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> SmallRig RF20C RGB Portable LED Photo Torch User Manual

## SmallRig RF20C

# SmallRig RF20C RGB Portable LED Photo Torch User Manual

Model: RF20C (5335)

Brand: SmallRig

## 1. INTRODUCTION

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The SmallRig RF20C RGB Portable LED Photo Torch is a versatile and powerful lighting tool designed for photographers, videographers, and content creators. It features 5-color LED beads, adjustable beam angle, and supports creative lighting effects with included gobos. This manual provides essential information for the safe and effective use of your device.

## 2. SAFETY INFORMATION

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- Do not expose the device to water or excessive humidity.
- Avoid direct eye exposure to the LED light.
- Do not disassemble or modify the device. Repairs should only be performed by authorized personnel.
- Keep out of reach of children.
- Ensure proper ventilation during extended use, as the device may become warm.
- Use only the specified charging cable and power adapter.

## 3. PACKAGE CONTENTS

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Verify that all items are present in your package:

- RF20C Portable Focusable LED Video Light x 1
- Gobos x 20
- Silicone Gobo Holder x 1
- Storage Bag x 1
- User Manual x 1 (This document)
- Charging Cable x 1

## 4. SETUP

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## 4.1 Initial Charging

Before first use, fully charge the RF20C. Connect the provided USB-C charging cable to the device's charging port and to a compatible USB power adapter (PD 36W recommended). The device can be used while charging.



Figure 4.1: Internal battery illustration and runtime information.



Figure 4.2: Portable design, mounting options, cooling fan, and charging capability.

## 4.2 Attaching Gobos

To use the creative pattern gobos, first remove the plano-convex lens from the front of the light. Then, attach the silicone gobo holder and insert the desired gobo. This ensures optimal projection effects.

# 20 Creative Pattern Gobos

\*Using Tips: Remove plano-convex lens, then attach silicone holder & gobos for the best projection effects

