

SMALLRIG RC 120B

SmallRig RC 120B Bi-Color COB Video Light Instruction Manual

Model: RC 120B

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective operation of your SmallRig RC 120B Bi-Color COB Video Light. Please read this manual thoroughly before use and retain it for future reference.



Image 1.1: SmallRig RC 120B Bi-Color COB Video Light with included accessories, including the light unit, hyper reflector, AC adapter, power cable, and carrying bag.

2. SAFETY INFORMATION

To prevent damage to the product or injury to yourself or others, observe the following safety precautions:

- Do not look directly into the light source when it is active.
- Keep the device away from water and flammable liquids.
- Ensure proper ventilation to prevent overheating.
- Use only approved power adapters and accessories.
- Do not attempt to disassemble or modify the light.
- Keep out of reach of children.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- SmallRig RC 120B Light x 1
- Hyper-Reflector x 1
- AC Adapter x 1
- Power Cable x 1
- Carrying Bag x 1
- User Manual x 1

Package List

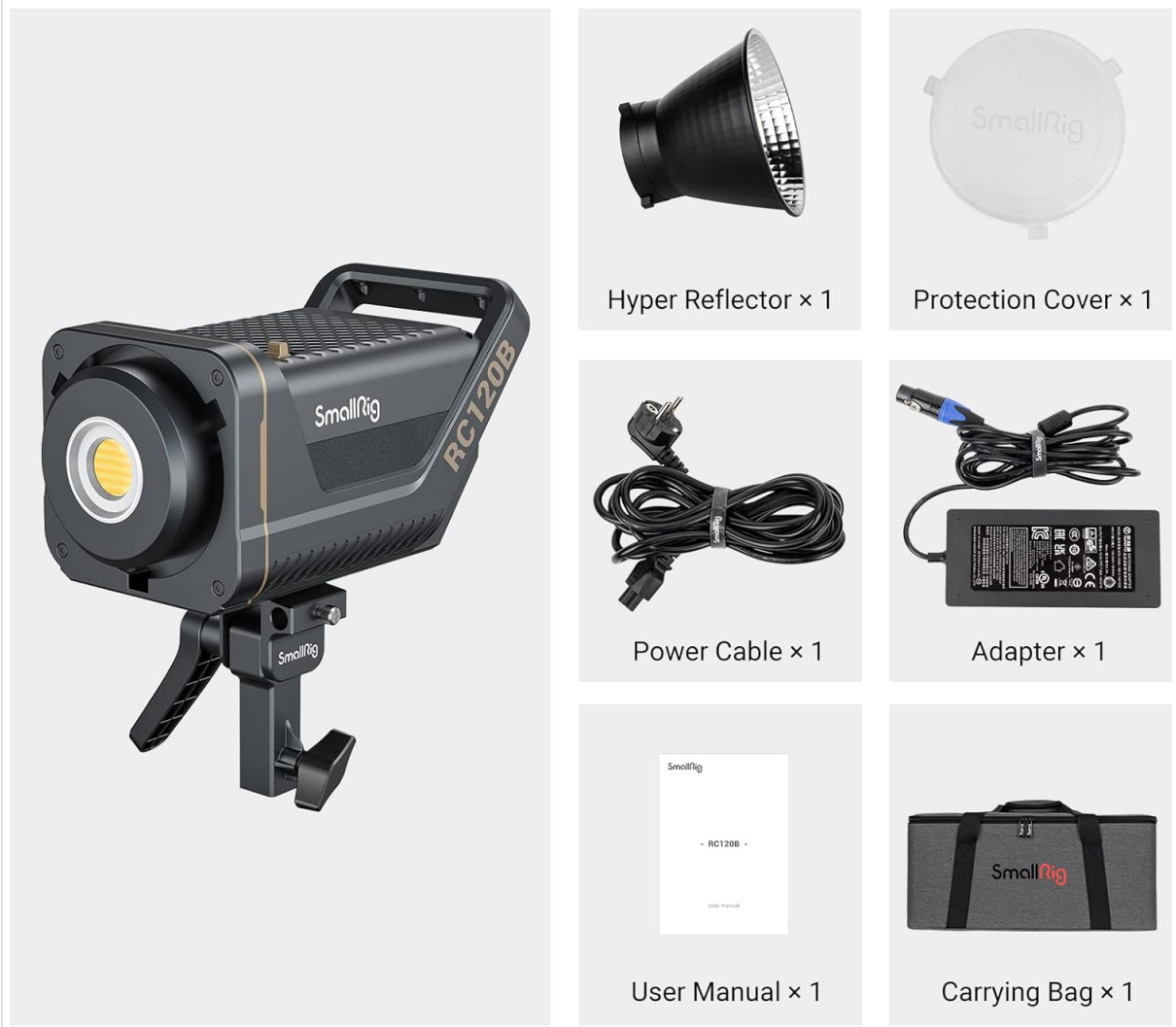


Image 3.1: Visual representation of all items included in the SmallRig RC 120B package.

