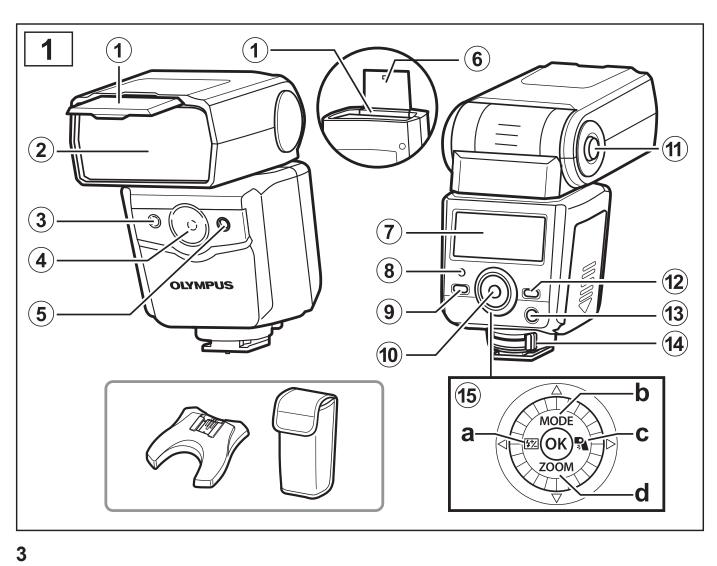
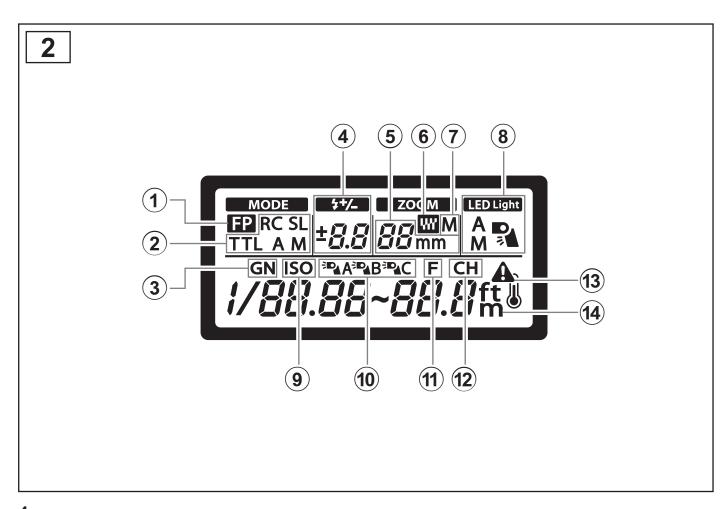
## **OLYMPUS**<sup>®</sup>

## **FL-600R**

 $C \in \mathbf{c}$ 

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#### **Information for Your Safety**

# IMPORTANT SAFETY INSTRUCTIONS

When using your photographic equipment, basic safety precautions should always be followed, including the following:

- Read and understand all instructions before using.
- Close supervision is necessary when any flash is used by or near children. Do not leave flash unattended while in use.
- Care must be taken as burns can occur from touching hot parts.

- Do not operate if the flash has been dropped or damaged until it has been examined by qualified service personnel.
- Let flash cool completely before putting away.
- To reduce the risk of electric shock, do not immerse this flash in water or other liquids.
- To reduce the risk of electric shock, do not disassemble this flash, but take it to qualified service personnel when service or repair work is required. Incorrect reassembly can cause electric shock when the flash is used subsequently.
- The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.

### **SAVE THESE INSTRUCTIONS**

Thank you for purchasing this Olympus product. To ensure your safety, please read this instruction manual before use, and keep it handy for future reference.

