### PT-EP13

#### Instruction Manual

<table>
<thead>
<tr>
<th>Language</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP</td>
<td>取扱説明書</td>
</tr>
<tr>
<td>EN</td>
<td>Instruction Manual</td>
</tr>
<tr>
<td>FR</td>
<td>Mode d’emploi</td>
</tr>
<tr>
<td>DE</td>
<td>Bedienungsanleitung</td>
</tr>
<tr>
<td>ES</td>
<td>Manual de instrucciones</td>
</tr>
<tr>
<td>CHS</td>
<td>使用说明书</td>
</tr>
<tr>
<td>KR</td>
<td>사용설명서</td>
</tr>
</tbody>
</table>

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Printed in China
Thank you for buying the Underwater Case PT-EP13 (hereinafter Case).
Please read this instruction manual carefully and use the product safely and correctly. Please keep this instruction manual for reference after reading it.
Wrong usage may cause damage to the camera inside the Case due to water leakage, and repair may not be possible.
Before use, perform an advance check as described in this manual.

Introduction

- Unauthorized copying of this manual in part or in full, except for private use, is prohibited.
- Unauthorized reproduction is strictly prohibited.
- OLYMPUS IMAGING CORP. shall not be responsible in any way for lost profits or any claims by third parties in case of any damage occurring from improper use of this product.

Please read the following items before use

- This Case is a precision device designed for use at a water depth within 45 m. Please handle it with sufficient care.
- Please use the Case correctly after sufficient understanding of the contents of this manual in regard to handling of the Case, checks before use, maintenance, and storage after use.
- OLYMPUS IMAGING CORP. shall in no way be responsible for accidents involving immersion of a digital camera in water. In addition, expenses incurred for damage of internal materials or loss of recorded contents due to water entering the camera will not be compensated. Please address these possible damages by insuring your camera at your own discretion before use.
- OLYMPUS IMAGING CORP. shall not pay any compensation for accidents (injuries or material damage) at the time of use.

For safe use

This instruction manual uses various pictographs for correct use of the product and to prevent danger to the user and other person, as well as property damage. These pictographs and their meanings are shown below.

| WARNING  | This shows the content regarding assumption of possibility of human death or severe injury in case of handling with disregard of this indication. |
| CAUTION  | This shows the contents regarding assumption of possibility of injury or damage to property in case of handling with disregard of this indication. |
WARNING

1. Keep this product out of the reach of babies, infants, and children. There is the possibility of occurrence of the following types of accidents.
   - Injury by dropping onto the body from heights.
   - Injury from parts of the body getting caught in parts which open and close.
   - Swallowing of small parts, O-ring, silicone grease and silica gel. Please consult a physician immediately if any parts have been swallowed.

2. Do not store digital camera with batteries inserted in this product. Storage with a battery inserted may lead to leakage of the battery liquid and fire hazard.

3. If leakage of water should occur with a camera installed in this product, quickly remove the battery from the camera. There is the possibility of ignition and explosion from generation of hydrogen gas.

4. This product is made of resin. There is the possibility that injuries may be caused when it becomes broken due to strong impact with a rock or other hard objects. Please handle it with sufficient care.

CAUTION

1. Do not disassemble or modify this product. This may cause water leakage or defect. In case of the loss of image data caused by disassembly, repair or modification etc. by any party other than those appointed by OLYMPUS IMAGING CORP., we shall bear no responsibility for damage.

2. Use or storage of the product at the following locations may cause defective operation, defects, damage, fire, internal fogging, or water leakage. This should be avoided.
   - Locations reaching high temperatures such as those under direct sunlight, in an automobile, etc.
   - Locations close to fire
   - A water depth in excess of 45 m
   - Locations subject to vibrations
   - Locations with high temperature and humidity or with extreme temperature changes
   - Locations with volatile substances

3. Opening and closing at locations with much sand, dust, or dirt may impair the waterproof characteristic and cause water leakage. This should be avoided.