4. PRODUCT FEATURES

4.1 High Brightness Output

The SmallRig RC 120B delivers significant illumination. Without the hyper reflector, it provides 4,450 Lux at 1 meter (3.3 ft). When the hyper reflector is attached, the output increases to an impressive 52,800 Lux at 1 meter (3.3 ft).

Powerful Light Output

The LED Video Light at a distance of 1 meter (3.3 ft.), the maximum illuminance of the bare light source is 4,450 lux. The illuminance level increases to an impressive 52,800 lux after attaching the hyper reflector.

52800 Lux

Within 1-meter (3.3ft) center area
(with hyper reflector)



Image 4.1: The RC 120B light with its hyper reflector, demonstrating its powerful light output of 52,800 Lux at 1 meter.

4.2 High-Quality Color Rendering

This video light features a Color Rendering Index (CRI) of 95+ and a Television Lighting Consistency Index (TLCI) of 96+, ensuring accurate and natural color reproduction for your subjects.

120W LED COB LIGHT High-Quality Color Rendering

CRI 95+, TLCI 96+, ultra-high color rendering, truly restore the color of objects.



SmallRig

low CRI and TLCI

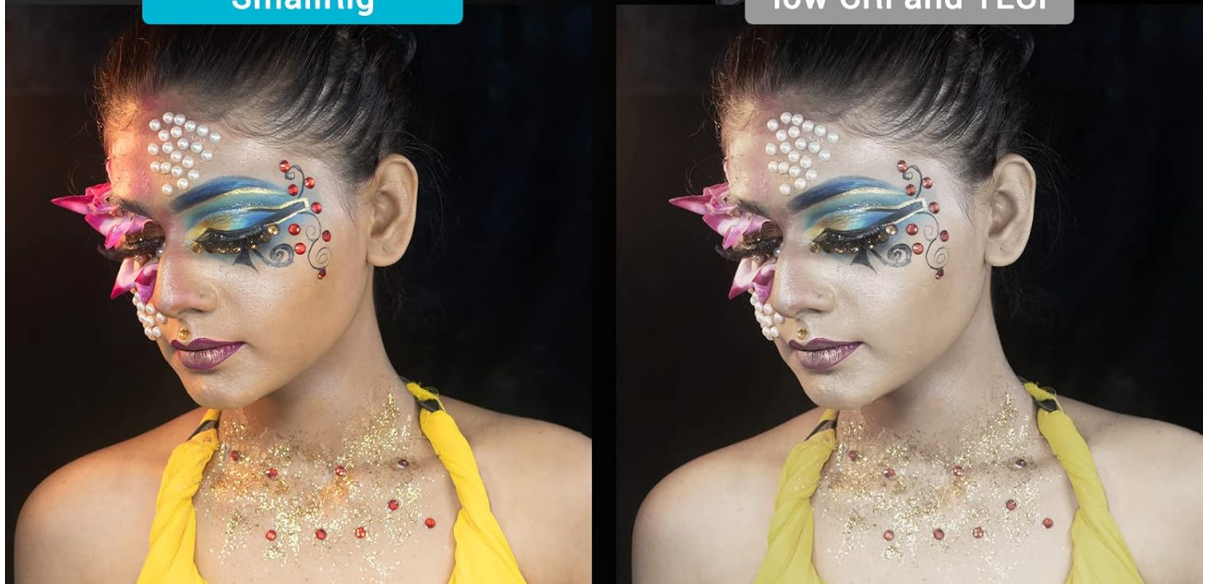


Image 4.2: A visual comparison illustrating the superior color rendering achieved with the SmallRig RC 120B compared to a light with lower CRI and TLCI values.

4.3 Ultra-Quiet Active Cooling System

The integrated fan operates at an ultra-quiet level, producing approximately $25\text{dB} \pm 2\text{dB}$ at a distance of 1 meter (3.3 ft). An active heat dissipation function engages when the lamp body temperature exceeds 60°C (140°F) to maintain optimal performance and longevity.

