).

2 Press ▷, then press the ⊛ button.
   • The [Busy] bar is displayed when pixel mapping is in progress. When pixel mapping is finished, the menu is restored.

   • If you accidentally turn the camera off during pixel mapping, start again from Step 1.

8

Information

Shooting tips and information

The camera does not turn on even when a battery is loaded

The battery is not fully charged

- Charge the battery with the charger.

The battery is temporarily unable to function because of the cold

- Battery performance drops at low temperatures. Remove the battery and warm it by putting it in your pocket for a while.

No picture is taken when the shutter button is pressed

The camera has turned off automatically

- The camera automatically enters sleep mode to reduce the drain on the battery if no operations are performed for a set period of time. ☞ [Sleep] (P. 119)
  Press the shutter button halfway to exit the sleep mode.
  The camera will turn off automatically if no operations are performed for an additional 4 hours.

The flash is charging

- On the monitor, the ⚡ mark blinks when charging is in progress. Wait for the blinking to stop, then press the shutter button.

Unable to focus

- The camera cannot focus on subjects that are too close to the camera or that are not suited to autofocus (the AF confirmation mark will blink in the monitor). Increase the distance to the subject or focus on a high contrast object at the same distance from the camera as your main subject, compose the shot, and shoot.

  #### Subjects that are difficult to focus on
  It may be difficult to focus with auto focus in the following situations.

AF confirmation mark is blinking. These subjects are not focused.			
	Subject with low contrast	Excessively bright light in center of frame	Subject containing no vertical lines
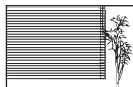
AF confirmation mark lights up but the subject is not focused.			
	Subjects at different distances	Fast-moving subject	Subject not inside AF area
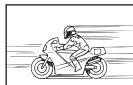
Noise reduction is activated

• When shooting night scenes, shutter speeds are slower and noise tends to appear in images. The camera activates the noise-reduction process after shooting at slow shutter speeds. During which, shooting is not allowed. You can set [Noise Reduct.] to [Off]. ☞ [Noise Reduct.] (P. 116)

The number of AF targets is reduced

The size and number of the AF targets changes with the aspect ratio (P. 76), the AF target mode (P. 63), and the option selected for [Digital Tele-converter] (P. 103).

The date and time has not been set

The camera is used with the settings at the time of purchase

• The date and time of the camera is not set when purchased. Set the date and time before using the camera. ☞ "Setting the date/time and the language" (P. 20)

The battery has been removed from the camera

• The date and time settings will be returned to the factory default settings if the camera is left without the battery for approximately 1 day. The settings will be canceled more quickly if the battery was only loaded in the camera for a short time before being removed. Before taking important pictures, check that the date and time settings are correct.

Set functions are restored to their factory default settings

When you perform operations such as rotating the mode dial in the **AUTO** (▣), **SCN**, or ⒶⓅ mode, any settings you have altered will be reset to their default values.

Image taken appears whitish

This may occur when the picture is taken in backlight or semi-backlight conditions. This is due to a phenomenon called flare or ghosting. As far as possible, consider a composition where strong light source is not taken in the picture. Flare may occur even when a light source is not present in the picture. Use a lens hood to shade the lens from the light source. If a lens hood does not have effect, use your hand to shade the lens from the light. ☞ "Interchangeable lenses" (P. 140)

Unknown bright dot(s) appear on the subject in the picture taken

This may be due to stuck pixel(s) on the image pickup device. Perform [Pixel Mapping]. If the problem persists, repeat pixel mapping a few times. ☞ "Pixel Mapping - Checking the image processing functions" (P. 149)

Functions that cannot be selected from menus

Some items may not be selectable from the menus when using the arrow pad.
• Items that cannot be set with the current shooting mode.
• Items that cannot be set because of an item that has already been set:
    Combinations of [⎍ₕ] (P. 68) and [Noise Reduct.] (P. 116), etc.

8

Information

The subject appears distorted

The following functions use an electronic shutter:

movie recording (P. 53)/silent (P. 69)/the **SCN** mode "silent" (P. 30) and "multi-focus shot" (P. 30) options/the [AP] mode "silent" (P. 37) and "focus bracketing" (P. 41) options

This may cause distortion if the subject is moving rapidly or the camera is moved abruptly. Avoid moving the camera abruptly during shooting or use standard sequential shooting.

