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› Canon 600EX-RT Speedlite Flash User Manual

Canon 600EX-RT

Canon Speedlite 600EX-RT Instruction Manual

Model: 600EX-RT

1. INTRODUCTION

The Canon Speedlite 600EX-RT is a high-performance flash unit designed for advanced photography with Canon DSLR cameras. It features advanced wireless two-way radio communication, an expanded zoom range, and a high guide number, offering enhanced control and reliability for diverse lighting scenarios. This manual provides essential information for setting up, operating, and maintaining your Speedlite 600EX-RT.



Image 1.1: The Canon Speedlite 600EX-RT with its included accessories and packaging.

2. SETUP

2.1. Battery Installation

The Speedlite 600EX-RT requires four AA batteries for operation. Ensure batteries are inserted with correct polarity as indicated inside the battery compartment.

1. Open the battery compartment cover located on the side of the flash unit.

2. Insert four AA batteries, matching the positive (+) and negative (-) terminals.
3. Close the battery compartment cover securely.

2.2. Mounting to Camera

Attach the Speedlite 600EX-RT to your Canon DSLR camera's hot shoe mount.

1. Slide the flash unit onto the camera's hot shoe until it clicks into place.
2. Rotate the lock lever clockwise to secure the flash to the camera.
3. To remove, rotate the lock lever counter-clockwise and slide the flash off.

3. OPERATING INSTRUCTIONS

3.1. Power On/Off and Basic Controls

To power on the flash, slide the power switch to the 'ON' position. The dot-matrix LCD panel will illuminate, displaying current settings.



Image 3.1: Front view of the Speedlite 600EX-RT, highlighting the LCD panel and control buttons.

3.2. Wireless Communication

The Speedlite 600EX-RT supports both optical and radio wave wireless communication for multi-flash setups. Radio transmission operates on 2.4 GHz frequencies, offering enhanced reliability and range up to 98.4 feet (30 meters) without line-of-sight limitations.

- **Radio Transmission:** Supports up to 5 groups with a total of 15 individual Speedlites. 15 transmission channels are available, selectable manually or automatically. Radio transmission IDs can be set to prevent interference.
- **Optical Transmission:** Traditional wireless communication method.

3.3. Zoom Flash Head

The flash head covers a wide range of 20mm to 200mm. When the built-in wide panel is pulled out, flash coverage extends to 14mm. The flash can automatically adjust its zoom position based on the camera's image sensor size (full-frame, APS-H, and APS-C) to optimize power and minimize energy consumption.

3.4. LCD Panel and Backlit Controls

The dot-matrix LCD panel (172 x 104 dots) displays comprehensive information including flash status, wireless configuration, and all flash settings. Backlit operation buttons ensure visibility in low-light conditions.



Image 3.2: The LCD panel showing E-TTL mode and zoom settings.

3.5. AF Assist Beam

The built-in AF assist beam aids the camera's autofocus system in dark or low-contrast situations. It is compatible with Canon's 61-Point High Density Reticular AF system and works with all lenses 28mm or longer.

3.6. Color Filter Holder

A dedicated color filter holder allows for attaching Canon and third-party color gelatin filters. This helps match the flash's color temperature to ambient light, ensuring consistent color balance. The flash can transmit color information and light output decrease to the camera for proper white balance and exposure adjustments.



Image 3.3: The Speedlite 600EX-RT with a color filter attached.

3.7. Custom and Personal Functions

The Speedlite 600EX-RT features 18 Custom Functions (C.Fn) and 7 Personal Functions (P.Fn) for advanced customization.

- **Custom Functions:** Control settings such as flash exposure bracketing, modeling flash, test firing, AF assist control, power and energy saving features, and beep sound.
- **Personal Functions:** Adjust settings like LCD panel illumination color and Master/Slave configurations.

3.8. Bounce Flash

The flash head offers full swivel capabilities for bounce flash photography. It can be angled 90° up, 7° down, and rotated 180° left and right. A bounce lock with a release button secures the head position. A built-in catch light panel is available when the flash head is positioned front and 90° up.



Image 3.4: The Speedlite 600EX-RT flash head angled for bounce photography.

4. MAINTENANCE

The Speedlite 600EX-RT is designed with enhanced durability and weather resistance.

- **Dust and Water Resistance:** The unit features improved sealing for all moving parts, display, and buttons, providing reliable performance in challenging conditions. A dust and water resistant adapter for the mounting foot creates a seal between the camera and flash.
- **Cleaning:** Use a soft, dry cloth to clean the flash unit. For stubborn dirt, a slightly damp cloth may be used, followed by immediate drying. Avoid using solvents or abrasive cleaners.
- **Storage:** When not in use for extended periods, remove the batteries to prevent leakage. Store the flash in a cool, dry place away from direct sunlight.

5. TROUBLESHOOTING

If you encounter issues with your Speedlite 600EX-RT, refer to the following common solutions:

- **Flash Not Firing:**
 - Check battery levels and ensure they are correctly inserted.

- Verify the flash is securely mounted to the camera's hot shoe.
- Ensure the flash is powered on and not in sleep mode.
- Check camera settings to ensure external flash is enabled.

- **Wireless Communication Issues:**

- Ensure all units (master and slave) are set to the same channel and ID.
- Check for physical obstructions between units when using optical transmission.
- Reduce distance between units if exceeding recommended range.
- Change channels to avoid interference from other devices.

- **Incorrect Exposure:**

- Verify flash exposure compensation settings on both the flash and camera.
- Check ISO and aperture settings on the camera.
- Ensure the flash head zoom matches the lens focal length or is set to auto.

6. SPECIFICATIONS

Brand	Canon
Model Number	5296B002
Compatible Mountings	Canon
Camera Flash Type	Hotshoe
Color	Black
Connectivity Technology	Wireless
Wireless Technology Type	RF
Number of Batteries	4 AA batteries required
Compatible Devices	Canon DSLR Cameras
Minimum Shutter Speed	0.004 seconds
Maximum Shutter Speed	1/200 seconds
Water Resistance Level	Water Resistant
Item Weight	14.99 Ounces

7. WARRANTY AND SUPPORT

7.1. Warranty Information

The Canon Speedlite 600EX-RT comes with a **Limited 1 year** warranty from the date of purchase. Please retain your proof of purchase for warranty claims. For detailed terms and conditions, refer to the warranty card included with your product or visit the official Canon website.

7.2. Customer Support

For technical assistance, service, or additional information, please contact Canon customer support or visit the official Canon website. You can also find more resources and product information at the [Canon Store](#).