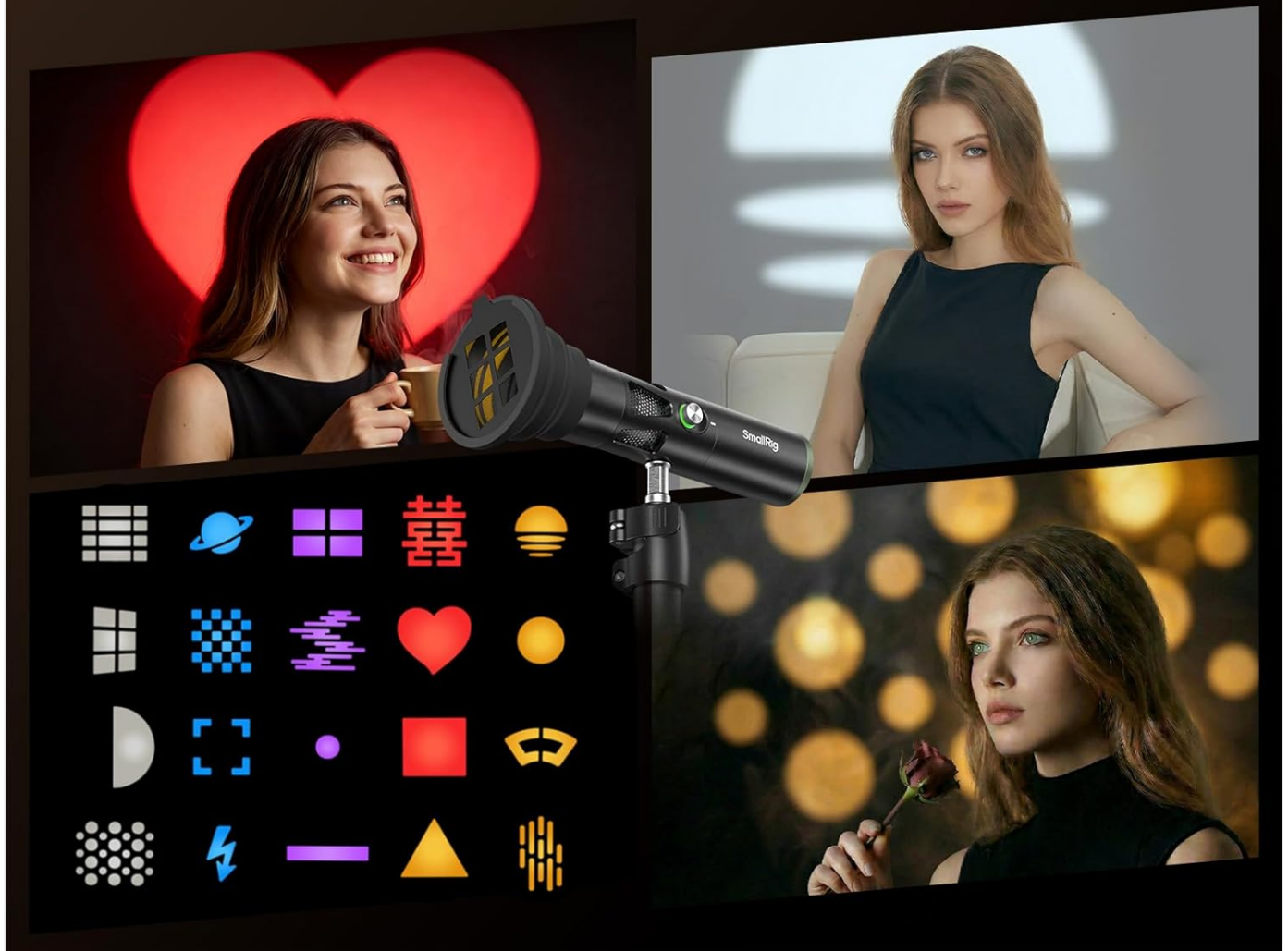


Figure 4.3: Gobo projection examples and installation tip.

## 5. OPERATING INSTRUCTIONS

### 5.1 Power On/Off and Basic Controls

The RF20C features a single multi-function button for control. To prevent accidental activation during transport, the device requires a specific action to turn on.

- **Power On:** Rotate the control button to turn on the device.
- **Power Off:** Press and hold the control button for 3 seconds.
- **Change Color:** Short press the control button to cycle through the available colors (Red, 5600K White, Purple, Orange, Cyan).
- **Adjust Brightness:** Rotate the control button to increase or decrease the light brightness.

# Simple One-Button Control

Rotate to turn on, preventing accidental switching



Figure 5.1: One-button control and battery indicator.

# 5-Color LED Light



Figure 5.2: Available LED colors.

## 5.2 Adjusting Beam Angle

The front plano-convex lens allows for adjustment of the beam angle. Push or pull the lens to change the focus of the light from a narrow 24° beam to a wider 60° diffusion.

- **Extend the lens:** Narrows the beam (e.g., 24°).
- **Retract the lens:** Diffuses the beam (e.g., 60°).