Lines appear in photographs

The following functions use an electronic shutter, which may result in lines due to flicker and other phenomena associated with fluorescent and LED lighting, an effect that can sometimes be reduced by choosing slower shutter speeds:

movie recording (P. 53)/silent (P. 69)/the **SCN** mode "silent" (P. 30) and "multi-focus shot" (P. 30) options/the [AP] mode "silent" (P. 37) and "focus bracketing" (P. 41) options

I want to turn the eye sensor off

Press the |○| button and select [Off] for [EVF Auto Switch]. ☞ "Switching between displays" (P. 23), [EVF Auto Switch] (P. 119)

The monitor or EVF will not turn on

Hold the |○| button to cycle through the displays.
[EVF Auto Switch] may be off. Hold the |○| button and select [On] for [EVF Auto Switch].
☞ "Switching between displays" (P. 23)

The camera is stuck in manual focus (MF) mode

Some lenses are equipped with a manual focus clutch that engages manual focus when the focus ring is slid back. Check the lens. More information can be found in the lens manual.

8

Information

Error codes

Monitor indication	Possible cause	Corrective action
! No Card	The card is not inserted, or it cannot be recognized.	Insert a card or insert a different card.
! Card Error	There is a problem with the card.	Insert the card again. If the problem persists, format the card. If the card cannot be formatted, it cannot be used.
! Write Protect	Writing to the card is prohibited.	The card write-protect switch is set to the "LOCK" side. Release the switch. (P. 138)
! Card Full	• The card is full. No more pictures can be taken or no more information such as print reservation can be recorded. • There is no space in the card and print reservation or new images cannot be recorded.	Replace the card or erase unwanted pictures. Before erasing, download important images to a PC.
Card Setup Clean the contact area of the card with a dry cloth. Clean Card Format Set ⏎	Card cannot be read. Card may not have been formatted.	• Select [Clean Card], press the ⏎ and turn off the camera. Remove the card and wipe the metallic surface with a soft, dry cloth. • Select [Format] ▶ [Yes], and then press the ⏎ to format the card. Formatting the card erases all data on the card.
⌐ ⌐ No Picture	There are no pictures on the card.	The card contains no pictures. Record pictures and play back.
! Picture Error	The selected picture cannot be displayed for playback due to a problem with this picture. Or the picture cannot be used for playback on this camera.	Use image processing software to view the picture on a PC. If that cannot be done, the image file is damaged.
! The Image Cannot Be Edited	Pictures taken with another camera cannot be edited on this camera.	Use image processing software to edit the picture.

Monitor indication	Possible cause	Corrective action
⚠️ ℃/℉	The internal temperature of the camera has risen due to sequential shooting.	Turn off the camera and wait for the internal temperature to cool.
⚠️ Internal camera temperature is too high. Please wait for cooling before camera use.		Wait a moment for the camera to turn off automatically. Allow the internal temperature of the camera to cool before resuming operations.
🔋 Battery Empty	The battery is drained.	Charge the battery.
📷⤳✕ No Connection	The camera is not correctly connected to a computer, printer, HDMI display, or other device.	Reconnect the camera.
↓ No Paper	There is no paper in the printer.	Load some paper in the printer.
🎨 No Ink	The printer has run out of ink.	Replace the ink cartridge in the printer.
🔧 Jammed	The paper is jammed.	Remove the jammed paper.
Settings Changed	The printer's paper cassette has been removed or the printer has been manipulated while making settings on the camera.	Do not manipulate the printer while making settings on the camera.
⚠️ Print Error	There is a problem with the printer and/or camera.	Turn off camera and printer. Check the printer and remedy any problems before turning the power on again.
! Cannot Print	Pictures recorded on other cameras may not be printed on this camera.	Use a personal computer to print.

Monitor indication	Possible cause	Corrective action
The lens is locked. Please extend the lens.	The lens of the retractable lens stays retracted.	Extend the lens.
Please check the status of a lens.	An abnormality has occurred between the camera and the lens.	Turn off the camera, check the connection with the lens, and turn the power on again.
This lens is not supported.	The lens does not support the selected shooting mode.	Choose a lens that does or choose a different shooting mode.