Ultra-Quiet Active Cooling System

The noise level of the ultra-quiet fan is only $25 \pm 2\text{dB}$ at 1 meter (3.3 ft.). When the temperature of the lamp body exceeds 60°C (140°F), the active heat dissipation function is turned on.



Image 4.3: The RC 120B light in use within a studio environment, emphasizing its quiet cooling system suitable for video production.

4.4 Standard Bowens Mount

Equipped with a standard Bowens mount, the RC 120B is compatible with a wide range of lighting modifiers, including softboxes, beauty dishes, and snoots, allowing for versatile light shaping and diffusion. It also includes a built-in umbrella hole for easy attachment of umbrella lighting accessories.

Standard Bowens Mount

Fully compatible with the wide range of lighting modifiers for maximum control of light shaping and diffusion



Image 4.4: The RC 120B demonstrating compatibility with different Bowens mount modifiers and showcasing the integrated umbrella hole.

4.5 Dual Control Methods

The light can be controlled directly via its on-board interface or remotely using the SmallGoGo App on your mobile device. The app provides intelligent remote control for brightness, color temperature, and lighting effects.

RC 120 Point-Source Video Lights support two methods of light c

• SmallGoGo App Control

Intelligent Remote Light Control
with SmallGoGo App



• On-Board Control



Image 4.5: Illustration of the two control methods for the RC 120B: via the SmallGoGo mobile application and directly through the on-board controls.

4.6 Dual Power Supply System

The RC 120B supports two power options: direct power supply from the included AC adapter (with a 6m/19.6ft power cable) or via a 14.4V/26V V-mount battery (not included). A special V-mount battery plate (model 3676, not included) is available for mounting the battery to a light stand.

Dual Power Supply System

Support 12 ~ 30V DC power supplies, adapters and V-Mount batteries



When using a V-mount battery, the control panel indicates power



The power plug has a locking design for a secure connection

Image 4.6: Details of the dual power supply system, showing the display indicators for AC adapter and V-mount battery power, and the secure locking design of the power plug.

4.7 Wide Color Temperature Range

Adjust the color temperature from 2700K (warm light) to 6500K (cool light) to match ambient lighting or achieve desired creative effects.



Image 4.7: The RC 120B light in action, demonstrating its ability to provide a wide range of color temperatures from warm to cool.

5. SETUP

5.1 Mounting the Light

1. Attach the RC 120B light to a compatible light stand using its integrated mounting bracket.
2. Secure the light by tightening the locking knob on the mounting bracket.
3. Adjust the tilt angle of the light as needed and tighten the tilt locking knob.

5.2 Attaching the Hyper Reflector

1. Align the three mounting pins on the hyper reflector with the corresponding slots on the Bowens mount of the light.
2. Insert the reflector and twist clockwise until it locks securely into place.
3. To remove, press the release button on the Bowens mount and twist counter-clockwise.

5.3 Powering the Device

AC Power Adapter:

1. Connect the AC adapter to the DC 12-30V input port on the light. Ensure the locking design engages for a secure connection.
2. Plug the power cable into the AC adapter, then into a standard wall outlet.

V-Mount Battery (Optional):

1. Attach a compatible 14.4V or 26V V-mount battery to a V-mount battery plate (e.g., SmallRig 3676, sold separately).
2. Connect the V-mount battery plate's output cable to the DC 12-30V input port on the light.

6. OPERATING INSTRUCTIONS

6.1 On-Board Control

Use the control knobs and buttons on the rear panel of the light to adjust settings. The LED screen displays current parameters such as intensity, color temperature, and effect mode.

- **Power Button:** Press to turn the light on or off.
- **INT Knob:** Rotate to adjust light intensity (brightness) from 0% to 100%.
- **CCT Knob:** Rotate to adjust color temperature from 2700K to 6500K.
- **FX Button:** Press to cycle through available lighting effects. Rotate the INT knob to select an effect and adjust its parameters.

6.2 SmallGoGo App Control

For advanced remote control, download the SmallGoGo App from your mobile device's app store.

1. Ensure Bluetooth is enabled on your mobile device.
2. Open the SmallGoGo App and follow the on-screen instructions to connect to your RC 120B light.
3. Once connected, you can adjust brightness, color temperature, and activate lighting effects remotely.

