

/封面

RC 100B COB LED Video Light – User Manual

HVIN:RC100B

Part 1

前言

感谢您购买使用 SmallRig 摄影补光灯，在使用前请认真阅读本手册。

Foreward

Thank you for purchasing the SmallRig COB LED video light. Please read the user manual carefully before using it.

重要提示

Important Prompt

1. 请妥善保管该手册。为了您和他人的安全，在将设备交给他人使用时，请务必附带本手册。
Please keep the user manual properly. For your safety and the safety of others, please ensure that this user manual is enclosed with the gear when it is borrowed by someone.
2. 请注意所有警告提示，并遵循本手册的设备使用规范。
Please read all warnings carefully and adhere to the gear usage specifications outlined in this manual.
3. 儿童使用设备时，应由成人监督和陪同。请勿将设备置于无人看管状态。
Children should only operate this equipment under adult supervision. Please do not leave the gear unattended without continuous supervision.
4. 使用前请取下 COB 灯珠的硅胶保护罩。
Please remove the silicone cover in front of the COB chip board before use.
5. 设备使用后，COB 灯珠及面板区域、设备顶部与底部均为高温区域。给设备降温前，请避免接触高温区域。出于您的安全与健康考虑，使用本设备时请勿遮挡散热孔，设备工作时，也不要长时间直视 COB 灯珠。
After using the gear, the COB chip board, top, and bottom of the gear will become extremely hot. Please avoid touching these areas until the gear has cooled down. For your safety and well-being, do not block the cooling holes and avoid directly exposing your eyes to the COB LED chip.
6. 如需使用电源延长线，请确保使用的延长线的额定电流标号大于或等于设备的额定电流标号。额定电流标号较低的电线可能会导致线缆或机身过热。
If you need to use a longer power cable, please make sure that the rated amp mark on the power cable is larger or equal to the rated amp on the gear.
7. 使用后请妥善归置电源线，以避免设备被电源线绊倒或拉扯电源线导致设备断电。请记住，电源线不可接触灼热表面。
To avoid stumbling over the power cable or accidentally pulling it, which may cause the gear to lose power, please properly secure the power cable after use. Also, be cautious and make sure not to place the power cable near heat sources or interfaces.
8. 请勿操作损坏的设备或电源线损坏的附件。一旦设备或附件损坏或故障，请寻找合格的维修人员检查。
Please do not operate the gear or power cable if they are damaged. In the event that the gear or accessories are damaged or experiencing a fault, please seek assistance from a qualified repairing engineer.