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Information

Defaults

*1: Default can be restored by selecting [Full] for [Reset].
*2: Default can be restored by selecting [Basic] for [Reset].

Button Functions/Live Control/LV Super Control

Function	Default	*1	*2	☞
ISO	AUTO	✔	✔	65
Sequential shooting/Self-timer	♦☐	✔	✔	68
AF target settings	▦	✔	✔	63
Flash photography	⚡	✔	✔	66
◻AF Mode	S-AF	✔	✔	75
🎬AF Mode	C-AF	✔	✔	75
Aspect ratio	4:3	✔	✔	76
◻ ◀⁑	▮N	✔	✔	76
🎬◀⁑ (Standard)	1920×1080 Fine 60p	✔	✔	77
🎬◀⁑ (4K)	3840×2160 30p	—	—	78
🎬◀⁑ (Clips)	1920×1080 Normal 60p 4s	✔	✔	78
🎬◀⁑ (High-speed)	1280×720 HighSpeed 120fps	—	—	78
Movie (exposure) mode	**P**	✔	—	79

◻ Shooting Menu

Tab	Function		Default	*1	*2	☞
◻₁	Reset		Basic	—	—	102
	Picture Mode		░ Natural	✔	✔	72, 103
	Digital Tele-converter		Off	✔	✔	103
	Metering		▨	✔	✔	82
◻₂	◻Image Stabilizer		S-IS On	✔	✔	80
	AF Illuminator		On	✔	✔	103
	◻Elec. Zoom Speed		Normal	✔	—	104
	⚡⁑		±0.0	✔	✔	80
	Intrvl. Sh./Time Lapse		Off	✔	✔	104
	Silent[♥]Settings	Noise Reduction[♥]	Off	✔	—	106
		◼))	Not Allow	✔	—	
		AF Illuminator	Not Allow	✔	—	
		Flash Mode	Not Allow	✔	—	
	⚡ RC Mode		Off	✔	✔	142

▶ Video Menu

Tab	Function	Default	*1	*2	☞
▶	Movie ●	On	✔	✔	107
	Recording Volume	±0	✔	—	107
	▶AF Mode	C-AF	✔	✔	107
	▶Image Stabilizer	M-IS **1**	✔	✔	80
	▶Elec. Zoom Speed	Normal	✔	—	107
	Video Frame Rate	30p	✔	—	77, 107
	Video Bit Rate	Fine	✔	—	77, 107

▶ Playback Menu

Tab		Function		Default	*1	*2	☞
▶		Start		—	—	—	
	▶	BGM		Happy Days	✔	✔	
		Slide		All	✔	✔	96
		Slide Interval		3 sec	✔	—	
		Movie Interval		Short	✔	—	
	▢			On	✔	✔	108
	Edit	Sel. Image	RAW Data Edit	—			108
			JPEG Edit	—			109
			Movie Edit	—	—	—	110, 111
			●	—			99
		Image Overlay		—			110
	Print Order			—	—	—	135
	Reset Protect			—	—	—	111
	Connection to Smartphone			—	—	—	126

✲ Custom Menu

Tab		Function		Default	*1	*2	☞
✲	AF/MF						
	A	AEL/AFL	S-AF	mode1			114, 120
			C-AF	mode2	✔	✔	
			MF	mode1			
		AF Targeting Pad		Off	✔	✔	114
		☺Face Priority		☺	✔	—	64, 114
		MF Assist	Magnify	Off	✔	—	114, 120
			Peaking	Off	✔	—	
		Reset Lens		On	✔	✔	114

