

Thunder One · Beyond Sunlight



Thunder One is by far one of the most versatile soft light panels. The lights are brighter, softer and fresher. It integrated new semiconductor technology, innovative color–mixing algorithms and latest camera and display research achievements. Thunder One is a brand–new weapon you can use for various film and television lighting applications.

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# Tremendous Light

- Thunder One is one of the brightest soft light panels. In white light modes, it achieves 1800 lux at 3 m distance, brighter than a 3kW space Tungsten light. It is 50% brighter than soft light panels with similar light apertures.
- Thunder One supports 1000 level dimming and provides four different dimming curves. Users are able to fine tune light output at different lumen output levels.





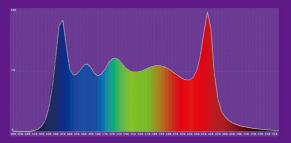






# Sun-Like Spectrum

- Thunder series provide sun-like spectrum of light over 2,700K to 10,000K color temperature range. The Color Rendering Index and the Television Lighting Consistency Index are above 95.
- Thunder series support Green / Magenta fine tuning, matching the ambient light and camera white balance.



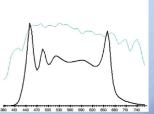


# **Extreme Color Quality** TLCI>99 Ra>98



### **Television Lighting** Consistency Index

Sector	Lightness	Chroma	Hue
R	0	0	0
R/Y	0	0	0
Y	0	0	0
Y/G	0	0	0
G	0	0	0
G/C	0	0	0
С	0	0	0
C/B	0	0	0
В	0	0	0
B/M	0	0	0
M	0	0	0
M/R	0	0	0





# Beyond Sunlight

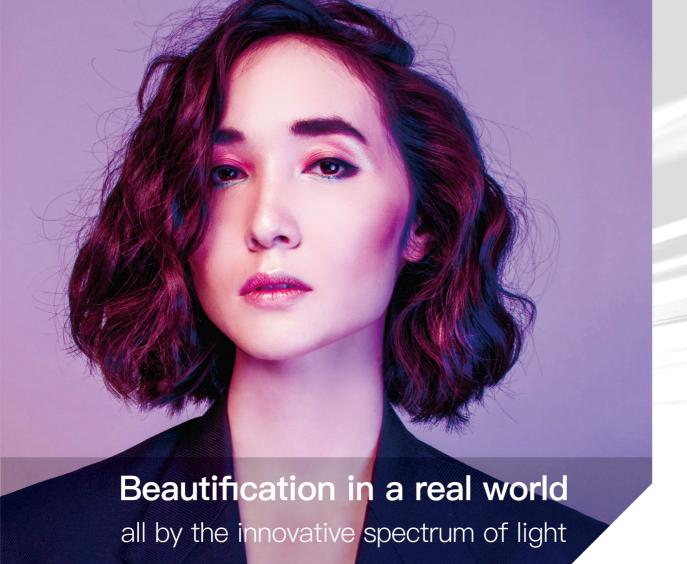
- Thunder series believe that sunlight is not the only criterion for film and television lighting.
- The innovative Augmented Reality (AR) mode makes object colors appear fresher and preferred than they are under the sunlight. Advanced control modes allow users to adjust the skin tone saturation level with a fixed white light appearance.
- Thus the film shooting group is able to edit object colors in reality, without changing the white balance settings in cameras. It largely reduces the color correction labor after film shooting.











# Beyond the Sunlight

Adjust the skin tone saturation level with a fixed white light appearance



# Wide Gamut

- Thunder series use the innovative RGBWA color mixing technology. The color gamut is 20% wider than traditional ways of color mixing, providing more than 100,000 colors.
- HSI mode allows for a full range of color options with user defined white point.
- Gel mode simulates color appearance of more than 300 traditional film & television gels.









- Thunder series insist the "all-calibration" principle: every thunder series product is carefully calibrated by our fully automated color management system.
- In the white light mode, the color abbreviation of every color temperature is less than 2 SDCM (<50K on average), closing to camera and human eye limits.
- Thunder series have been widely used in camera calibration and visual research.











# **Of** Soft Light

- A wider light aperture guaranteed a uniform light and color distribution. The lights spread to the surface of objects softly, without edge shadows and chromatic abbreviation.











PRECISE COLOR, AGILE SOFTLIGHT
Set any color from the 360-degree color wheel and popular gels



# Dynamic Lighting Effects

- Thunder series provide more than 10 dynamic lighting effects, simulating various themes.
- Thunder series now support fire, candle, paparazzi, lightning, cop car, club, firework, party, television, CCT sweeting and dynamic AR lighting effects.
- The Brightness, frequency, speed, phase, and colors of the lighting effects can be adjusted to match various film shooting requirements.