9. 在存放和收纳之前, 请确保设备完全冷却。待设备冷却后, 请将其放置在收纳包的相应位置。
Please make sure that the gear has completely cooling down before storage. Place it in the appropriate compartment in the carry bag.
10. 为了保证设备正常运作, 建议将其存放在阴凉、干燥、整洁的环境中。请勿将本设备存放在潮湿、有液体或其他易燃、易挥发溶剂附近, 以避免损坏设备。
To ensure proper operation of the gear, it is recommended to store it in a cool, dry, and clean environment. Do not store the gear near damp areas or in the vicinity of liquids, flammable substances, or volatile solvents to avoid damaging the gear.
11. 工作温度: -10~45°C (14~113°F)
Working temperature: -10~45°C (14~113°F)
12. 参考储存温度/ 湿度: 20°C ± 5°C (59~77°F) / 60±15%
Reference storage temperature/ humidity:
20°C ± 5°C (59~77°F) / 60±15%
13. 如果需要清洁本设备表面, 请使用干燥的软布进行清洁。在清洁和维修之前, 请务必拔下电源适配器和机身连接线。
If you need to clean the surface of this gear, please use a dry, soft cloth for cleaning. Before cleaning and performing maintenance, make sure to disconnect the power adapter and body connection cable.
14. 为降低电击风险, 严禁将本设备浸入水中或其他液体中。
To reduce the risk of electric shock, it is strictly prohibited to immerse this gear in water or any other liquids.
15. 为降低电击风险, 严禁私自拆卸本设备。如果设备出现故障需要维修, 请咨询相关购买渠道并交由专业维修人员处理。非规范的组装和维修可能存在安全隐患, 未经授权禁止私自拆卸, 一经核实, SmallRig 将执行保修无效操作。
To reduce the risk of electric shock, it is strictly prohibited to dismantle this gear without authorization. If the gear malfunctions and requires repairs, please consult the relevant purchase channel and submit it to professional repair personnel. Non-standard assembly and repairs may cause safety hazards. Unauthorized dismantling is strictly prohibited and, once verified, SmallRig will consider the warranty void.
16. 使用非 SmallRig 推荐的配件可能会引起火灾或电击等危险。请参考 SmallRig 提供的配件, 或根据 SmallRig 提供的规格信息, 使用经过合格制造商认证的配件。如果经核实, 使用不合格的配件导致设备故障, SmallRig 将执行保修无效操作。
Using non-SmallRig recommended accessories may cause hazards such as fire or electric shock. Please refer to the accessories provided by SmallRig or use certified accessories from qualified manufacturers based on the specifications provided by SmallRig. If it is verified that the use of non-compliant accessories leads to gear malfunction, SmallRig will consider the warranty void.
17. 本设备已通过 CE、RoHS、FCC、ISED、RCM 等认证。请参考相关国家标准进行使用和操作。因操作不当导致的设备故障, SmallRig 会核实并执行保修无效操作。此用户手册根据 SmallRig 严格测试制定, 设计和规格如有变更, 恕不另行通知。
This gear has been certified with CE, RoHS, FCC, ISED, RCM, and other certifications. Please refer to the relevant national standards for use and operation. SmallRig will verify and consider the warranty void for gear malfunctions caused by improper operation. This user manual is created based on rigorous testing by SmallRig, and in the event of any changes in design and specifications, no separate notification will be provided.

注意: 请勿触摸 COB LED 灯珠及前盖玻璃。(加警示图标)

Attention: Do not touch the COB LED chip and front cover glass.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment This equipment should be installed and operated with minimum distance 20cm

ISED Statement

English: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux CNR exempts de licence d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

- (1) Cet appareil ne doit pas causer d'interférences.
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance. cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité. This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. Cet équipement est conforme Canada limites d'exposition aux radiations dans un environnement non contrôlé.

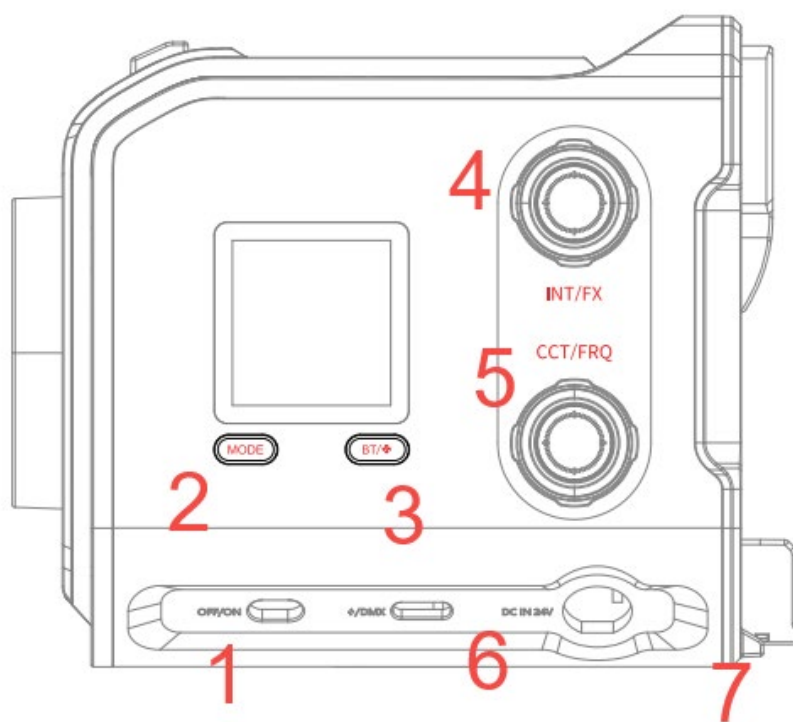
Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le

radiateur et votre corps.