Tab	Function			Default	*1	*2	☞
✿	Button/Dial						
	B Button Function	**Fn1** Function		AEL/AFL	✔	—	89, 114
		Fn2 Function		Digital Tele-converter	✔	—	
		Dial Function	P	Front dial: ✳ Rear dial: Ps	✔	—	114
			A	Front dial: ✳ Rear dial: FNo.			
			S	Front dial: ✳ Rear dial: Shutter			
			M	Front dial: FNo. Rear dial: Shutter			
	Disp/■))/PC						
	C1 ○ Control Settings		⬛	▭ LV-C	✔	—	70, 115
			P/A/S/M	▭ LV-C	✔	—	
			ART	▭ LV-C	✔	—	
			SCN/ⒶP	▭ LV-C	✔	—	
		▦/Info Settings	▶ Info	Image Only, Overall	✔	✔	115, 121
			LV-Info	Custom1 (▥), Custom2 (Level Gauge)	✔	—	
			▦ Settings	25, My Clips, Calendar	✔	—	
		Live View Boost		Off	✔	✔	115
		Flicker reduction		Auto	✔	—	115
		Displayed Grid		Off	✔	—	115
		Peaking Color		Red	✔	—	115
	C2 ■))			On	✔	✔	115
		HDMI	Output Size	1080p	✔	—	115, 123
			HDMI Control	Off	✔	—	
		USB Mode		Auto	✔	✔	115
	Exp/ISO/BULB						
	D1 Exposure Shift	▩		±0	✔	—	116
		◎					
		•					
		ISO-Auto Set	High Limit	6400	✔	✔	
			Default	200	✔	✔	
		Noise Filter		Standard	✔	✔	116
		Noise Reduct.		Auto	✔	✔	116
	D2 Bulb/Time Timer			8min	✔	✔	116
		Live Bulb		Off	✔	—	116
		Live Time		0.5 sec	✔	—	116
		Composite Settings		1 sec	✔	—	51, 116

Tab	Function		Default	*1	*2	☞
✿	⚡ Custom					
E	⚡ X-Sync.		1/250	✔	✔	117, 124
	⚡ Slow Limit		1/60	✔	✔	117, 124
	🔅+✚		Off	✔	✔	117
	⚡+WB		WB AUTO	✔	—	117
	◀:-/WB/Color					
F	◀:- Set		◀:-1 ▉F, ◀:-2 ▉N, ◀:-3 ▉N, ◀:-4 ▉N	✔	✔	117, 124
	WB		Auto	✔	✔	73, 117
	WB AUTO Keep Warm Color		On	✔	✔	117
	Color Space		sRGB	✔	✔	87, 117
	Record					
G	File Name		Reset	✔	—	118
	Edit Filename		—	✔	—	118
	Copyright Settings	Copyright Info.	Off	✔	—	118
		Artist Name	—	—	—	
		Copyright Name	—	—	—	
	EVF					
H	EVF Auto Switch		On	✔	—	119, 152
	EVF Adjust	EVF Auto Luminance	On	✔	—	119
		EVF Adjust	🌡 ±0, ☀ ±0			
	📷 Utility					
I	Pixel Mapping		—	—	—	119, 149
	Level Adjust		—	✔	—	119
	Touchscreen Settings		On	✔	—	119
	Sleep		1 min	✔	✔	19, 119
	Certification		—	—	—	119

♪ Setup Menu

Tab	Function		Default	*1	*2	☞
♪	Card Setup		—	—	—	113
	🕐		—	—	—	20
	🌐		—	—	—	112
	🖥		🌡 ±0, ☀ ±0, Natural	✔	—	112
	Rec View		0.5 sec	✔	—	112
	Wi-Fi Settings	Wi-Fi Connect Settings	Private	✔	—	128
		Private Password	—	—	—	
		Reset share Order	—	—	—	129
		Reset Wi-Fi Settings	—	—	—	
	Firmware		—	—	—	112

