**A**puture<sup>®</sup>





LS 600c Pro

**Product Manual** 

English

Courtesy of Red Star Rentals redstarpictures.com

# Thank You!

Thank you for purchasing the Aputure® "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.
  - DO NOT TOUCH LED Light Source Surface
- 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. 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.
- 22. 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**

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

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

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

**NOTE:** 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.

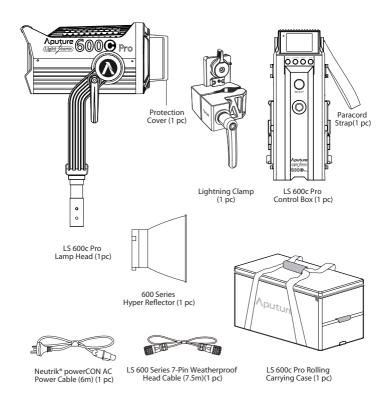
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a different circuit than the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

# **RF Warning Statement:**

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

# **Components List**

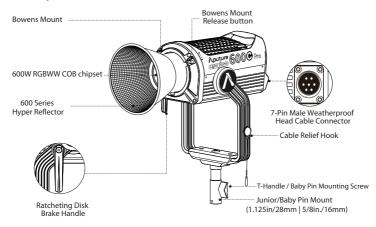
Please make sure all accessories listed below are completed before using. If not, please contact with your sellers immediately.



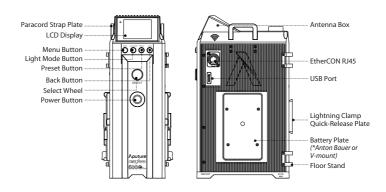
Tips: The illustrations in the manual are only diagrams for reference. Due to the continuous development of new versions of the product, if there are any differences between the product and the user manual diagrams, please refer to the product itself.

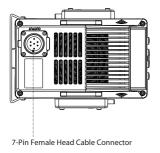
## **Product Details**

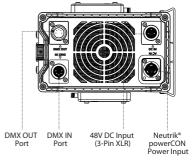
# 1. Lamp Head



## 2. Control Box





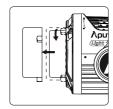


# **Setting Up the Light**

## 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 counterclockwise.



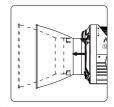


Notice: Always remove the protection cover prior when turning on the light. Always re-install the cover when packing it away,

# 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 proceed to fix it in place using the T-Handle/Mounting Screw on the Baby Pin Receiver/Mounting Column.

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 baseplate, then mount the control box onto the Lightning Clamp (the release lever will automatically 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.

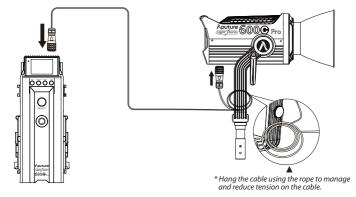


## **Specifications**

Weight	670g / 1.48lbs	Sizes (L*W*H)	10.35x8.74x12.5cm / 4.07x3.44x4.92in						
*The Lightning Clamp can clamp onto square or round pipe with a diameter between 2-5 cm or 0.79-1.97 in									

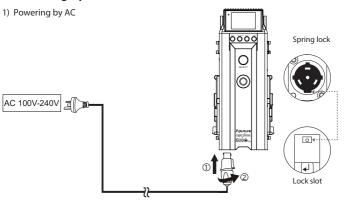
## 5. Connect the Lamp Head to the Control Box

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



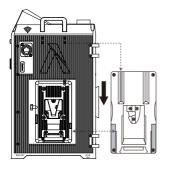
<sup>\*</sup> Disconnect the Head Cable by pulling up the collar on the connector. This will disengage its locking mechanism. Do not pull directly.

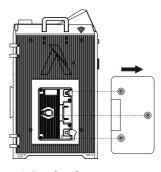
# 6. Powering Up the Control Box



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

## 2) Powering by DC





▲ V-Mount Battery

▲ Anton Bauer Battery

# 7. Charge Batteries

You can charge batteries by Battery Plate, the maximum intensity that can be charged at different dimming curves is as follows:

Exponential(Exp) or Linear: ≤70%

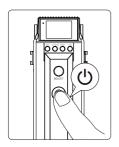
 $Logarithmic(Log) : \leq 30\%$ 

S-Curve: ≤55%

<sup>\*</sup> You can choose V-Mount or Anton Bauer Battery as required.

# **Operations**

## 1. Press the Power Button to Turn the Light On and Off





## 2. Manual Control

Press the MENU button on the control box to enter the mode: MENU, LIGHT MODE 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



#### 2.1) 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 the current maximum power output.



#### 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 Lighting / Effect/Lighting& Effects 8-bit or 16-bit.DMX Termination: toggle Auto-termination on or off.



