



# LS 600c Pro

# **Product Manual**

English

# Introduction

Thank you for purchasing the Aputure<sup>®</sup> "Light Storm" series RGBWW COB light - LS 600c Pro. LS 600c Pro is a high power full color light source with Fully Tunable CCT from 2,300K to 10,000K, supporting CCT, HSI, XY, RGB, GEL, SOURCE light mode, and professional control with Sidus Link, DMX512/RDM, Lumenradio CRMX, Ethernet. The LS 600c Pro brings you a more comprehensive and professional lighting solution with intelligent power supply and cinematic control, granting you true creative freedom.

# **IMPORTANT SAFETY INSTRUCTIONS**

When using this unit, basic safety precautions should always be followed, including the following:

- 1. Read and understand all instructions before using.
- 2. Close supervision is necessary when any fixture is used by or near children. Do not leave the fixture unattended while in use.
- 3. Care must be taken as burns can occur from touching hot surfaces.
- 4. Do not operate the fixture if a cord is damaged, or if the fixture has been dropped or damaged, until it has been examined by qualified service personnel.
- 5. Position any power cables such that they will not be tripped over, pulled, or put into contact with hot surfaces.
- 6. If an extension cord is necessary, a cord with an amperage rating at least equal to that of the fixture should be used. Cords rated for less amperage than the fixture may overheat.
- 7. Always unplug the lighting fixture from the electrical outlet before cleaning and servicing, or when not in use. Never yank the cord to remove the plug from the outlet.
- 8. Let the lighting fixture cool completely before storing. Unplug the power cable from lighting fixture before storing and store the cable at assigned space of the carrying case.
- 9. To reduce the risk of electric shock, do not immerse this fixture in water or any other liquids.
- 10. To reduce the risk of fire or electric shock, do not disassemble this fixture. Contact cs@aputure.com or take the lighting fixture to qualified service personnel when service or repair is required. Incorrect reassembly may cause electric shock when the lighting fixture is in use.
- 11. The use of any accessory attachment not recommended by the manufacturer may increase the risk of fire, electric shock, or injury to any persons operating the fixture.
- 12. Please power this fixture by connecting it to a grounded outlet.
- 13. Please remove the protective cover before use.
- 14. Please remove the protection cover before using the reflector.
- 15. Please do not block the ventilation or donot look at the LED light source directly when it is powered on. Please do not touch the LED light source in any condition.



- 16. Please do not place the LED lighting fixture near any flammable object.
- 17. Only use a dry microfiber cloth to clean the product.
- 18. Please do not use the light fixture in wet condition on account of electric shock may be caused.
- 19. Please have the product checked by an authorized service personnel agent if the product has a problem. Any malfunctions caused by unauthorized disassembly are not covered by the warranty. The user may pay for maintenance.
- 20. We recommend only using the original Aputure cable accessories. Please note that any malfunctions casued by using unauthorized accessories are not covered by the warranty. The user may pay for maintenance.
- 21. When hanging the product overhead, always ensure an extra safety measure has been attached such as a safety chain- that is certified for the weight of the product.
- 22. This product is certified by RoHS, CE, KC, PSE, and FCC. Please operate the product in full compliance with relevant country's standards. Any malfunctions caused by incorrect use are not covered by warranty. The user may pay for maintenance.
- 23. The instructions and information in this manual are based on thorough, controlled company testing procedures. Further notice will not be given if the design or specifications change.

# SAVE THESE INSTRUCTIONS

# **FCC Compliance Statement**

#### WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### NOTICE

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 reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a different circuit than the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

# **RF Warning Statement:**

This device has been evaluated to meet general RF exposure requirements.

# **Components List**

Please make sure all accessories listed below are found before using. If not, contact your seller immediately.



The illustrations in the manual are only diagrams for reference. Due to the continuous development of new versions of the product, if there are any differences between the product and the user manual diagrams, please refer to the product itself.

# **Product Details**

# 1. Lamp Head



# 2. Control Box







# Setting Up the Light

## 1. Attaching/detaching the Protection Cover

Press the release button following the arrow and rotate the cover clockwise to detach the cover. To reattach the cover, insert it into the Bowens mount and rotate counter-clockwise.



#### WARNING

Always remove the protection cover prior to turning on the light. Always re-install the cover when packing it away.

# 2. Attaching/detaching the Bowens Mount Hyper Reflector (LS 600 Series)

To install the reflector, press the release button, insert the reflector into the Bowens mount, and rotate it counterclockwise as shown in the following pictures. To remove the reflector, pull back the release button and rotate the reflector clockwise.