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Information

Specifications

■ Camera

Product type	
Product type	Digital camera with interchangeable Micro Four Thirds Standard lens system
Lens	M.Zuiko Digital, Micro Four Thirds System Lens
Lens mount	Micro Four Thirds mount
Equivalent focal length on a 35 mm film camera	Approx. twice the focal length of the lens
Image pickup device	
Product type	4/3" Live MOS sensor
Total no. of pixels	Approx. 17.20 million pixels
No. of effective pixels	Approx. 16.05 million pixels
Screen size	17.3 mm (H) × 13.0 mm (V)
Aspect ratio	1.33 (4:3)
Viewfinder	
Type	Electronic viewfinder with eye sensor
No. of pixels	Approx. 2.36 million dots
Magnification	100%
Eye point	Approx. 19.2 mm (−1 m^{-1})
Live view	
Sensor	Uses Live MOS sensor
Magnification	100%
Monitor	
Product type	3.0" TFT color LCD, Vari-angle, touch screen
Total no. of pixels	Approx. 1.04 million dots (aspect ratio 3:2)
Shutter	
Product type	Computerized focal-plane shutter
Shutter speed	1/4000 - 60 sec., bulb photography, time photography
Auto focus	
Product type	Hi-Speed Imager AF
Focusing points	121 points
Selection of focusing point	Auto, Optional
Exposure control	
Metering system	TTL metering system (imager metering) Digital ESP metering/Center weighted averaging metering/Spot metering
Metered range	EV −2 - 20 (f/2.8 lens, ISO100)
Shooting modes	⚙: AUTO/**P**: Program AE (Program shift can be performed)/ **A**: Aperture priority AE/**S**: Shutter priority AE/**M**: Manual/ ♠: Movie/**ART**: Art Filter/**SCN**: Scene/⒜Ⓟ: Advanced Photo
ISO sensitivity	LOW, 200 - 25600 (1/3 EV step)
Exposure compensation	±5.0EV (1/3 EV step)

White balance	
Product type	Image pickup device
Mode setting	Auto/Preset WB (6 settings)/Customized WB/One-touch WB (camera can store up to 4 settings)

Recording	
Memory	SD, SDHC and SDXC UHS-II compatible
Recording system	Digital recording, JPEG (DCF2.0), RAW Data
Applicable standards	Exif 2.3, Digital Print Order Format (DPOF), PictBridge
Sound with still pictures	Wave format
Movie	MPEG-4 AVC/H.264
Audio	Stereo, PCM 48kHz

Playback	
Display format	Single-frame playback/Close-up playback/Index display/Calendar display

Drive	
Drive mode	Single-frame shooting/Sequential shooting/Self-timer/Silent shooting
Sequential shooting	Up to approximately 8.5 fps (⊑ᴴ) / Up to approximately 14 fps (♥⊑ᴴ)
Self-timer	Operation time: 12 sec./2 sec./Customized
Energy saving function	Switch to sleep mode: 1 minute (This function can be customized.) Power OFF: 4 hours

Flash	
Guide number	5.8 (ISO100•m)/8.2 (ISO200•m)
Firing angle	Covers the angle of view of a 14 mm lens (28 mm in 35 mm format)
Flash control mode	TTL-AUTO (TTL pre-flash mode)/MANUAL
Sync speed	1/250 s or slower

Wireless LAN	
Compatible standard	IEEE 802.11b/g/n

External connector	
Micro-USB connector/HDMI micro connector (type D)	

Power supply	
Battery	Lithium-ion Battery ×1

Dimensions/weight	
Dimensions	121.5 mm (W)×83.6 mm (H)×49.5 mm (D) (4.8"×3.3"×1.9") (excluding protrusions)
Weight	Approx. 411 g (0.9 lb.) (including battery and memory card)

Operating environment	
Temperature	0 °C - 40 °C (32 °F - 104 °F) (operation)/ –20 °C - 60 °C (–4 °F - 140 °F) (storage)
Humidity	30% - 90% (operation)/10% - 90% (storage)

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HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

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Information

■ Lithium-ion battery

MODEL NO.	BLS-50
Product type	Rechargeable Lithium ion battery
Nominal voltage	DC 7.2 V
Nominal capacity	1210 mAh
No. of charge and discharge times	Approx. 500 times (varies with usage conditions)
Ambient temperature	0 °C - 40 °C (32 °F - 104 °F) (charging)
Dimensions	Approx. 35.5 mm (W) × 12.8 mm (H) × 55 mm (D) (1.4" × 0.5" × 2.2")
Weight	Approx. 46 g (0.1 lb.)