# Adjustable Beam Focus

Zoom from 24° to 60°

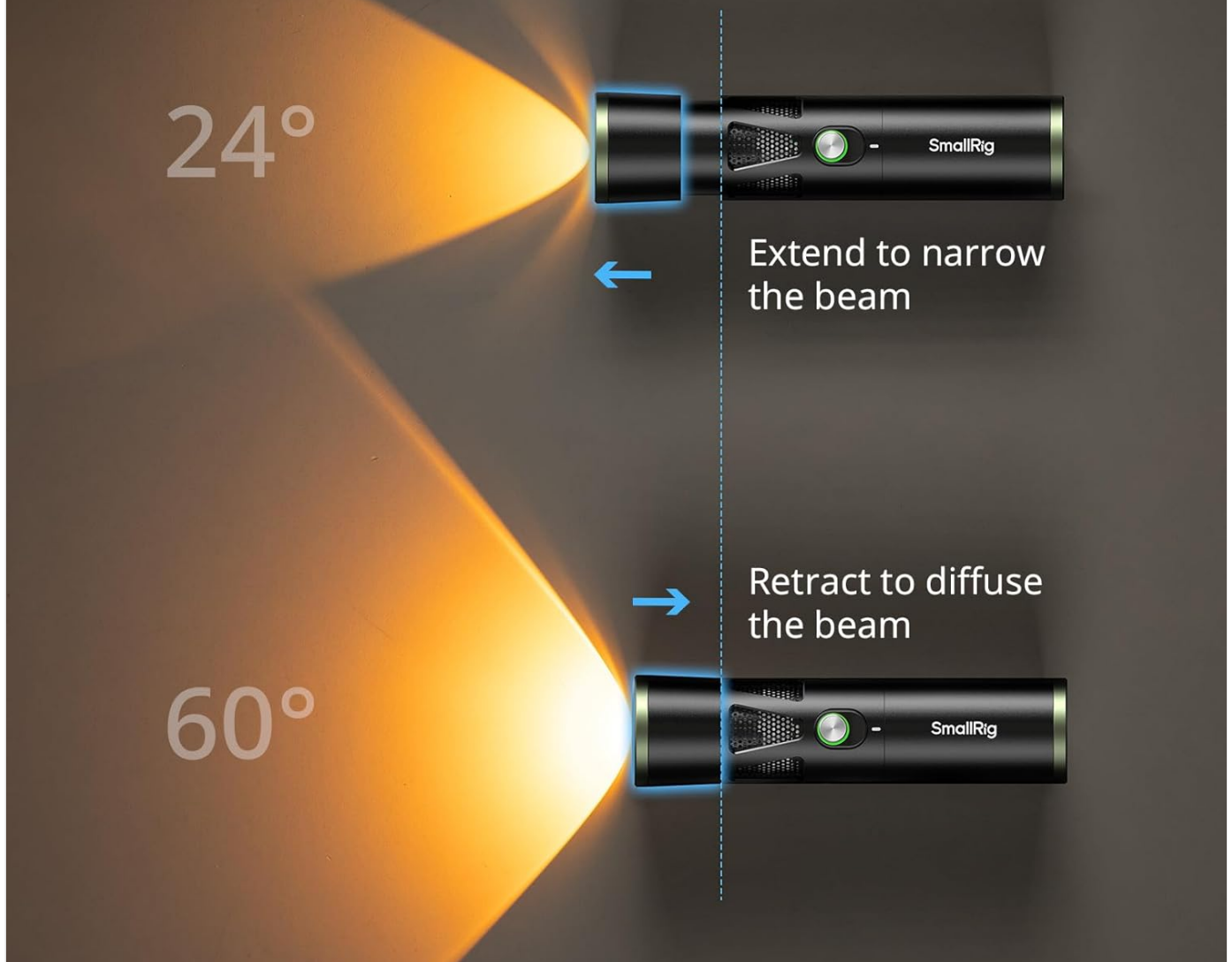


Figure 5.3: Beam angle adjustment mechanism.

## 5.3 Battery Indicator

The control button's LED indicates the battery status:

- **Green Light:** 20% - 90% battery remaining.
- **Red Light:** 5% - 20% battery remaining.
- **Flashing Red Light:** Less than 5% battery remaining.

# Pro-Grade Brightness

Real 20w output, 2x Brighter than other flashlights



Figure 5.4: Brightness comparison of RF20C.

## 6. MAINTENANCE

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- Clean the device regularly with a soft, dry cloth. Do not use harsh chemicals or abrasive materials.
- Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.
- When not in use for extended periods, charge the battery to approximately 50% every three months to prolong battery life.
- Keep the lens and LED surface free from dust and fingerprints for optimal light output.

## 7. TROUBLESHOOTING

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Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Device does not turn on.	Low battery; incorrect power-on procedure.	Charge the device. Ensure you rotate the control button to power on.
Light output is dim.	Low battery; brightness set too low; dirty lens.	Charge the device. Rotate the control button to increase brightness. Clean the lens.
Gobo projection is blurry.	Plano-convex lens not removed; gobo not seated correctly.	Remove the plano-convex lens before attaching the silicone gobo holder. Ensure gobo is properly inserted.
Device becomes warm during use.	Normal operation, especially at high power; fan obstruction.	This is normal. Ensure the fan vents are not obstructed for proper heat dissipation. If excessively hot, reduce brightness or allow to cool.
Fan noise is noticeable.	Normal operation for cooling.	The device uses a high-speed fan for efficient heat dissipation. This noise is part of normal operation. Consider distance from audio recording equipment.

## 8. SPECIFICATIONS

Feature	Detail
Model	RF20C (5335)
Power	20 W
Input	20 V / 1.8 A (max. 36 W)
LED Colors	Red, 5600K White, Purple, Orange, Cyan
Color Rendering Index (CRI)	≥ 97
Television Lighting Consistency Index (TLCI)	≥ 99 (at 5600 K)
Luminance	5400 Lux @ 1m / 5600K
Battery Capacity	10000mAh (2 x 5000mAh / 7.4V / 37Wh)
Runtime (Full Power)	Up to 1.5 hours
Charging	USB-C PD 36W Fast Charging, supports charging while operating
Beam Angle Adjustment	24° to 60°
Material	Aluminium alloy, ABS
Product Dimensions	φ49.0 x 200.0 mm / φ1.9 x 7.9 inches
Product Weight	520.0 ± 20.0 g / 18.3 ± 0.7 oz
Connectivity Technology	USB
Country of Origin	China

## 9. WARRANTY AND SUPPORT

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SmallRig products are designed and manufactured to the highest quality standards. This product is covered by a limited warranty from the date of purchase. For detailed warranty terms, technical support, or service inquiries, please refer to the official SmallRig website or contact your local distributor.

Please retain your proof of purchase for warranty claims.

## 10. USAGE SCENARIOS

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The SmallRig RF20C is suitable for various applications, including:

- Photography
- Video Recording
- Live Streaming
- Creative Accent Lighting
- Macro Work and Close-ups

# Multiple Scenarios



Figure 10.1: Examples of RF20C usage scenarios.