Part 2

产品概览及按键功能

Product Overview



- ① 开关机按钮：接通电源后，拨动至“ON”并旋转 INT 旋钮一圈进行 RC 100B 开机操作；拨动至“OFF”关机。白色开机界面底部会显示设备蓝牙名称后缀。此时屏显变化如下

ON/ OFF Switch: After connecting to the power source, turn the switch to "ON" and rotate the INT knob one round to power on the RC 100B; turn the switch to "OFF" to shut down. The Bluetooth name suffix of the gear will be displayed at the bottom of the white startup interface. The screen display will change as follows.

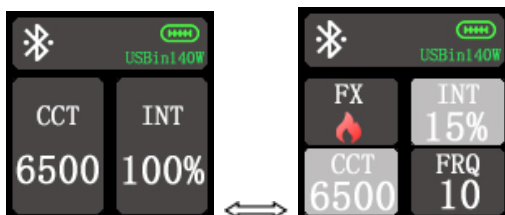
SmallRig
V1.0.2
15C59F

旋转INT一圈以
开机
Rotate the INT
button one turn
to power on.



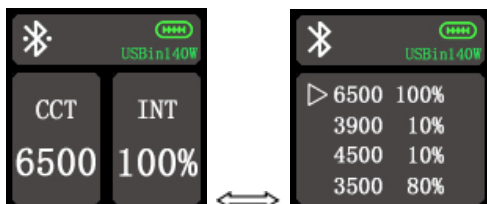
- ② 模式键 (Mode): 单击该按键可循环切换色温模式 (CCT) /特效模式 (FX)。此时屏显变化如下

Mode Button: Clicking this button will cycle between the color temperature mode (CCT mode) and the special effects mode (FX mode). The screen display will changed as follows.



在色温模式或特效模式下，长按该按钮 2 秒可存储当前参数，并进入预设模式 (PRESET)。旋转 INT 旋钮以选择预设，并单击确认。再次长按按钮 2 秒或选择预设以退出。最多可存储 4 组预设参数。屏幕显示将如下变化：

In CCT/ FX mode, long-press the mode button 2s to store the current parameters and goes into the PRESET mode. Rotate the INT knob to select the presets and click to confirm. Long-press the button 2s again or select the preset to exit. Up to four sets of preset parameters can be stored. The screen display will change as follows.



- ③ 蓝牙/ 静音控制键 (BT) : 双击该按键可循环切换 RC 100B 的工作模式。可通过观察左上图标查看 RC 100B 工作模式。无图标：正常模式，不限制亮度；红色静音图标：静音模式，限制 30%亮度模式； 白色风扇图标：低风噪模式，限制 70%亮度模式，此时图标显示如下：

Bluetooth/ Mute Control Button (BT): Double-click this button to cycle through the working modes of RC 100B. You can observe the top left icon to view the working mode of RC 100B.

- No icon: Normal mode, unrestricted brightness;
- Red mute icon: Silent mode, 30% brightness limited mode;
- White fan icon: Low fan noise mode, 70% brightness limited mode.

The screen display will change as follows.



开机后，长按蓝牙/ 静音控制键可重置蓝牙连接，此时蓝牙图标将快速闪烁，您可以打开 SmallGoGo 应用，根据开机提示的蓝牙后缀为设备组网。如果您未下载 SmallGoGo，请扫描以下二维码了解/ 下载，或者在 Google Play/ App store 等应用商店搜索下载。



(接中文说明书)

After powering on, long-press the Bluetooth/ Mute control button to reset the Bluetooth connection. The Bluetooth icon will flash quickly. You can open the SmallGoGo application and set up a network for the gear based on the Bluetooth suffix prompted during startup. If you haven't downloaded SmallGoGo before, please scan the QR code below for more information and download, or search and download it from app stores such as Google Play/App Store.