■ Lithium-ion charger

MODEL NO.	BCS-5
Rated input	AC 100 V - 240 V (50/60 Hz)
Rated output	DC 8.35 V, 400 mA
Charging time	Approx. 3 hours 30 minutes (room temperature)
Ambient temperature	0 °C - 40 °C (32 °F - 104 °F) (operation)/ −20 °C - 60 °C (−4 °F - 140 °F) (storage)
Dimensions	Approx. 62 mm (W) × 38 mm (H) × 83 mm (D) (2.4" × 1.5" × 3.3")
Weight (without AC cable)	Approx. 70 g (0.15 lb.)

• The AC cable supplied with this device is for use only with this device and should not be used with other devices. Do not use cables for other devices with this device.

• SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT ANY NOTICE OR OBLIGATION ON THE PART OF THE MANUFACTURER.
• Visit our website for the latest specifications.

8

Information

SAFETY PRECAUTIONS

| | **CAUTION** | |
| | RISK OF ELECTRIC SHOCK
DO NOT OPEN | |

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED OLYMPUS SERVICE PERSONNEL.

⚠ An exclamation mark enclosed in a triangle alerts you to important operating and maintenance instructions in the documentation provided with the product.

⚠ WARNING If the product is used without observing the information given under this symbol, serious injury or death may result.

⚠ CAUTION If the product is used without observing the information given under this symbol, injury may result.

⚠ NOTICE If the product is used without observing the information given under this symbol, damage to the equipment may result.

WARNING!
TO AVOID THE RISK OF FIRE OR ELECTRICAL SHOCK, NEVER DISASSEMBLE, EXPOSE THIS PRODUCT TO WATER OR OPERATE IN A HIGH HUMIDITY ENVIRONMENT.

General Precautions

Read All Instructions — Before you use the product, read all operating instructions. Save all manuals and documentation for future reference.

Power Source — Connect this product only to the power source described on the product label.

Foreign Objects — To avoid personal injury, never insert a metal object into the product.

Cleaning — Always unplug this product from the wall outlet before cleaning. Use only a damp cloth for cleaning. Never use any type of liquid or aerosol cleaner, or any type of organic solvent to clean this product.

Heat — Never use or store this product near any heat source such as a radiator, heat register, stove, or any type of equipment or appliance that generates heat, including stereo amplifiers.

Attachments — For your safety, and to avoid damaging the product, use only accessories recommended by Olympus.

Location — To avoid damage to the product, mount the product securely on a stable tripod, stand, or bracket.

⚠ WARNING

- **Do not use the camera near flammable or explosive gases.**
- **Rest your eyes periodically when using the viewfinder.**

  Failure to observe this precaution could result in eyestrain, nausea, or sensations similar to motion sickness. The length and frequency of the required rest varies with the individual; use your own judgement. If you feel tired or unwell, avoid using the viewfinder and if necessary consult a physician.

- **Do not use the flash and LED (including AF illuminator) on people (infants, small children, etc.) at close range.**
  - You must be at least 1 m (3 ft.) away from the faces of your subjects. Firing the flash too close to the subject's eyes could cause a momentary loss of vision.

- **Do not look at the sun or strong lights with the camera.**

- **Keep young children, infants away from the camera.**
  - Always use and store the camera out of the reach of young children and infants to prevent the following dangerous situations which could cause serious injury:
    - Becoming entangled in the camera strap, causing strangulation.
    - Accidentally swallowing the battery, cards or other small parts.
    - Accidentally firing the flash into their own eyes or those of another child.
    - Accidentally being injured by the moving parts of the camera.
- **Should you notice that the charger is emitting smoke, heat, or an unusual noise or smell, immediately cease use and unplug the charger from the power outlet, and then contact an authorized distributor or service center.**
- **Stop using the camera immediately if you notice any unusual odors, noise, or smoke around it.**
  - Never remove the batteries with bare hands, which may cause a fire or burn your hands.
- Never hold or operate the camera with wet hands.
  This may cause overheating, exploding, burning, electrical shocks, or malfunctions.
- **Do not leave the camera in places where it may be subject to extremely high temperatures.**
  - Doing so may cause parts to deteriorate and, in some circumstances, cause the camera to catch fire. Do not use the charger if it is covered (such as a blanket). This could cause overheating, resulting in fire.
- **Handle the camera with care to avoid getting a low temperature burn.**
  - When the camera contains metal parts, overheating can result in a low-temperature burn. Pay attention to the following:
    - When used for a long period, the camera will get hot. If you hold on to the camera in this state, a low-temperature burn may be caused.
    - In places subject to extremely cold temperatures, the temperature of the camera's body may be lower than the environmental temperature. If possible, wear gloves when handling the camera in cold temperatures.
- To protect the high-precision technology contained in this product, never leave the camera in the places listed below, no matter if in use or storage:

- Places where temperatures and/or humidity are high or go through extreme changes. Direct sunlight, beaches, locked cars, or near other heat sources (stove, radiator, etc.) or humidifiers.
  - In sandy or dusty environments.
  - Near flammable items or explosives.
  - In wet places, such as bathrooms or in the rain.
  - In places prone to strong vibrations.
- The camera uses a lithium-ion battery specified by Olympus. Charge the battery with the specified charger. Do not use any other chargers.
- Never incinerate or heat batteries in microwaves, on hot plates, or in pressure vessels, etc.
- Never leave the camera on or near electromagnetic devices.
  This may cause overheating, burning, or exploding.
- Do not connect terminals with any metallic objects.
- Take precautions when carrying or storing batteries to prevent them from coming into contact with any metal objects such as jewelry, pins, fasteners, keys, etc.
  The short circuit may cause overheating, exploding, or burning, which burn or damage you.
- To prevent causing battery leaks or damaging their terminals, carefully follow all instructions regarding the use of batteries. Never attempt to disassemble a battery or modify it in any way, solder, etc.
- If battery fluid gets into your eyes, flush your eyes immediately with clear, cold running water and seek medical attention immediately.
- If you cannot remove the battery from the camera, contact an authorized distributor or service center. Do not try to remove the battery by force.
  Damage to the battery exterior (scratches, etc.) may produce heat or an explosion.
- Always store batteries out of the reach of small children and pets. If they accidentally swallow a battery, seek medical attention immediately.
- To prevent batteries from leaking, overheating, or causing a fire or explosion, use only batteries recommended for use with this product.
- If rechargeable batteries have not been recharged within the specified time, stop charging them and do not use them.
- Do not use batteries with scratches or damage to the casing, and do not scratch the battery.

- Never subject batteries to strong shocks or continuous vibration by dropping or hitting. This may cause exploding, overheating, or burning.
- If a battery leaks, has unusual odor, becomes discolored or deformed, or becomes abnormal in any other way during operation, stop using the camera, and keep away from fire immediately.
- If a battery leaks fluid onto your clothing or skin, remove the clothing and flush the affected area with clean, running cold water immediately. If the fluid burns your skin, seek medical attention immediately.
- Never use lithium-ion batteries in a low-temperature environment. Doing so may cause generation of heat, ignition, or explosion.
- The Olympus lithium-ion battery is designed to be used only for the Olympus digital camera. Do not use the battery to other devices.
- **Do not allow children or animals/pets to handle or transport batteries (prevent dangerous behaviour such as licking, putting in mouth or chewing).**

Use Only Dedicated Rechargeable Battery and Battery Charger

We strongly recommend that you use only the genuine Olympus dedicated rechargeable battery and battery charger with this camera.
Using a non-genuine rechargeable battery and/or battery charger may result in fire or personal injury due to leakage, heating, ignition or damage to the battery. Olympus does not assume any liability for accidents or damage that may result from the use of a battery and/or battery charger that are not genuine Olympus accessories.

⚠ CAUTION

- **Do not cover the flash with a hand while firing.**
- Never store batteries where they will be exposed to direct sunlight, or subjected to high temperatures in a hot vehicle, near a heat source, etc.
- Keep batteries dry at all times.
- The battery may become hot during prolonged use. To avoid minor burns, do not remove it immediately after using the camera.
- This camera uses one Olympus lithium-ion battery. Use the specified genuine battery. There is a risk of explosion if the battery is replaced with the incorrect battery type.
- Please recycle batteries to help save our planet's resources. When you throw away dead batteries, be sure to cover their terminals and always observe local laws and regulations.