4. This product is not a case to soften impacts to the camera inside the product. When this product with a digital camera inside is subjected to impacts or heavy objects are placed onto it, the digital camera may be damaged. Please handle it with sufficient care.

5. Do not use the following chemicals for cleaning, corrosion prevention, prevention of fogging, repair or other purposes. When these are used for the Case directly or indirectly (with the chemicals in vaporized state), they may cause cracking under high pressure or other problems.

<table>
<thead>
<tr>
<th>Chemicals which cannot be used</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatile organic solvents, chemical detergents</td>
<td>Do not clean the Case with alcohol, gasoline, thinner or other volatile organic solvents or with chemical detergents etc. Pure water or lukewarm water is sufficient for cleaning.</td>
</tr>
<tr>
<td>Anticorrosion agent</td>
<td>Do not use anticorrosion agents. Pure water is sufficient when washing the metal parts as stainless steel and brass are used.</td>
</tr>
<tr>
<td>Commercial defogging agents</td>
<td>Do not use commercial defogging agents. Always use the specified desiccant silica gel.</td>
</tr>
<tr>
<td>Grease other than specified silicone grease</td>
<td>Use only the specified silicone grease for the O-ring, as otherwise the O-ring surface may deteriorate and water leakage may occur.</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Do not use adhesive for repairs or other purposes. When repair is required, please contact a dealer or a service station of OLYMPUS IMAGING CORP.</td>
</tr>
</tbody>
</table>
Jumping into the water with the Case in your hand, throwing the Case from a boat or ship into the water, and other rough handling may cause water leakage. Please handle with sufficient care, when handing it over from hand to hand etc.

If the Case interior or the camera should become wet because of water leakage, etc., immediately wipe off all moisture and contact your local service station or dealer.

Be careful not to apply excessive force to the projection parts, such as the zoom dial or tripod seat.

Please remove the O-ring when traveling by air. Otherwise air pressure may make it impossible to open the Case.

For safe use of the digital camera in this product, please read the "Instruction Manual" for the digital camera carefully.

When sealing this product, take sufficient care that no foreign matter gets caught at the O-ring and the contact surface. It is caused for water leakage.

The lens port cannot be removed.
Contents

Introduction ................................................................................................................... 1
Please read the following items before use ................................................................. 1
For safe use ................................................................................................................... 1

1. Preparations ............................................................................................................. 6
Check the contents of the package ............................................................................... 6
Names of the parts ......................................................................................................... 7
Using the supplied accessories ...................................................................................... 8
Installing and removing of the monitor hood ............................................................... 8
Mounting and removing the body cap .......................................................................... 8
Using the diffuser .......................................................................................................... 9
Removing diffuser (with port adapter) from the Case body ......................................... 9
Prepare the digital camera ......................................................................................... 10

2. Advance check of the Case .................................................................................. 11
Advance check before use .......................................................................................... 11
Remove the O-ring ....................................................................................................... 11
Remove any sand, dirt, etc. ......................................................................................... 11
How to Apply Grease to the O-ring .......................................................................... 12
Install the O-ring .......................................................................................................... 12

3. Installing the digital camera ................................................................................. 13
Open the Case ............................................................................................................ 13
Attach the flash to the camera .................................................................................... 13
Load the digital camera ............................................................................................. 14
Make sure the camera is loaded properly .................................................................. 14
Seal the Case ............................................................................................................. 15
Attach the diffuser ...................................................................................................... 15
Check the operation of the loaded camera ............................................................... 15
Water Leakage Test ................................................................................................. 16

4. Connecting the underwater flash ........................................................................ 17

5. Taking Pictures Under Water ............................................................................... 18
How to select the shooting modes ............................................................................. 18
Underwater shooting modes .................................................................................... 18