# 3. Setting Up the Lamp Head

If using a 5/8in / 16mm stand (Baby Pin), then mount the Lamp Head onto the stand, and fix it in place using the T-Handle/Mounting Screw on the Baby Pin Receiver.

If using a 1.125in / 28mm stand (Junior Pin), then mount the Lamp Head into the Junior Pin receiver, and fix it in place using the T-Handle on the stand. Loosen or tighten the handbrake locking mechanism on the yoke to adjust the fixture's angle of tilt.



# 4. Lightning Clamp Operation Instructions

1) Clamp the Lightning Clamp onto a light stand.

2) To attach the control box, rotate the release lever to unlock the quick-release plate, then mount the control box onto the Lightning Clamp (the release lever will spring back).

3) To remove the control box, grasp it firmly, then unlock the quick-release plate by turning the release lever, and detach the control box.







## 5. Connecting the Lamp Head to the Control Box

Connect the Lamp Head to the control box using the 7-pin Weatherproof Connecting Cable.



\* Disconnect the Head Cable by pulling up the collar on the connector. This will disengage its locking mechanism. Do not pull directly.

## 6. Powering Up the Control Box

#### 1) Powering by AC



\*To disconnect the Neutrik® powerCon cable, pull back on the silver release tab on the cable connector, and rotate the connector counter clockwise. Do not pull directly.

#### 2) Powering by DC



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#### 3) Powering by DC Supply



## 7. Charging Batteries Using the Control Box

You can charge batteries via built-in Battery Plates, the maximum intensity that the light can operate at while charging batteries are as follows: Exponential(Exp) or Linear: ≤70% Logarithmic(Log): ≤30% S-Curve: ≤55%

# Operations

# 1. Turning the Light On and Off





# 2. Manual Control

There are three buttons on the control box for manual control of the light: **MENU**, **LIGHT MODE**, and **PRESET**.

### 2.1 MENU

Press the MENU button to enter the System Menu interface. In the System Menu you'll find Output Mode / DMX Mode / Custom FX /Dimming Curves / Fan Mode / Studio Mode / Control System / Language / Frequency Selection / Product Information / Update / Factory Reset / Battery Power Option



System Menu Control Screen

#### 2.1.1) Output Mode

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Output Mode.

**Constant Output:** maintain the brightness output during the process of changing the color temperature.

Max Output: perform at the maximum possible output throughout the CCT range.



#### 2.1.2) DMX Mode

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the DMX mode.

DMX address: LS 600c Pro will set to in DMX Address interface. Press and hold the MENU

for 2 seconds to lock the DMX Address. In the locked state, cannot enter other interfaces, Press and hold SELECT for 2 seconds to unlock.

DMX Loss Behavior: rotate the select wheel to choose Black out /fade to Black /Hold last setting/ Hold 2 min& fade Out.

- ① Hold last setting -After DMX signal is lost, remember the last control setting.
- 2 Black out -when the DMX signal is lost, it will be Black out.
- ③ Fade to Black -after DMX signal is lost, it will fade to Black in 60 seconds.
- ④ Hold 2 min& Fade Out After the DMX signal is lost, keep the last control setting for two minutes, and then Fade to Black within 60 seconds.
- DMX Profile : Rotate the Select wheel, and short press to select a desired 8-bit/16-bit DMX Profile. DMX Termination: toggle Auto-termination on or off.



\* The fade-out time decreases as the percentage of brightness decreases. When the Intensity output is 100%, the fade-out time is 60 seconds, which decreases in sequence.

\* If the signal is reconnected, the DMX console will continue to maintain the signal output as s ame as before.

#### 2.1.3) Custom FX

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Custom FX.

You can choose to enter Picker FX or Music FX.

Each type can save up to 10 custom FXs. "NO FX" refers to unsaved FX, and "Untitled" refers to saved FX.



#### 2.1.4) Dimming Curves

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Dimming Curves. Rotate and short press the wheel to choose between exponential (**Exp**) or logarithmic (**Log**), **linear** and **S-Curve** dimming curves.



#### 2.1.5) Fan Mode

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Fan Mode. rotate and short press the wheel to choose between **Smart, High, Medium** and **Silent** fan mode.



- \* Silent: deactivate all fans. Limits output to 60W max.
- \* When overheat symbol appears on the light control interface, please follow the text underneath to adjust the Fan Mode to Smart or High. If the internal temperature of the lamp reaches the threshold that needs to be cooled, the lamp will automatically shut down due to overheat protection.

#### 2.1.6) Studio Mode

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Studio Mode. When the studio mode is turned on (**ON**), the lamp can be turned on directly, when the studio mode is turned off (**OFF**), you need to press the power button to turn on the lamp.



#### 2.1.7) Control System

LS 600c Pro has three remote control methods: Bluetooth, LumenRadio CRMX and Ethernet. Only one control mode can be used at one time.