#### Names of Parts (Fig. 1 p. 3)

1 Wide panel 2 Light-emitting area
3 Remote sensor 4 AF illuminator/LED
window 5 Auto light receptor 6 Catch light
plate 7 Control panel 8 AUTO CHECK lamp
9 TEST button/CHARGE lamp 10 OK button
11 Bounce lock release button 12 BACK LIGHT
button 13 ON/OFF button 14 Latch
15 Dial (a: flash compensation button; b: MODE
button; c: LED light button; d: ZOOM button)

## Control Panel (Fig. 2 p. 4) ▶ Details (p. 29, 36)

1 Super FP flash 2 Flash control mode 3 Guide number (GN) 4 Flash intensity control 5 Zoom position (angle of illumination) 6 FOUR THIRDS 7 Zoom mode 8 LED light 9 ISO sensitivity 10 RC mode group 11 Aperture (F) 12 RC mode channel 13 Temperature warning 14 Distance units

#### **Continuous Firing**

The flash may become hot when fired many times in succession, resulting in damage or malfunction. The flash should be fired no more than 10 times in succession at intervals of 2.5 seconds, after which it should be left unused for at least 10 minutes.

#### **Preparing a Battery (Sold Separately)**

Choose from the below batteries:

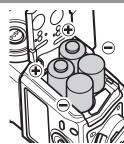
- AA (R6) alkaline batteries (× 4)
- AA (R6) NiMH batteries (× 4)

#### Note

AA (R6) manganese batteries cannot be used.

#### **Loading Batteries**





- Open the battery compartment cover.
- **2** Insert the batteries with correct +/– polarity.
- **3** Close the battery compartment cover.

#### **Attaching to the Camera**

Confirm that both the camera and electronic flash are off. Attaching or removing the electronic flash while either the flash or the camera is on may result in malfunction.



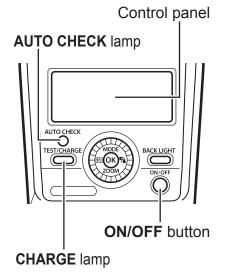




- 1 Slide the latch in the direction opposite to that indicated by the [LOCK▶] icon (1).
- 2 Slide the flash into the hot shoe until it clicks securely into place (2).
- **3** Slide the latch to the [LOCK▶] position (③).
- To remove the flash, slide the latch in the direction opposite to the [LOCK▶] arrow and slide it from the shoe.

#### **Turning on the Electronic Flash**

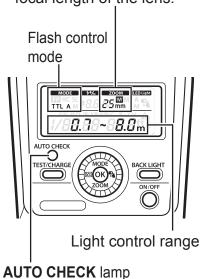
Attach an electronic flash to the camera, and then turn the camera on.



- 1 Press the **ON/OFF** button.
  - The control panel display will turn on.
  - To turn the flash off, press the **ON/OFF** button again.
- Replace the batteries if the CHARGE lamp does not light after:
  - 30 seconds (Alkaline batteries)
  - 10 seconds (NiMH batteries)
- If the CHARGE lamp and AUTO CHECK lamp blink simultaneously, batteries are running low. Replace the batteries.
- The flash will enter sleep mode whenever the camera enters sleep mode.
- If no operations are performed for approximately 60 minutes, the flash will turn off automatically. Press the ON/OFF button to turn it on.

#### **Shooting**

Firing angle Displayed according to the focal length of the lens.



- 1 Use camera controls to choose the flash mode. See the camera manual for details.
- 2 Choose a flash control mode. Flash control mode" (p. 29)
- **3** Press the shutter button halfway.
  - The camera and flash will exchange shooting information and the flash range will be displayed in the control panel.
  - Flash range varies with camera settings (ISO sensitivity, aperture, and lens focal length).
- 4 Press the shutter button the rest of the way down to take the picture.

The **AUTO CHECK** lamp blinks for about 5 s after shooting to indicate that the flash has fired successfully.

- When using a flash, flash light may be blocked by the lens body, lens hood, etc.
- Use the wide panel to prevent overexposure at ranges of less than 1 m (3 ft.).

#### **Flash Control Mode**

Choose a flash control mode according to your subject and shooting conditions. To select a mode, press the **MODE** ( $\Delta$ ) button and rotate the dial.