6. Handling After Shooting .................................................................................... 19
Wash the Case with pure water ................................................................................ 19
Wipe off any waterdrops ......................................................................................... 19
Unload the digital camera ....................................................................................... 19
Dry the Case ............................................................................................................ 19
7. Maintaining the Waterproof Function

- Remove the O-ring .................................................. 20
- Remove any sand, dirt, etc. ........................................ 20
- How to Apply Grease to the O-ring .......................... 20
- Install the O-ring ..................................................... 20
- Replace consumable products ................................ 20

8. Appendix ................................................................. 21

- Specifications .......................................................... 21
- Supplied accessories for PT-EP13 ............................ 21
- Optional accessories ............................................. 21
- Combination ............................................................ 22
1. Preparations

Check the contents of the package

Check that all accessories are in the box.
Contact your dealer if accessories are missing or damaged.

• Case body
  (Check that the O-ring is installed.)

• Monitor hood (on the body)

• O-ring remover

• Silica gel (1g)

• Body cap

• Silicone grease

• Hand strap

• Optical fiber cable insertion slot cap (2)

• Flash window cover

• Diffuser

• Instruction manual (this manual)

⚠️ CAUTION:
• After purchase, be sure to do maintenance even in brand-new condition. Neglecting the maintenance may become the cause of water leakage.
For how to maintenance the case, refer to P.20.
Names of the parts

1. Open/close dial
2. Lock knob
3. Slide lock
*4. Fn2 button
*5. (Movie) button
*6. Shutter lever
*7. EVF button
*8. HDR button
9. Accessory mount
*10. Zoom dial
*11. Front dial
12. Optical fiber cable insertion slots

*13. ON/OFF lever
*14. Mode dial lock
*15. Mode dial
16. Finder window
*17. Fn1 button
*18. Rear dial
*19. Lever
*20. MENU button
*21. INFO (Info display) button
*22. OK button
*23. Cross-cursor button ▲
*24. Cross-cursor button ▼
*25. (Play) button

*26. Cross-cursor button ▼
*27. (Erase) button
*28. Cross-cursor button ▲
29. Monitor window
30. Monitor hood
31. O-ring
32. Monitor inner hood
33. Pickup finder
34. Tripod seat

Note:
Case operation parts marked by * correspond to the operation parts of the digital camera. When the operation parts of the Case are operated, the corresponding functions of the digital camera will operate. For details of the functions, refer to the instruction manual for the digital camera.
Using the supplied accessories

Installing and removing of the monitor hood

Installation
Fit the holes of monitor hood into the left and right pins at the top of the monitor window.
Fit the monitor hood into the finder window.
Fit the bottom frame of monitor hood into the rail at the bottom of the monitor window.

Removal
Remove the monitor hood from the rail at the bottom of the monitor window by extending it outward.
Remove the monitor hood from the left and right pins at the top of the monitor window.
Remove the monitor hood from the finder window.

Mounting and removing the body cap
Install to fit the concave part of the body cap and lens ports. Be sure to remove the body cap before shooting.
Using the diffuser
When using the flash supplied with the camera, attach the diffuser.

① Attach the diffuser to the port adapter.

② Install the strap of the port adapter to the Case body.

③ Install the diffuser on the Case.

Removing diffuser (with port adapter) from the Case body
To remove the diffuser, pull the port adapter from the Case body.
Prepare the digital camera

Prepare the digital camera before loading it in the Case.

1. Battery Confirmation
   It is impossible to change the batteries when using the Case. Make sure that you have sufficient remaining battery capacity before use.

2. Check the remaining number of pictures
   Check that the image storage medium has enough room for the number of pictures you want to take.

3. Remove the strap, lens cap, filter and eye-cup from the camera.
   If the digital camera is loaded without removing these, the Case cannot be sealed properly and may leak.

4. After attaching the zoom gear to the lens, attach the lens to the camera.

5. Attach the antireflective ring to the lens.

For details of the combination of the zoom gear and the antireflective ring, refer to P.22.