#### 2.1.7.1) Bluetooth

Rotate the select wheel and short press to enter the Bluetooth mode. When **Bluetooth** is "ON", the serial number is displayed below, after executing **Bluetooth Reset**, your mobile phone or tablet will be able to connect to and control the light with Sidus Link App.



#### 2.1.7.2) CRMX

Rotate the select wheel and short press to enter the Lumenradio CRMX, When **CRMX Status** is "**ON**", it will continuously search for a pairable signal in the background to connect. "**Unpair**" will disconnect the currently established connection so that other signal transmitters can be paired.



#### 2.1.7.3) Ethernet

Rotate the select wheel and short press to enter the Ethernet mode. You can set the IP manually in **Manual Set IP** interface or obtain IP aromatically in **Automatic Obtain IP** interface.



#### 2.1.8) Language

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Language settings. rotate and short press the wheel to choose **English** or **Simplified Chinese**.



#### 2.1.9) Frequency Selection

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter the Frequency Selection. Rotate the select wheel to adjust he light frequency by 100Hz every turn.



#### 2.1.10) Product Information

Press the MENU button to enter the menu interface, rotate the select wheel and short press to enter Product Information, you can view the **Hardware Version** and **UID** of the product.



#### 2.1.11) Update

Press the MENU button to enter the menu interface, rotate the select wheel and short press to Update. You can update the firmware in the **Update Firmware** interface, and view the **Firmware Version**. Firmware update can also be done via Sidus Link app using OTA (Over the Air Technology).



#### 2.1.12) Factory Reset

Press the MENU button to enter the menu interface, rotate the select wheel and short press to Factory Reset.

The factory settings list : Light mode: Intensity 50%, CCT 5600K; Language: English Fan Mode: Smart Dimming Curve: Linear Studio Mode: OFF Control System: Bluetooth DMX: Address 001, Hold Last Settings, DMX Termination OFF



#### 2.1.13) Battery Power Option

Press the MENU button to enter the menu interface, rotate the select wheel and short press to Battery Power Option.

• Wake Up Battery: When you need to activate the lithium battery from overdischarge protection. Select the lithium battery specification 14.4V/26V and enter the Wake Up Batteries interface, confirm Activate to output 3A current in order to activate the lithium battery; After activation, check whether the lithium battery has a voltage output. If so, the activation is successful, otherwise the activation fails.

• Full power output: a single lithium battery meets 360W continuous output (14.4V lithium battery maximum output current 30A, 26V lithium battery maximum output current 15A), two lithium batteries can meet the input power requirement of 720W, and the lamp can achieve 100% illumination Output.



# 2.2 Accessing Lighting Modes

Press the LIGHT MODE button on the control box to enter the mode: CCT, HSI, RGB, XY, RGB, Source, and GEL.

#### 2.2.1} **CCT**

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to CCT. You can adjust **Intensity** (0-100%), **Correlated Color Temperature** (2300K - 10000K), and **Green/ Magenta** adjustment (-1.0 to +1.0).



#### 2.2.2) Advanced HSI

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to Adv. HSI. You can adjust **Intensity** (0-100%), **Hue**(1-360°), **Saturation** (0-100%), and **Correlated Color Temperature** (2300K - 10000K).



#### 2.2.3) **FX**

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to FX.

You can choose 16 light preset effects: Fire, Strobe, Explosion, Faulty Bulb, Pulsing, Welding, Cop Car, Color Chase, Party Lights, Firework, Club Lights, Paparazzi, Lightning, TV and Candle.

Each preset has multiple parameters that can be changed to customize the effects.



#### 2.2.4) RGB

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to RGB. You can adjust **Intensity** (0-100%) and **Red/Green/Blue** values (0-100%).



#### 2.2.5) XY

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to XY. You can adjust **Intensity** (0-100%) and **X/Y coordinates** (0.0000 – 0.8000).



#### 2.2.6) Source

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to Source. You can choose 46 preset light source effects.



#### 2.2.7) **GEL**

Press the LIGHT MODE button to enter the light mode interface, rotate the select wheel and short press to GEI. You can set 3200K or 5600K as the light color temperature , and select the Rosco or LEE Gel Lighting Filter paper.



#### 2.3) Light Preset

Press the PRESET button on the control box to enter the light preset mode, you can save 10 light preset effects.

Rotating and short press the select wheel to save/replace the preset effect in CCT, Adv. HSI, RGB, XY, Source, GEL mode. You can open/delete previously saved to the preset mode in any mode.