<sup>\*</sup> 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.

<sup>\*</sup> 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 10 custom FXs. In the name of each FX, "NO FX" means unsaved FX, and "Untitled" means 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.



<sup>\*</sup> Silent: Deactivate All Fans, Limit Output to 60W.

<sup>\*</sup> 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.





#### 2.1.7.2) 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 disconnects 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 updating 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 is:

Light mode: Intensity 50%, CCT 5600K;

Language: English Fan Mode: Smart

Pinania - Comart

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.

- 1. Wake Up Battery: for A-Mount or V-Mount lithium battery, you need to activate the lithium battery from over-discharge 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.
- 2.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 Press the Power Button to Turn the Light On and Off

Press the LIGHT MODE button on the control box to enter the mode: CCT, HSI, RGB, XY, RGB, Source, 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), Green/Magenta (-1.0 to  $\pm$ 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%), 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%), Red/Green/Blue (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%), 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

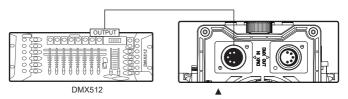
Press the PRESET button on the control box to enter the light preset mode, you can save 10 light preset effects.

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.

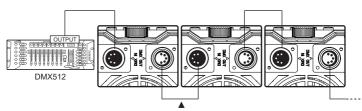


# 3. Connecting to DMX

3.1Connect a standard DMX controller

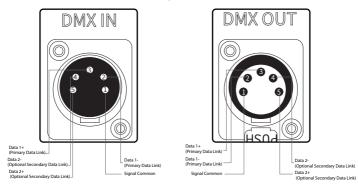


Connecting DMX to only one LS 600c Pro



Daisy chaining multiple lights using DMX

\*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	CRI ≥95		≥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)	Nireless Operating Range (Bluetooth) ≤ 80 m		≤ 100 m	
	Lamp Head w/o Yoke	30.2x22.2x15.0 cm / 11.9x8.74x5.90 in		
Dimensions	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		
weight	Control Box	5.21 kg / 11.48 lbs		

<sup>\*</sup> 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	11340 lux 1054 fc	35000 lux 3251 fc	17160 lux 1594 fc	35700 lux 3317 fc
	3 m	1370 lux 127 fc	3888ux 361fc	2150 lux 200 fc	4930 lux 458 fc
	5 m	565 lux 52 fc	1400 lux 130 fc	844 lux 78 fc	1875 lux 174 fc
	1 m	12300 lux 1143 fc	39500 lux 3669 fc	18660 lux 1734 fc	38800 lux 3605 fc
3200 K	3 m	1489 lux 138 fc	4388lux 407 fc	2335 lux 217 fc	5360 lux 498 fc
	5 m	615 lux 57 fc	1580 lux 146 fc	920 lux 85 fc	2042 lux 190 fc
	1 m	13250 lux 1231 fc	43000 lux 3994 fc	21100 lux 1960 fc	41800 lux 3883 fc
4300 K	3 m	1605 lux 149 fc	4777 lux 443 fc	2513 lux 233 fc	5780 lux 537 fc
	5 m	662 lux 62 fc	1720 lux 159 fc	990 lux 92 fc	2195 lux 204 fc
	1 m	14890 lux 1383 fc	50000 lux 4645 fc	22510 lux 2091 fc	46900 lux 4357 fc
5600 K	3 m	1800 lux 167 fc	5555 lux 516 fc	2810 lux 261 fc	6450 lux 599 fc
	5 m	743 lux 69 fc	2000 lux 185 fc	1110 lux 103 fc	2464 lux 229 fc
	1 m	16150 lux 1500 fc	50300ux 4672 fc	24310 lux 2258 fc	35700 lux 3317 fc
7500 K	3 m	1947 lux 181 fc	5588 lux 519 fc	3020 lux 281 fc	50500 lux 4692 fc
	5 m	802 lux 75 fc	2012lux 186 fc	1200 lux 111 fc	2667 lux 248 fc
	1 m	14540 lux 1351 fc	44500 lux 4134 fc	22190 lux 2062 fc	46000 lux 4274 fc
10000 K	3 m	1766 lux 164 fc	4944 lux 459 fc	2760 lux 256 fc	7020 lux 652 fc
	5 m	724 lux 67 fc	1780 lux 165 fc	1091 lux 101 fc	2413 lux 224 fc

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

## **Trademarks**

Bowens is a trademark registered by Bowens in China and other countries.

Anton Bauer is a trademark registered by Anton Bauer in the US and other countries.

Neutrik\* is a trademark registered by Neutrik\* in the US and other countries.