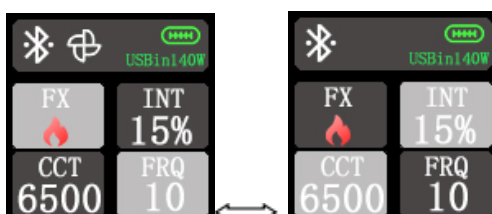
(接英文说明书)

- ④ INT/FX 旋钮（亮度调节/ 特效调节旋钮）：CCT 模式下，顺/逆时针转动旋钮可增大/降低亮度输出比例，单击可快速切换 33%/ 66%/ 100%亮度输出比例；

INT/ FX Knob (Intensity/ Special Effect Knob) : In CCT mode, rotating the knob clockwise/ counter-clockwise increases/ decreases the brightness output ratio. Clicking the knob allows for quick switching between 33%/ 66%/ 100% brightness output ratios.

特效模式 (FX) 下，单击 INT/ FX 旋钮可把光标从亮度调节切换至特效调节 此时屏显变化如下。

In FX mode, clicking the INT/ FX knob switches the cursor from brightness adjustment to effect adjustment. The screen display will change as follows.



此时顺/ 逆时针转动 INT/ FX 旋钮，可调节光标区域对应的九种光效/ 亮度比例。

Rotating the INT/ FX knob clockwise/ counter-clockwise at this point adjusts the 9 x light effects/ brightness ratio corresponding to the cursor area.

狗仔队	电视	坏灯泡	闪电	呼吸	闪烁	舞会	火焰	烟花
								

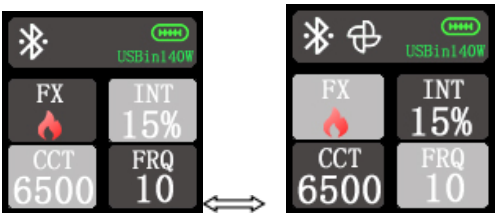
Paparazzi	Television	Falty bulb	Lightning	Breathing	Flickering	Party	Flame	Fireworks
								

- ⑤ CCT/ FRQ 键（色温调节以及频率调节键）：CCT 模式下，顺/ 逆时针转动旋钮可增大/ 降低色温数值，单击可快速切换 3200K/4300K/5600K 色温；

CCT/ FRQ Knob (Color Temperature/ Frequency Adjustment Knob): In CCT mode, rotating the knob clockwise/ counter-clockwise increases/ decreases the color temperature value. Clicking the knob allows for quick switching between 3200K/ 4300K/ 5600K color temperatures.

特效模式 (FX) 下，单击 CCT/ FRQ 旋钮可把光标从色温调节切换至频率调节，此时屏显变化如下。

In FX mode, clicking the CCT/ FRQ knob switches the cursor from color temperature adjustment to frequency adjustment. The screen display will change as follows.



特效模式下，此时顺/逆时针转动旋钮，可调节光标区域对应的色温/ 特效频率。

In FX mode, rotating the knob clockwise/ counter-clockwise adjusts the color temperature/ frequency corresponding to the cursor area.

- ⑥ USB-C 供电及 DMX 通讯接口：可接入 USB-C 电源如 140W PD 充电器/ 电池手柄/ 100 瓦 PD 充电宝等，为 RC 100B 提供移动供电方案，最高支持 100W USB-C 输入；另外可接入 USB-C 转 DMX 转接器，为 RC 100B 提供有线 DMX 连接。

USB-C Power Supply and DMX Interface: You can connect a USB-C power source such as a 140W PD charger, battery grip, 100W PD power bank, etc., to provide a mobile power supply solution for the RC 100B, Max 110W DC input.. Additionally, you can connect a USB-C to DMX adapter to establish a wired DMX connection for the RC 100B.