# Compact & Continuous

powerful ThunderOne driver provides continuous light output. No flickers at high-speed shooting. ThunderOne's built-in power supply allows for more portability and reliable performance. The

# Flicker-Free Lights

- Unlike the traditional Pulse-width modulation dimming technology, Thunder series use the innovative analog way of dimming, continuously outputting the lights.
- Every mode and every dimming level of thunder's light generates continuous light for high speed shooting. Free from flicker at any frame rate or shutter angle.







### Intuitive User Interface

- Thunder series provide a high-resolution 3.2-inch color display with full viewing angle. Intuitively adjust the all color parameters, the lights are ready to shine.
- Thunder series supports on-board, DMX, remote controller and mobile app ways of control. Wireless control provides more options for arranging the lighting system layouts.























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## Robust & Reliable

 In the manufacturing process, every thunder series product is carefully evaluated and tested by more than 40 processes, including physical protection test, LED aging, temperature/humidity induced color shift and etc.









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## Full Range of Accessories

 To meet various film & television shooting needs, Thunder series are provided with diverse accessories, including remote controller, USB cable, diffusion panels, 4-leaf barndoor, Snoot, Softbox, DMX cables, power cables and various types of cases.







# Ease of Installation

- Thunder series soft light panels are one of the thinnest light source in the market, as thin as 4.8 inches. They can be closely installed against walls, under the ceiling, or in more narrow spaces.
- Thunder series are equipped with built-in power supply and supports external battery, all for ease of installation and portability.

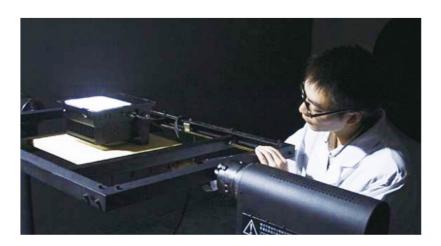




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# Responsive Customer Service

- Thunder series continuously updates the firmware, for more functions and more reliable light output.
- 2-year warranty. Lifelong maintenance.







# HIGH COLOR QUALITY

The color gamut is 20% wider than previous color mixing light sources. Thunder One uses the latest RGBWY five-color mixing technology.













### THUNDER ONE

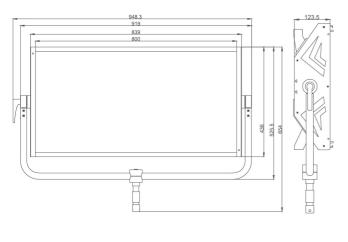
Thunder One is by far one of the most versatile soft light panels. It spreads lights that are brighter, softer and fresher. It combines new semiconductor technology, innovative color–mixing algorithms and latest camera and display research achievements. It a brand–new weapon you can use for various film and television lighting applications.

Thunder soft light series include three models: Thunder One, Thunder Lite and Thunder Mini, varied in light aperture and power consumption. Among them, Thunder One has a light aperture of  $3.2' \times 1.6'$ , Thunder Lite has a light aperture of  $1.6' \times 1.6'$ . Thunder Mini is a hand-hold small panel, with a light aperture of  $0.7' \times 0.3'$ .

Thunder series output sun-like light with a correlated color temperature (CCT) ranging from 2,700K to 10,000K. All colors are rendered in a natural way. The CRI is above 95 on average, up to 97.CCT mode also provides Green/Magenta fine tuning to match the true color of the ambient light. Besides sun-like spectrum, Thunder doesn't believe that sunlight is the only criterion of film and television lighting. Thunder introduces the latest camera and display research achievements, constructing spectra that never existed in the industry before, rendering colors in a fresher and more preferred way than they are under the sunlight. Advanced modes allow users freely adjust the saturation level of objects or skin tone, without changing the appearance of the light itself, which largely reduces the labor of white balancing after film shooting. Moreover, Thunder supports gel simulation and dynamic lighting effect simulation, all for various needs of film lighting professions.

Thunder One supports standard DMX512 protocol, with options of wired DMX, wireless DMX and mobile app via Bluetooth. A built-in power solution allows for extreme portability. The tremendous lumen output, the precise colors, the flicker-free continuous light — all of the carefully designed and manufactured features make Thunder One a perfect source for soft light applications.