6. Press and hold down the button to turn off the "EVF Auto Switch" setting.
   Press the button to switch the display between the finder and monitor.
   When turned on, the eye sensor may activate and appear the finder display.
2. Advance check of the Case

Advance check before use

This Case has been the subject of thorough quality control for the parts during the manufacturing process and thorough function inspections during the assembly. In addition, a water pressure test is performed with a water pressure tester for all products to confirm that the performance conforms to the specifications.

However, depending on the carrying and storage conditions, the maintenance status, etc., the waterproof function may be damaged.

Before using, always perform the following advance checks.

⚠️ CAUTION:
If the advance test should show water leakage with normal handling, stop using the Case and contact your dealer or an Olympus service station.

Remove the O-ring

Open the Case and remove the O-ring.

Procedure

1. Insert the O-ring remover into the gap between the O-ring and O-ring groove wall.
2. Bring the tip of the inserted O-ring remover below the O-ring. (Be careful not to damage the groove with the tip of the O-ring remover.)
3. Lift the O-ring, pinch it with your fingertips and pull it out of the Case.

Remove any sand, dirt, etc.

After visually checking that dirt has been removed from the O-ring, check for attached sand and other foreign matter, as well as for damage and cracks by squeezing the entire circumference of the O-ring lightly with your fingertips.

Remove attached foreign matter from the O-ring groove with a clean cloth or a cotton swab. Also remove any sand or dirt attached to any part of the Case that comes into contact with the O-ring.

⚠️ CAUTION:
- When a sharp object is used to remove the O-ring or to clean the inside of the O-ring groove, the Case and the O-ring may be damaged and water leakage may be caused.
- When the O-ring is checked with the fingertips, take care not to stretch the O-ring.
- Never use alcohol, thinner, benzene or similar solvents or chemicals detergents to clean the O-ring. When such chemicals are used, it is likely that the O-ring will be damaged or that its deterioration will be accelerated.
How to Apply Grease to the O-ring

1. Apply only Olympus exclusive lubricant to each O-ring.
   Make sure that your fingers and the O-ring are free of dirt, then squeeze the appropriate amount of exclusive lubricant onto a finger to spread onto the entire circumference of the O-ring (approx. 15 mm is adequate).

2. Spread the lubricant onto the entire circumference of the O-ring.
   Spread the grease onto the entire circumference of the O-ring using 3 fingers. Be careful not to use excessive force as this may stretch the O-ring.

3. Check that the O-ring is free of scratches or unevenness.
   After spreading the lubricant, check visually and by touch that the O-ring is not scratched and that its surface is flat. If it is damaged in any way, replace it with a brand-new O-ring.

CAUTION:
• Always perform maintenance of the waterproof function even when the Case has been opened every shooting. Neglecting this maintenance may become the cause of water leakage.
• When the Case is not to be used for a long time, remove the O-ring from the groove to prevent deformation of the O-ring, apply a thin coat of silicone grease, and store it in a clean plastic bag or the like.

Examples of foreign matter sticking to the O-ring

- Hair
- Fibers
- Grains of sand

Install the O-ring

Confirm that no foreign matter is in the gap and then fit the O-ring. At this time, confirm that the O-ring does not stick out from the groove.
When sealing this product, make sure that no hairs, fibers, sand particles or other foreign matter stick not only to the O-ring, but also to the contact surface (front cover). Even a single hair or a single grain of sand may cause water leakage. Please check with special care.
3. Installing the digital camera

Open the Case

1. Slide the lock knob towards the arrow direction (1 of figure below).
2. Slide and hold the slide lock towards the arrow direction (2 of figure below) and turn the open/close dial clockwise (3 of figure below).
3. Turn the open/close dial to the position where it cannot be turned further.
4. Open the rear lid of the Case gently.