- ⑦ 迷你 XLR 输入接口：可接入 AC to DC 适配器 (选购)，为 RC 100B 提供墙插持续供电方案。最高支持 110W DC 输入。

Mini XLR Input Interface: You can connect an AC to DC adapter (optional) via this port to provide continuous wall plug power supply for the RC 100B.

light stand adaptor)

4. Mounting the Light to a Grip Handle: Rotate the handle clockwise onto the RC 100B via the 1/4" threaded hole on the bottom of the RC 100B. (Lite version include grip handle)
5. Photographic Lighting Umbrellas Installation: Insert the handle of the photographic lighting umbrellas into the umbrella hole of the light stand adaptor and tighten the knob on the side to secure it.
6. Creative Installation Methods: The RC 100B can be flexibly connected to accessories such as a magic arm or clamp via the 1/4" threaded hole to achieve lighting setups in places where it is inconvenient to use a light stand.

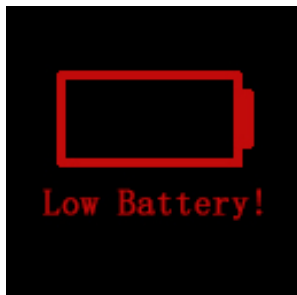
供电

RC 100B 包含 BP 接口/ USB-C 接口/ 迷你 XLR 接口, 可以直连 V 口电池/ 接 NP-F 挂板连接 NP-F 970 电池/ 电池手柄等进行移动供电, 也可以通过 PD 充电器/ AC 转 DC 适配器 (另购) 进行墙插持续供电。

为保证产品全功率运作, 建议用户使用 98Wh 或以上的 V 口电池 (V 口电池电压不能超过 35V) / 100W 或以上 USB-C PD 电源/ AC 转 DC 适配器给 RC 100B 进行供电。另外使用 100W 或以上的 USB-C PD 电源对 RC 100B 进行供电时, 请使用 PD 3.1 规格 USB-C 转 USB-C 充电线。(标准版含 PD 3.1 充电线)

需注意, 若 USB-C 电源功率不足 100W, 如 USB-C PD 充电宝只提供 45W 输出功率, 则 RC 100B 的照度输出只能达到 45% 左右。另外受限于不同品牌的 V 口电池/ NP-F 电池的峰值功率输出, 低于 NP-F970 规格电池可能导致机器/ 电池的工作异常, 使用两块 NP-F970 只能给 RC 100B 提供约 60% 的最大照度输出。

RC 100B 支持低电提醒功能, 当监测到外部电池供电低于 12V 时, 会触发低电提示, 请及时更换电池, 或接入其他电源。



Power Supply

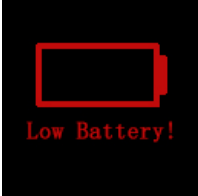
The RC 100B comes with BP interface/ USB-C interface/ mini XLR interface, allowing direct connection to V-mount batteries/ NP-F battery plate with NP-F970 batteries/ battery grips for mobile power supply, or continuous wall outlet power supply via PD chargers/ AC to DC adapters (optional).

To ensure fully output of the gear, it is recommended that users use V-mount batteries of 98Wh or above (V-mount battery voltage should not exceed 35V)/ USB-C PD power supplies of 100W or above/AC to DC adapters to power the RC 100B. Additionally, when powering the RC 100B with a USB-C PD power supply of 100W or above, please use a USB-C to USB-C charging cable that complies with the PD 3.1 specification. (The standard version includes a PD 3.1 charging cable)

Please note that if the power of the USB-C power supply is less than 100W, such as a USB-C PD power bank providing only 45W output power, the illumination output of the RC 100B will only reach around 45%. Furthermore, due to limitations in the peak output of different brands of V-mount batteries/ NP-F batteries, using batteries below the NP-

F970 specification or V-mount Battery below 98Wh may cause abnormal operation of the gear/battery. Using two NP-F970 batteries will only provide approximately 60% of the maximum illumination output for the RC 100B.

The RC 100B features a low battery alert function. When the external battery power is detected to be below 12V, a low battery alert will be triggered. Please replace the battery promptly or connect to another power source.



过热保护:

为保证 RC 100B 的长时间稳定工作，建议您按照“重要提醒”的温度/ 湿度/ 环境下储存及使用本设备。RC 100B 内置过热保护功能，当 COB 灯珠温度超过 100°C时，机器会采取过热保护措施。

Overheating protection:

To ensure the long-term stable operation of the RC 100B, it is recommended to store and use this equipment in accordance with the temperature, humidity, and environment mentioned in the "Important Prompt" The RC 100B features a built-in overheating protection function. If the temperature of the COB Chip exceeds the limitation of 100°C/ 212°F, the gear will activate overheating protection status.