## 3. Connecting to DMX

#### 3.1) Connecting a standard DMX controller



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\*The DMX interface schematic is shown in the pictures below:



#### 3.2) Channel Selection

In DMX mode, match the channel of your DMX controller with the light, and then adjust accordingly.

\* The default DMX channel is "001".

\* The range of DMX channels is 1 to 512.

## 4. Controlling Device Via DMX

The LS 600c Pro offers a variety of DMX modes. Please find a detailed overview of all DMX modes in the document, LS 600c Pro DMX Chart is available for free download on the Aputure official website https://www.aputure.com.

# 5. Using the Sidus Link APP

You can download the Sidus Link app from the iOS App Store or Google Play Store for enhancing the functionality of the light. Please visit sidus.link/app/help for more details regarding how to use the app to control your Aputure lights.



Get Sidus Link®App



Sidus.link/app/help

### **Specifications**

Powe Consumption	≤720W	Output Power	≤600W	
Voltage Input Range	100V~240V	Operating Current	8A	
CRI	≥95	TLCI	≥98	
SSI(D56)	74	SSI(D32)	85	
сст	2300 K - 10000 K	Ambient Temperature Operation	-20°C - 45°C	
Operating Voltage (Battery)	14.4 V - 15A 26 V - 8 A 28.8 V – 7.5 A	DC Voltage Range (3-Pin XLR)	48 V - 15 A	
Wireless Operating Range (Bluetooth)	≤ 80 m	Wireless Operating Range (CMRX)	≤ 100 m	
Dimensions	Lamp Head w/o Yoke	30.2x22.2x15.0 cm / 11.9x8.74x5.90 in		
	Lamp Head w/ Yoke	45.3x26.7x15.0 cm / 17.8x10.5x5.9 in		
	Control Box	36.6x19.7x15.6 cm / 14.4x7.7x6.1 in		
Weight	Lamp Head w/ Yoke	5.86 kg / 12.92 lbs		
	Control Box	5.21 kg / 11.48 lbs		

\* The malfunctions caused by water in the lamp body are not covered under the warranty.

\* If the LS 600c Pro is used in a heavy rain, it is recommended to use the tilt angle range of the lamp head as shown below:



### **Photometrics**

ССТ	Distance	Bare Bulb	LS 600 Hyper Reflector	F10 Fresnel Flood	F10 Fresnel Spot
2300 K	1 m	12460 lux 1157 fc	39500 lux 3669 fc	19930 lux 1851 fc	44300 lux 4115 fc
	3 m	1481 lux 177 fc	3770ux 350fc	2517 lux 233 fc	5710lux 530 fc
	5 m	608 lux 56 fc	1444 lux 134 fc	1007 lux 93 fc	2265 lux 210 fc
3200 K	1 m	13700 lux 1272 fc	42800 lux 3976 fc	21570 lux 2003 fc	48700 lux 4524 fc
	3 m	1638 lux 152 fc	4160lux 386fc	2770 lux 257 fc	6270 lux 582 fc
	5 m	668 lux 62 fc	1586 lux 147 fc	1085 lux 100 fc	2490 lux 231 fc
4300 K	1 m	15030 lux 1396 fc	46800 lux 4347 fc	23490 lux 2182 fc	52700 lux 4895 fc
	3 m	1778 lux 165fc	4570 lux 424 fc	3030 lux 281 fc	6840lux 635 fc
	5 m	743 lux 69 fc	1728 lux 160 fc	1169 lux 108 fc	2740 lux 254 fc
5600 K	1 m	16450 lux 1528 fc	51100 lux 4747 fc	25500 lux 2369 fc	57300 lux 5323 fc
	3 m	1937 lux 179 fc	5020 lux 466 fc	3320 lux 308 fc	7440 lux 691 fc
	5 m	817 lux 75 fc	1889 lux 175 fc	1254 lux 116 fc	3010 lux 279 fc
7500 K	1 m	16440 lux 1527 fc	50700ux 4710 fc	25300 lux 2350 fc	57000 lux 5295 fc
	3 m	1935 lux 179 fc	5030 lux 467 fc	3320 lux 308 fc	7420 lux 689 fc
	5 m	819 lux 76 fc	1877 lux 174 fc	1245 lux 115 fc	3010 lux 279 fc
10000 K	1 m	14300 lux 1328 fc	44300 lux 4115 fc	22280 lux 2069 fc	50200 lux 4663 fc
	3 m	1686 lux 156 fc	4500 lux 418 fc	2950 lux 274 fc	6530 lux 606 fc
	5 m	721 lux 66 fc	1651 lux 153 fc	1099 lux 102 fc	2685 lux 249 fc

\* This is an averaged result. The luminance of your individual unit may vary slightly from this data.

#### Trademarks

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Detailed product manual can be found on www.aputure.com.