![Diagram of open case]

**CAUTION:**
- Do not exert too much force while turning the open/close dial. Doing so may damage the dial.

Attach the flash to the camera

1. Attach the flash supplied with the camera. Make sure to set the light emitting part facing to front.

2. Raise the ON/OFF lever to turn the power ON.

**Note:**
When using the flash supplied with the camera, light distribution unevenness may occur. If the distribution unevenness occurs, use an external flash.
Load the digital camera

1. Confirm that the digital camera is OFF.
2. Put the monitor in closed position (do not pull out).
3. Raise the ON/OFF lever (1 of figure below), then set to the "OFF" position.
4. Set the digital camera lever on "1" and adjust the position of the lever of the Case (2 of figure below) to "1" also.
5. Gently load the digital camera into the Case.
6. Insert a silica gel bag (1 g) between the bottom of the digital camera and the Case.
   The silica gel bag provided for prevention of fogging.

![Diagram showing steps 1 to 6 for loading the digital camera](image)

⚠️ CAUTION:
- If the silica gel bag is caught when the Case is sealed, water leakage will occur.
- Once silica gel has been used, the moisture absorption performance will be impaired. Always replace the silica gel when the Case is opened and closed.
- Clean the surface of the dials of the Case and the camera.
  The dials may slip if there is grease or foreign matter on them.

Make sure the camera is loaded properly

Check the following points before sealing the Case.
- Is the digital camera loaded properly?
- Is silica gel inserted all the way at the specified location?
- Is the grease applied to O-ring?
- Is the O-ring attached properly to the opening on the Case?
- Is there any dirt or foreign matter on the O-ring or the O-ring contact surface on the front lid?
Seal the Case

1. Close the Case gently while aligning the mounting projection of the rear lid and groove.
2. Turn the open/close dial counter clockwise (1 of figure below) until you hear a “click” sound and lock the Case.
   • The Case is sealed.
3. Slide the lock knob towards the LOCK side (2 of figure below).
4. Lower the ON/OFF lever.

Attach the diffuser

• When using the flash supplied with the camera, attach the diffuser. When doing this, do not cap the optical fiber cable insertion slot.
• For details of how to attach the diffuser, refer to “Using the diffuser” (P.9).

Check the operation of the loaded camera

After sealing the Case, check that the camera operations normally.
• Operate the ON/OFF lever on the Case and confirm that the camera turns ON/OFF.
• Turn the mode dial on the Case and confirm that the camera mode switches properly.
• Operate the lever and confirm that the camera lever position switches properly.
• Press the shutter lever on the Case and confirm that the camera shutter releases.
• Operate other control buttons/levers on the Case and confirm that the camera functions properly as intended.

CAUTION:
• If the open/close dial is not fully turned, the Case will not be sealed. This will cause water leakage.
• Close the rear lid of the Case so that the lens cap, silica gel or monitor hood strap doesn’t catch. If it catches, water leaks may result.
**Water Leakage Test**

The final test after loading the camera is explained below. Always perform this test. It can be performed easily in a water tank or a bathtub. Confirm the operation of the different buttons. The required time is about 5 minutes.

- At first, immerse the Case for only 3 seconds and check that no water enters the Case.
- Next, immerse the Case for 30 seconds and check that no water enters the Case.
- Then, immerse the Case for 3 minutes, operate all buttons and levers, and check the following:
  - check that no water drops have entered the Case.
  - check that the Case is not fogged internally.
  - check that no water has entered the Case.
- If the inside of the Case becomes fogged or there are water drops in the Case, repeat the maintenance of the O-ring (P.11) and perform the water leakage test again.
4. Connecting the underwater flash

To connect the underwater flash (optional) to the Case using an underwater optical fiber cable (optional: PTCB-E02), follow the procedures below.

Connecting the underwater optical fiber cable

① Put the underwater optical fiber cable plug into the optical fiber cable insertion slot. Insert firmly until it stops next to the flash window cover.

② Put the cap to the optical fiber cable insertion slot when not in use.