6.3 Silent Mode

To activate silent mode for reduced fan noise during critical audio recording:

1. Press the Reset button three times in quick succession.
2. Note that in silent mode, the light's power output may be reduced to maintain low fan noise.
3. To deactivate silent mode, press the Reset button three more times.

7. MAINTENANCE

- Clean the light body and reflector with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Regularly check cables for any signs of wear or damage. Replace immediately if damage is found.
- Store the light in its carrying bag in a cool, dry place when not in use.

8. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
|---------|----------------|----------|


| Problem | Possible Cause | Solution |
|----------------------------------|--|--|
| Light does not turn on. | No power, faulty cable, or adapter. | Check power connections, try a different outlet, ensure AC adapter is properly connected. If using V-mount battery, check battery charge. |
| Light output is low. | Silent mode active, low power setting, or insufficient power supply. | Deactivate silent mode. Increase intensity setting. Ensure adequate power supply (e.g., fully charged V-mount battery or stable AC power). |
| Cannot connect to SmallGoGo App. | Bluetooth off, app not paired, or interference. | Ensure Bluetooth is on. Restart the app and light. Re-pair the device in the app. Move closer to the light. |
| Fan noise is too loud. | Silent mode is not active. | Activate silent mode by pressing the Reset button three times. |

9. SPECIFICATIONS

| Feature | Detail |
|------------------------------------|---|
| Model Number | RC 120B (3471-120B) |
| Brand | SMALLRIG |
| Power Output | 120W |
| Illuminance (without reflector) | 4,450 Lux @ 1m (3.3ft) |
| Illuminance (with hyper reflector) | 52,800 Lux @ 1m (3.3ft) |
| Color Temperature Range | 2700K - 6500K |
| CRI | 95+ |
| TLCI | 96+ |
| Cooling System Noise | Approx. 25dB ± 2dB @ 1m |
| Mount Type | Bowens Mount |
| Control Methods | On-board, SmallGoGo App (Bluetooth) |
| Power Supply | AC Adapter (100-240V), 14.4V/26V V-mount battery (not included) |
| Product Dimensions | 9.45"L x 4.8"W x 9.35"H |
| Item Weight | 10.48 pounds |

10. WARRANTY AND SUPPORT

SmallRig products are designed and manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the official SmallRig website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty claims.

| | |
|---|--|
|  <p>SmallRig</p> <p>LA-090 Octagonal Softbox LA-090 快拆八角柔光箱</p> <p>Operating Instruction / 操作指引</p> | <p>SmallRig LA-090 Octagonal Softbox - Operation Guide and Specifications</p> <p>This guide provides detailed information on the SmallRig LA-090 Octagonal Softbox, including its features, compatibility with SmallRig LED lights via Bowens Mount, and usage instructions.</p> |
|  <p>SmallRig</p> <p>RC100B COB LED Video Light COB 影棚补光灯</p> <p>RC100B</p> | <p>SmallRig RC100B COB LED Video Light User Manual and Specifications</p> <p>Comprehensive user manual for the SmallRig RC100B COB LED Video Light, covering product overview, installation, power supply, and detailed technical specifications.</p> |
| | <p>SmallRig RC220B COB LED Video Light User Manual</p> <p>User manual for the SmallRig RC220B COB LED Video Light, covering setup, operation, features, and specifications. Includes safety precautions and warranty information.</p> |
|  <p>SmallRig</p> <p>RC 220C RGB COB LED Video Light RGB COB 摄影补光灯</p> <p>220W</p> | <p>SmallRig RC 220C RGB COB LED Video Light Operating Instructions</p> <p>Comprehensive guide for the SmallRig RC 220C RGB COB LED Video Light, covering product overview, installation, power supply, operation modes (CCT, HSI, FX, GEL, RGBCW), app control, BLE connect, OTA upgrades, and DMX mode.</p> |
|  <p>SmallRig</p> <p>RC 100B COB LED Video Light</p> | <p>SmallRig RC 100B COB LED Video Light User Manual</p> <p>This user manual provides comprehensive instructions, safety guidelines, and technical specifications for the SmallRig RC 100B COB LED Video Light, ensuring proper operation and maintenance.</p> |



[SmallRig RC 220B Pro COB LED Video Light User Manual](#)

User manual for the SmallRig RC 220B Pro COB LED Video Light, covering important reminders, product introduction, installation, power supply, operation, app control, BLE connect, DMX mode, specifications, and FCC/ISED statements.