### THUNDER ONE · Specifications



#### THUNDER ONE · Photometrics Data

Distance	1m/3.28f	t	3m/9.8f	:	5m/16.4f	t	7m23	ft	9m/29	).5ft
CCT	3200k	5600k	3200k	5600k	3200k	5600k	3200k	5600k	3200k	5600k
Illuminance	17820 lx	16780 lx	1730 lx	1827 lx	627 lx	652 lx	340 lx	347 lx	216 lx	220 lx
	1656 fc	1559 fc	161 fc	170 fc	58 fc	61 fc	31 fc	32 fc	20 fc	20 fc

#### THUNDER ONE

Optical system	Soft Light Panel
Light Aperture	3.2'x1.6'
Weight	Approx. 16.6kg/36.6lbs(including built-in power supply)
Handling	Aluminum Yoke, Tilt Lock
Mounting	28mm Spigot (Junior Pin)
Tilt Angle	±90°
White Light	2700K ~ 10000K with each step of 50K
Color Light	Full RGB+W+A Gamut, with user defined white point
Color Temperature Tolerance	+/-50 (nominal),+/-1/10 Green/Magenta (nominal)
Color Rendering (Thunder One)	Ra>95, TLCI>92 (average)
Color Rendering (Thunder One Pro)	Ra>98, TLCI>99 (average)
Green/Magenta Adjustment	Duv -0.015~0.015 with each step of 0.00015
Dimming	0~100% dimming with each step of 0.1%
Power Supply Input Range	100 to 240V, 50/60Hz
Power Consumption	450~480 W
Control	On-board controller, 5 Pin DMX in/out,Bluetooth mobile app
Software interface	DMX setup, Firmware upgradable via flash drive
Operating Temperature	−20°C to +45°C
Estimated color shift over life time	3 SDCM
Estimated LED Lifetime (L70)	50,000 hours
Screen Luminance	Approx. 60,000 cd/m2
Screen Uniformity	>90%

1.All the values are nominal.

2. Technical data are subject to change without notice. All rights are reserved by Morph Lite Corp. and Chromatech Lighting Co., Ltd.

3. Visit www.thunderone.com for more information



## THUNDER LITE

Thunder Lite is a middle–size soft light panel among Thunder series. The light aperture is  $0.7' \times 0.3'$ , half the size of the Thunder One. Thunder Lite is more agile for varied film and television lighting applications.

Thunder series output sun-like light with correlated color temperature (CCT) ranging from 2,700K to 10,000K. All colors are rendered in a natural way. The CRI is above 95 on average, up to 97.CCT mode also provides Green/Magenta fine tuning to match the true color of the ambient light. Besides sun-like spectrum, Thunder doesn't believe that sunlight is the only criterion of film and television lighting. Thunder introduces the latest camera and display research results, constructing spectra that never existed in the industry before, rendering colors more vivid than they are under the sunlight. Advanced modes allow the users freely editing the colors of objects, without changing the appearance of the light itself, which largely reduces the labor of white balancing after film shooting. Moreover, Thunder supports gel simulation and dynamic lighting effect simulation, all for varied needs of film lighting professions.

Thunder Lite supports standard DMX512 protocol, with options of wired DMX, wireless DMX and mobile app via Bluetooth. A built-in power solution allows for extreme portability. The tremendous lumen output, the precise colors, the flicker-free continuous light — all of the carefully designed and manufactured features make Thunder Lite a perfect source for soft light applications.

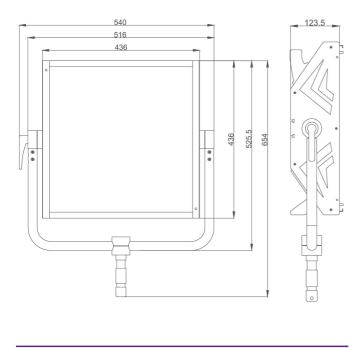








### THUNDER LITE · Specifications



#### THUNDER LITE

Optical system	Soft Light Panel
Light Aperture	1.6'x1.6'
Weight	Approx. 9kg/19.8lbs (including built-in power supply)
Handling	Aluminum Yoke, Tilt Lock
Mounting	28mm Spigot (Junior Pin)
Tilt Angle	±90°
White Light	2700K ~ 10000K with 50K step
Color Light	Full RGB+W+A Gamut, with user defined white point
Color Temperature Tolerance	+/-50 (nominal),+/-1/10 Green/Magenta (nominal)
Color Rendering	CRI>95 (nominal)
Green/Magenta Adjustment	Duv-0.015~0.015 with 0.0005 each step
Dimming	0~100% dimming with 0.1% each step
Power Supply Input Range	100 to 240V, 50/60Hz
Power Consumption	250~300 W
Control	On-board controller, 5 Pin DMX in/out,Bluetooth mobile app
Software interface	DMX setup, Firmware upgradable via flash drive
Operating Temperature	−20°C to +45°C
Estimated color shift over life time	3 SDCM
Estimated LED Lifetime (L70)	50,000 hours
Screen Luminance	Approx. 60,000 cd/m2
Screen Uniformity	>90%

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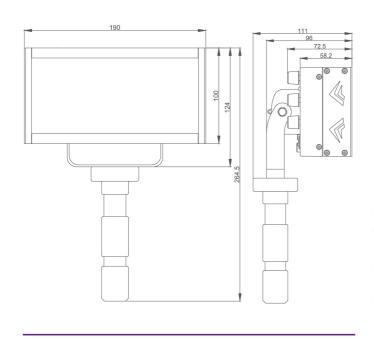
## **THUNDER MINI**

Thunder Mini is a small–size light panel most for hand–hold usage. The light aperture is 0.7'x0.3'. With the extreme portability, it is suitable for small scene lighting applications or as an auxiliary light source.