Setting of the digital camera

When using the underwater flash supporting wireless RC flash, set the RC mode of the camera to ON and set the underwater flash to RC mode. For details, refer to the instruction manuals of the camera and the flash.

In case of UFL-1, plug the optical fiber cable in the same way. Set the RC mode of the camera to OFF.
5. Taking Pictures Under Water

How to select the shooting modes

You can easily set the underwater mode by assigning (Underwater Wide-Angle)/ (Underwater Macro) to Fn button of the digital camera. Select [ ] in [MENU]-[Custom Menu]-[Button/Dial/lever]-[Button Function]-[Fn1 Button Function] or [Fn2 Button Function], then press OK button.

Note:
- Press the Fn button to switch between Underwater Wide-Angle and Underwater Macro modes.
- When using the ED12-50mm f3.5-6.3 EZ lens, the wide-angle end and the telephoto end of the zoom is automatically set in conjunction with the switching to (Underwater Wide-Angle) or (Underwater Macro).
- Turn the mode dial knob to temporarily exit the underwater mode. Press again the button you set for (Underwater Wide-Angle)/(Underwater Macro) to return to the underwater mode.
- Press and hold down the button you set for (Underwater Wide-Angle)/(Underwater Macro) to return to the original shooting mode.
- However, in SCN, iAUTO, PHOTO STORY and movie modes, pressing the Fn button will not set the camera in underwater mode.
- In the (Underwater Wide-Angle)/(Underwater Macro) mode, (Underwater White Balance) is automatically set.

For details, see the instruction manual of the digital camera.

Underwater shooting modes

- Underwater Wide-Angle
  Suitable for shooting a scene that extends across a wide range such as a school of fish swimming through the water. Background blues are vividly reproduced.

- Underwater Macro
  Suitable for close-up shooting of small fish and other underwater creatures. Natural colors of the underwater are accurately reproduced.

Memo:
- When using the camera in the P, A, S, M and "PHOTO STORY" mode, the (underwater white balance) can be selected in each mode.
- To zoom with ED12-50mm f3.5-6.3 EZ lens, assign electric zoom operation to (or (or (or ( or ( buttons.
  Select [Electric Zoom] in [MENU]-[Custom Menu]-[Button/Dial/lever]-[Button Function]-[Button Function]-[Button Function]-[button], the press the OK button.
6. Handling After Shooting

Wash the Case with pure water

1. After use, clean the protector thoroughly with pure water as soon as possible.
   After use in sea water, soak it in pure water for a fixed time (30 minutes to an hour) to remove any salt.
2. Operate the shutter lever and various buttons of the product in pure water to clean and remove the salt attached to the shaft.
3. Take it out of the water and rinse with pure water.

⚠️ CAUTION:
• Never disassemble the Case for cleaning.
• The functions may be impaired when the Case is dried with the salt still adhered to it. Make sure to wash away the salt after use.

Wipe off any waterdrops

Remove any drops of water from the case. Use pressurized air or a soft, lint-free cloth to carefully wipe away any moisture from the hinge between the front and rear lids, the shutter release lever and the open/close dial.

⚠️ CAUTION:
Water left between the front and rear lids can get inside the case once it is opened. Please dry these areas carefully.

Unload the digital camera

Raise the ON/OFF lever and open the Case carefully and then take the digital camera out.

⚠️ CAUTION:
• When opening the case, make sure no water from outside (e.g. drops from your hair or the diving suit) gets inside the case and/or on the camera!
• Before opening the case, ensure that your hands or gloves are completely clean (free of sand, loose fibers, etc.).
• Never open the case in areas where water could splash or spray or where sand or dust could be blown in the air. When this cannot be avoided, for example if the battery or memory card needs to be changed, the case and camera should be protected from the wind or spray with a plastic sheet or similar object.
• Never touch the digital camera and/or battery when your hands are wet with sea water.