Control panel display	Control operation
TTL-AUTO	The flash light intensity is controlled automatically according to the camera's setup. The flash will be adjusted based on the brightness taken through the camera's lens. Usually use this mode with a camera with communication capability.
AUTO	
Blinks: Out of flash control range	The flash will be adjusted based on the brightness captured by auto light receptor on the electronic flash. If the camera has communication capability, this mode can be used only when the camera is an AUTO-compatible model.

Control panel display	Control operation	
MANUAL	In this mode, the flash is emitted according to the guide number	
MODE 91/2 ZOOM LEDLIGHT PACE OF CHARACTER AND ADDRESS OF CHARACTER AND	setting. Rotate the dial to choose the guide number. The flash displays the optimal range, which is calculated based on the guide number and camera settings.	
FP TTLAUTO	Super FP flash. This mode allows you to use flash photography	
MODE 77/- ZOOM LED Light FP RC SL TTL A M  #### A M M M M M M M M M M M M M M M M M	even at shutter speeds faster than the flash synchronization speed of the camera. Flash level is set automatically. Maximum output	
I/88.88~88.8m	is reduced, resulting in a smaller flash range. Flash range also diminishes with shutter speed.	
FP MANUAL	The flash fires at the selected guide number. Rotate the dial to	
MODE 94/2 ZOOM LEDLIGHT FP RC SL TTL A M # 8.8. 28 mm A M GN ISO PAPER C F CH	choose the guide number. The flash displays the optimal range, which is calculated based on the guide number and camera settings.	

#### **Button Functions**

Button	Function	Use
<b>5</b> ½	Adjust flash level by up to ±5 EV. This value is combined with adjustments to flash compensation made using the camera.	<b>1</b> Press [★] (<) or <b>ZOOM</b> (▽). <b>2</b> Rotate the dial.
ZOOM	Adjust the angle of illumination manually. "M" appears in the display.	
		■ Before shooting, set the LED light to manual.  "Other settings" (p. 35)
7	Manually turn the LED light on or off.	Press ♀ (▷) to turn the LED light on. Press ♠ (▷) again to turn the LED light off. To view the LED brightness setting, press and hold ♠ (▷) for 2 s while the LED light is on.
TEST	To fire a test flash, press the <b>TEST</b> button while the <b>CHARGE</b> lamp is lit. The <b>AUTO CHECK</b> lamp blinks for about 5 s to indicate that the flash has fired successfully. If the lamp does not blink, adjust settings or change the distance to the subject.	
BACK LIGHT		

#### **Restoring Default Settings**

1 Keeping the **OK** button pressed, press the **BACK LIGHT** button for 2 s. The control panel will blink once when settings are reset.

#### **Wireless Flash Settings**

Wireless control is available with Olympus digital cameras that support RC mode. The unit is controlled by means of a flash mounted on the camera. It can also be mounted on a camera for wireless control of multiple remote flash units. For information on cameras that support this system, see the camera manual.

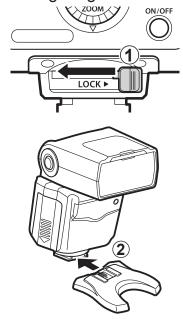
- 1 Set the camera and flash to RC mode.
  Press MODE (△) and rotate the dial to select a flash control mode.
- **2** Use the flash to select the channel and group. Press **MODE** ( $\Delta$ ) and use  $\Delta \nabla \triangleleft \triangleright$  to highlight items and rotate the dial to change.

<b>CH</b> Channel	Set the camera and flash to the same channel.
Group	The camera can adjust flash settings* separately for up to 3 groups; choose the group to which the flash belongs.

<sup>\*</sup> Including flash control mode, flash level, and flash compensation.

#### **Placing Wireless Flash Units**

Since the communication is performed with the flash emission of the camera, the flash positioning range varies with camera. See the camera manual for details.