若屏幕出现 Sensor error，代表设备的温度传感器失效，设备会停止运作。请寻找购买设备的经销商进行售后维修。

If the screen displays "Sensor error," it indicates a malfunction of the temperature sensor in the device, and the equipment will cease operation. Please contact the dealer from whom you purchased the device for post-purchase repairs.



PART 3

产品规格

功率 (Max)	100W	散热方式	主动散热
CRI	96	TLCI	97
色温	2700K-6500K (±200K)		
输入	USB-C 输入 : PD 3.1: 5V/3A、9V/3A、12V/3A、15V/3A、20V/ 5A、28V 5A (最大 140W) QC 2.0/ AFC/ FCP: : 5V/3A、9V/ 2A、12V/ 1.5A (最大 18W)		

	APPLE-2.4A: 5V/ 2.4A 迷你 XLR 输入: 24V/4.7A (最大 110W) BP 输入: 11V-16.8V/3.58-9.1A (V 口电池最大 100W / NP-F 电池最大 60W)		
尺寸	11.5 * 9.5 * 9.5 cm	重量	700g±20g

Product Specifications:

Power Consumption (Max)	100W	Cooling Mode	Active Cooling
CRI	96	TLCI	97
Color Temperature	2700K-6500K (±200K)		
Input	USB-C Input: PD 3.1: 5V/3A、9V/3A、12V/3A、15V/3A、20V/ 5A、28V 5A (Max 140W) QC 2.0/ AFC/ FCP: : 5V/3A、9V/ 2A、12V/ 1.5A (Max 18W) APPLE-2.4A: 5V/ 2.4A Mini XLR Input: 24V/4.7A (Max 110W) BP Input: 11V-16.8V/3.58-9.1A (Max 100W V mount/ Max 60W NP-F)		
Dimensions	11.5 * 9.5 * 9.5 cm	Weight	700g±20g

光源测试数据表

裸光源:

设定色温	亮度百分比	照度 Lux@1m	CRI (Ra)	TLCI	ΔUV	SSI	TM-30	
							Rf	Rg
2700K	2669	3150	97	97	0.0051	90	95	96
3200K	3211	3630	98	98	-0.0015	91	97	102
5600K	5516	4610	97	99	-0.0006	85	96	103
6500K	6413	4240	97	99	0.0015	83	96	102

带标准罩:

设定色温	亮度百分比	照度 Lux@1m	CRI (Ra)	TLCI	ΔUV	SSI	TM-30	
							Rf	Rg
2700K	2632	13500	97	97	0.0057	89	95	96
3200K	3143	15400	98	98	-0.0007	91	97	102
5600K	5630	20100	97	99	0.0006	86	96	102
6500K	6531	16300	96	99	0.0033	84	96	101

Light Source Test Data Sheet

Bare Light:

Color Temperature (Setting)	Output percentage	Illumination (Lux@1m)	CRI (Ra)	TLCI	ΔUV	SSI	TM-30	
							Rf	Rg
2700K	2669	3150	97	97	0.0051	90	95	96
3200K	3211	3630	98	98	-0.0015	91	97	102
5600K	5516	4610	97	99	-0.0006	85	96	103
6500K	6413	4240	97	99	0.0015	83	96	102

With mini Reflector:

Color Temperature (Setting)	Output percentage	Illumination (Lux@1m)	CRI (Ra)	TLCI	ΔUV	SSI	TM-30	
							Rf	Rg
2700K	2632	13500	97	97	0.0057	89	95	96
3200K	3143	15400	98	98	-0.0007	91	97	102
5600K	5630	20100	97	99	0.0006	86	96	102
6500K	6531	16300	96	99	0.0033	84	96	101

Part 4

保修卡/ 保修条款/ 公司信息

(沿用 SmallRig 模版)