Dry the Case

After washing with pure water, use a lint-free soft cloth without any salt on it to wipe off any waterdrops and dry the Case completely at a well ventilated location in the shade.

⚠️ CAUTION:
Do not use hot air from a hair drier or the like for drying and do not expose the Case to direct sunlight, as this may accelerate deterioration and deformation of the Case and deterioration of the O-ring, leading to leakage of water.
When wiping the Case, take care not to cause scratches.
7. Maintaining the Waterproof Function

The O-ring is a consumable product. Before each use, perform proper maintenance. Always be sure to perform the O-ring maintenance operation as described below. Neglecting this maintenance may become the cause of water leakage. Perform at the location without sand or dust, after washing and drying your hands.

Remove the O-ring
Refer to P.11.

Remove any sand, dirt, etc.
Refer to P.11.

How to Apply Grease to the O-ring
Refer to P.12.

Install the O-ring
Refer to P.12.

Replace consumable products

- The O-ring is a consumable product. Independent of the number of times the Case is used, it is recommended that the O-ring should be replaced by a new piece after a year has passed.
- Deterioration of the O-ring is accelerated by the usage conditions and the storage conditions. Replace the O-ring even before a year has passed if it shows signs of damage, cracking or loss of elasticity.

⚠️ CAUTION:
- Please use genuine Olympus silicone grease, silica gel and O-ring.
- Do not try to replace the O-ring by yourself.
- We recommend to perform the check periodically.
8. Appendix

Specifications

- Underwater Case PT-EP13

<table>
<thead>
<tr>
<th>Available models</th>
<th>Olympus Digital Camera E-M5 II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure resistance</td>
<td>Depth of down to 45 m (147 feet)</td>
</tr>
<tr>
<td>Main materials</td>
<td>Main body: Polycarbonate, O-rings: Silicone rubber</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Width 177 mm x Height 172 mm x Depth 176 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 1,250 g (not including camera and accessories)</td>
</tr>
<tr>
<td>Weight under water</td>
<td>Approx. 15 g (in the freshwater) (including camera (with flash), ED12-50mm f3.5-6.3 EZ lens, battery and media card)</td>
</tr>
</tbody>
</table>

* We reserve the right to change the external appearance and the specifications without notice.

Supplied accessories for PT-EP13

- O-ring: POL-EP13
- Silica gel: SILCA-5S
- Body cap: PBC-EP01
- Silicone grease: PSOLG-2
- Monitor hood: PFUD-EP13
- Diffuser: PTDP-EP13
- Flash window cover: PFC-EP12

Optional accessories

- Silicone grease: PSOLG-3
- Bracket: PTBK-E01/PTBK-E02
- Underwater flash: UFL-1/UFL-2/UFL-3
- Underwater optical fiber cable: PTCB-E02
- Short arm: PTSA-02/PTSA-03
- Balance weight: PWT-1BA/PWT-1AD
- Underwater macro conversion lens: PTMC-01
- Macro lens adapter: PMLA-EP01

* When use combining PTBK-E01 and the Case, the dedicated washers are necessary in the screw part. If you have PTBK-E01 to which dedicated washers are not bundled, please contact to customer support center.
## Combination

<table>
<thead>
<tr>
<th>Lens/Four Thirds adapter</th>
<th>Zoom gear/Focus gear</th>
<th>Antireflective ring</th>
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<tbody>
<tr>
<td>M.ZUIKO DIGITAL ED 9-18mm f4.0-5.6</td>
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<td>POSR-EP02</td>
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<tr>
<td>M.ZUIKO DIGITAL ED 14-42mm f3.5-5.6</td>
<td>PPZR-EP01</td>
<td>POSR-EP01</td>
</tr>
<tr>
<td>M.ZUIKO DIGITAL 14-42mm f3.5-5.6 II</td>
<td>PPZR-EP02</td>
<td>POSR-EP03/POSR-EP05</td>
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