⚠ NOTICE

- **Do not use or store the camera in dusty or humid places.**
- **Use SD/SDHC/SDXC memory cards only. Never use other types of cards.**
  If you accidently insert another type of card into the camera, contact an authorized distributor or service center. Do not try to remove the card by force.
- Regularly back up important data to a computer or other storage device to prevent accidental loss.
- OLYMPUS accepts no liability for any loss of data associated with this device.
- Be careful with the strap when you carry the camera. It could easily catch on stray objects and cause serious damage.
- Before transporting the camera, remove a tripod and all other non-OLYMPUS accessories.
- Never drop the camera or subject it to severe shocks or vibrations.
- When attaching the camera to or removing it from a tripod, rotate the tripod screw, not the camera.
- Do not touch electric contacts on cameras.
- Do not leave the camera pointed directly at the sun. This may cause lens or shutter curtain damage, color failure, ghosting on the image pickup device, or may possibly cause fires.
- Do not leave the viewfinder exposed to a strong light source or direct sunlight. The heat may damage the viewfinder.
- Do not push or pull severely on the lens.
- Be sure to remove any water droplets or other moisture from the product before replacing the battery or opening or closing covers.
- Before storing the camera for a long period, remove the batteries. Select a cool, dry location for storage to prevent condensation or mold from forming inside the camera. After storage, test the camera by turning it on and pressing the shutter button to make sure that it is operating normally.
- The camera may malfunction if it is used in a location where it is subject to a magnetic/electromagnetic field, radio waves, or high voltage, such as near a TV set, microwave, video game, loud speakers, large monitor unit, TV/radio tower, or transmission towers. In such cases, turn the camera off and on again before further operation.
- Always observe the operating environment restrictions described in the camera's manual.

- Insert the battery carefully as described in the operating instructions.
- Before loading, always inspect the battery carefully for leaks, discoloration, warping, or any other abnormality.
- Always unload the battery from the camera before storing the camera for a long period.
- When storing the battery for a long period, select a cool location for storage.
- Power consumption by the camera varies depending on which functions are used.
- During the conditions described below, power is consumed continuously and the battery becomes exhausted quickly.
  - The zoom is used repeatedly.
  - The shutter button is pressed halfway repeatedly in shooting mode, activating the auto focus.
  - A picture is displayed on the monitor for an extended period of time.
  - The camera is connected to a printer.
- Using an exhausted battery may cause the camera to turn off without displaying the battery level warning.
- If the battery's terminals get wet or greasy, camera contact failure may result. Wipe the battery well with a dry cloth before use.
- Always charge a battery when using it for the first time, or if it has not been used for a long period.
- When operating the camera with battery power at low temperatures, try to keep the camera and spare battery as warm as possible. A battery that has run down at low temperatures may be restored after it is warmed at room temperature.
- Before going on a long trip, and especially before traveling abroad, purchase extra batteries. A recommended battery may be difficult to obtain while traveling.

Using the wireless LAN function
- **Turn off the camera in hospitals and other locations where medical equipment is present.**
  The radio waves from the camera may adversely affect medical equipment, causing a malfunction that results in an accident.
- **Turn off the camera when onboard aircraft.**
  Using wireless devices onboard may hinder safe operation of the aircraft. Be sure to disable wireless LAN function onboard aircraft.

Monitor
- Do not push the monitor forcibly; otherwise the image may become vague, resulting in a playback mode failure or damage to the monitor.
- A strip of light may appear on the top/bottom of the monitor, but this is not a malfunction.
- When a subject is viewed diagonally in the camera, the edges may appear zigzagged on the monitor. This is not a malfunction; it will be less noticeable in playback mode.
- In places subject to low temperatures, the monitor may take a long time to turn on or its color may change temporarily.
  When using the camera in extremely cold places, it is a good idea to occasionally place it in a warm place. The monitor exhibiting poor performance due to low temperatures will recover in normal temperatures.
- The monitor of this product is manufactured with high-quality accuracy, however, there may be a stuck or dead pixel on the monitor. These pixels do not have any influence on the image to be saved. Because of the characteristics, the unevenness of the color or brightness may also be found depending on the angle, but this is due to the structure of the monitor. This is not a malfunction.

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