Thunder Mini outputs sun-like light with a correlated color temperature (CCT) ranging from 2,700K to 10,000K. All colors are rendered in a natural way. The CRI is above 95 on average, up to 97.CCT mode also provides Green/Magenta fine tuning to match the true color of the ambient light. Thunder Mini also supports dynamic lighting effect simulation. The light can be control either by on-board controller or Bluetooth app.



### THUNDER MINI · Specifications



#### THUNDER MINI

Optical system	Soft Light Panel
Light Aperture	0.7'x0.3'
Weight	1.2kg/2.65 lbs(not including power supply)
Handling	Aluminum Yoke, Tilt Lock or hand-hold
Mounting	28mm Spigot (Junior Pin)
Tilt Angle	±90°
White Light	2700K ~ 10000K with each step of 50K
Color Light	Full RGB+W+A Gamut
Color Temperature Tolerance	+/-50 (nominal),+/-1/10 Green/Magenta (nominal)
Color Rendering	CRI>95 (nominal)
Green/Magenta Adjustment	Duv-0.015~0.015 with each step of 0.00015
Dimming	0~100% dimming with each step of 0.1%
Power Supply Input Range	100 to 240V, 50/60Hz
Power Consumption	20 W
Control	On-board controller, Bluetooth mobile app
Operating Temperature	-20°C to +45°C
Estimated color shift over life time	3 SDCM
Estimated LED Lifetime (L70)	50,000 hours
Screen Luminance	Approx. 60,000 cd/m2
Screen Uniformity	>85%

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## SPOT-200C

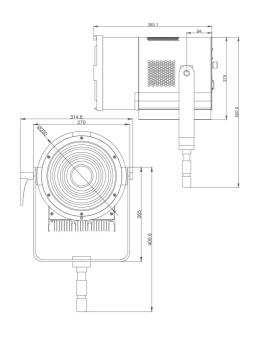
Spot-200C is a high-power LED Fresnel spotlight. Spot-200C provides spot-to-flood continuous focusing with smooth transition and uniform light field. The light aperture is 200 mm/8 inches. Whether it is a small interview or a large TV show, the SPOT-200C always provides the right light.

Spot-200C series output sun-like light with a correlated color temperature (CCT) ranging from 2,700K to 10,000K. All colors are rendered in a natural way. The CRI is above 95 on average, up to 97.CCT mode also provides Green/Magenta fine tuning to match the true color of the ambient light. Besides sun-like spectrum, Spot-200C doesn't believe that sunlight is the only criterion of film and television lighting. Spot-200C introduces the latest camera and display research achievements, constructing spectra that never existed in the industry before, rendering colors in a more vivid way than they are under the sunlight. Advanced modes allow users freely editing the colors of objects, without changing the appearance of the light itself, which largely reduces the labor of white balancing after film shooting. Moreover, Spot-200C supports gel simulation and dynamic lighting effect simulation, all for the needs of lighting professions.

Spot–200C supports standard DMX512 protocol, with options of wired DMX, wireless DMX and mobile app via Bluetooth. A built–in power solution allows for extreme portability. The tremendous lumen output, the precise colors, the flicker–free continuous light — all of the carefully designed and manufactured features make Spot–200C a perfect source for spot/hard light applications.



#### SPOT-200C · Specifications



#### SPOT-200C

Optical system	Fresnel Spot Light
Lens diameter	200mm/7.87 inches
Beam angle (half angle)	15°~50°
Weight	Approx. 5kg/11 lbs (including power supply)
Handling	Aluminum Yoke, Tilt Lock
Mounting	28mm Spigot (Junior Pin)
Tilt Angle	±90°
White Light	2700K ~ 10000K with each step of 50K
Color Light	Full RGB+W+A Gamut, with user defined white point
Color Temperature Tolerance	+/-50 (nominal),+/-1/10 Green/Magenta (nominal)
Color Rendering	CRI>95 (nominal)
Green/Magenta Adjustment	Duv-0.015~0.015 with each step of 0.00015
Dimming	0~100% dimming with each step of 0.1%
Power Supply Input Range	100 to 240V, 50/60Hz
Power Consumption	200~230 W
Control	On-board controller, 5 Pin DMX in/out, Bluetooth mobile app
Software interface	DMX setup, Firmware upgradable via flash drive
Operating Temperature	−20°C to +45°C
Estimated color shift over life time	3 SDCM
Estimated LED Lifetime (L70)	50,000 hours

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