- 1 Attach the stand provided.
  - Slide the latch in the direction opposite to that indicated by the [LOCK▶] icon (1) and slide the flash onto the stand until it clicks securely into place (2).
  - Slide the latch to the [LOCK▶] position to latch the flash in place.
  - To remove the flash, slide the latch in the direction opposite to the [LOCK▶] arrow and slide it from the stand.
- **2** Position the flash with the remote sensor facing the camera.
  - Take a test shot after positioning.
  - We recommend using a single group of up to three remote flash units.
  - Flash may not fire due to the angle or distance between the camera and the object.

#### **Fixing the Irradiation Angle**

Point the flash head at a wall or ceiling for bounce flash photography. The area illuminated at ranges of 0.5–1.0 m (1.6–3.3 ft.) will not be correct; point the flash down.

1 Pressing the bounce lock release button, turn the light-emitting section up/down and left/ right.



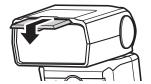


#### **Using the Wide Panel**

Use for angles of illumination wider than 12 mm (24 mm in 135 format). The ZOOM display will blink if the lens focal length is under 12 mm.

1 Slide out the wide panel and place it on the light-emitting area (Fig. 1 p. 3).





- The estimated range display changes when the wide panel is used.
- The angle of illumination can be set to 10 mm and 8 mm only.
- Do not tilt the wide panel up.
- The ZOOM display will blink if the lens has a focal length of 12 mm or more.

#### **Using the Catch Light Plate**

The catch light plate reflects light from the flash to create a catch light effect.

Slide out the catch light plate (Fig. 1 p. 3). Point the flash directly upward with the plate toward the subject.

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#### **Other Settings**

The following options can be selected in the control panel.





- 1 Press the **OK** button. An item will blink in the control panel.
- **2** Press  $\Delta \nabla \triangleleft \triangleright$  to highlight items.
- **3** Rotate the dial to change the highlighted item.

Option	Description
MODE (flash control mode)	p. 29
纽 (flash compensation)	p. 31
ZOOM (angle of illumination)	p. 31
(LED light)	Choose whether the LED lights automatically or manually. A: Lights automatically as required. M: Lights when the LED light button is pressed.
GN (guide number)	Adjust flash level.
ISO sensitivity	Adjust ISO sensitivity.
Group	Choose a group for RC mode (p. 32).
Aperture	Adjust aperture.
Channel	Choose a channel for RC mode (p. 32).

#### **Custom Settings**

Customize settings for improved ease of use.

- 1 Press the **OK** button for more than 2 s. The flash will enter custom settings mode.
- **2** Press  $\Delta \nabla$  to highlight items.
- **3** Rotate the dial to change the highlighted item.
- 4 Press the **OK** button for more than 2 s to save changes.

Control panel	Option	Description
8.88~88.8	AF illuminator	A: Controlled by camera.  OFF: Does not light.
LEDLIGHT 1/88.	LED brightness	1/1–1/16: Adjust LED brightness.
MODE FP RC SL TTL A M	Slave flash	ON: Flash control display shows slave mode. OFF: Flash control display does not show slave mode.
88.88~88.8	Flash cable	ON: Flash cable not used. OFF: Flash cable used.
200M 88 mm ~88.8	Zoom display	

Control panel	Option	Description
88~88.8	Wide panel detection	ON: Flash detects position of wide panel. Angle of illumination adjusted automatically. OFF: Flash does not detect wide panel position.
3ft	Distance units	m: Distances displayed in meters. ft: Distances displayed in feet.
GN ISC ~BB.B	Guide number display	ON: Flash output is shown as a guide number. OFF: Flash output is shown as a relative value.
MODE ISO BEDIC F CH	Auto light sensing	ON: Show the flash range calculated by the camera in AUTO flash control mode. OFF: Show the current aperture and ISO sensitivity.
SIN ISO SPARSO	Auto ISO display	25–3200: Display the ISO sensitivity when AUTO is selected as the flash control mode for cameras that can not communicate with the flash unit.

#### **Cameras That Do Not Communicate with the Flash**

#### **AUTO**

Set aperture and ISO sensitivity to the values selected with the camera.

1 Set the flash control mode to AUTO. Flash control mode" (p. 29)



- **2** Match the zoom position to the focal length of the lens. 

  "ZOOM" (p. 31)
- Adjust aperture and ISO sensitivity. 
   "Other settings" (p. 35)

If the selected values are out of the flash control range, [ISO] and [F] will blink in the display. The **AUTO CHECK** lamp blinks for about 5 s after the shutter is released to show that the flash has fired successfully.

#### **MANUAL**

Choose the guide number.

- 1 Set the flash control mode to MANUAL. Flash control mode" (p. 29)
- Adjust flash level.

  \*\*Other settings" (p. 35)



#### **Slave Mode**

The flash can be fired remotely in sync with any flash fired by other units.

- 1 Set the flash control mode to SL AUTO or SL MANUAL.
  □ "Flash control mode" (p. 29)
  Adjust other flash settings as for AUTO or MANUAL mode.
  □ "Cameras That Do Not Communicate with the Flash" (p. 38)
- 2 Position the flash.

See the camera manual for more information.

- The flash can not be used with cameras that require a pre-flash.
- The flash may fire in response to flash units used by other photographers.







#### Safety precautions

Read WARNINGS and CAUTIONS thoroughly to ensure safe usage. These safety precautions protect the users and others and prevent property damage.



Failure to observe the precautions indicated by this symbol may result in injury or death.

- Do not use flash in places where it may be exposed to flammable or explosive gas. Otherwise, fire ignition or explosion may result.
- Do not directly solder the product or modify, remodel, or disassemble.
- Do not cover the light emitting area of the flash with your hand, and do not touch the light emitting area after continuous firing. It may burn your skin.
- Water and foreign matter inside of the device may cause fire or electric shock. If the device
  is immersed in or exposed to water or foreign matter is found inside of the device, turn off
  the power immediately and remove batteries with care. Contact your dealer or consult an
  Olympus Authorized Service Station.
- To prevent a traffic accident, do not direct the flash at a person operating a motor vehicle.
- Do not use the flash or AF illuminator in close proximity to others (especially infants). Keep the flash out of reach of children. Light from the flash can cause visual impairment.
- Do not use batteries that are not specified for use.
- Do not mix old and new batteries, or batteries made by different manufacturers.
- Do not connect substances such as metal to the (+) or (–) of batteries.

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#### **Specifications**

MODEL NO. : FL-600R

Product type : External electronic flash for digital still camera
Guide number : 36 (ISO100), 12 (ISO100, using the wide panel)

Firing angle : Covers the angle of view of 12–42 mm lenses (equivalent to 24–85 mm in

135 format)

(With wide panel: 8 mm lens, equivalent to 16 mm in 135 format)

Flash modes : TTL-AUTO, AUTO, MANUAL, FP TTL AUTO, FP MANUAL,

SLAUTO, SL MANUAL, RC

Flash emission period: Approx. 1/20000 to 1/500 seconds (except in Super FP flash)

Flash emission count: Approx. 250 times (using AA (R6) alkaline batteries)
(at full activation)\* Approx. 370 times (using AA (R6) NiMH batteries)

Recharge time: Approx. 2.5 seconds (using AA (R6) NiMH batteries)

Approx. 2 seconds (using AA (R6) NiMH batteries) (from full activation to **CHARGE** lamp lighting)\*

AF illuminator : Effective range: Approximately 1–5 m (varies with camera and lens used)

Operating : Temperature: -10 to 42°C (14 to 108°F)

environment Humidity: 20 to 90%

Dimensions :  $62 \text{ (W)} \times 104 \text{ (H)} \times 98 \text{ (D)} \text{ mm/2.4} \times 4.1 \times 3.9 \text{ in. (excluding protrusions)}$ 

Weight : 255 g (9 oz.) (excluding batteries)

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

<sup>\*</sup> Measurements obtained from in-house tests at Olympus. Actual figures may vary depending on shooting conditions.

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