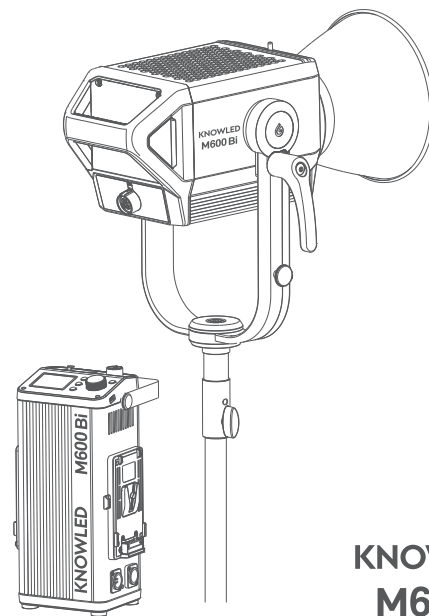




Godox



KNOWLED M600 Bi

双色温LED影视灯
Knowled M600Bi Bi-color LED Light

说明手册
Instruction Manual



Wechat
Official Account
神牛微信公众号

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www.godox.com

Made in China | 705-M600BY-00



Foreword

Thank you for purchasing!

Godox M600Bi is a LED Light product with superior performance. It has a separation design of light body and controller, high power, thousand-bit brightness adjustment, various dimming curves and 2800K-6500K CCT, quite suitable for large photo studios, broadcast studios, Outdoors or large-scale field scenes.

Main Features

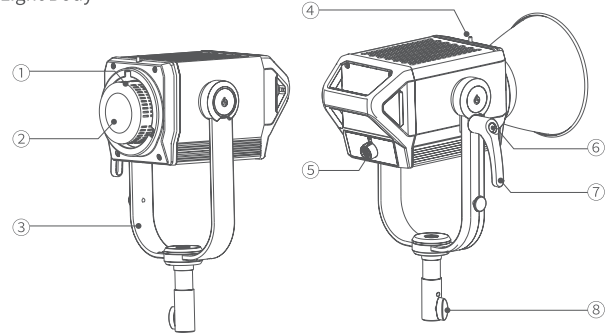
- 600W input power to create bright light output.
- Brightness adjustment is accurate to 0.1%, controlling the brightness in subtle scenes.
- 4 dimming curves: linear, S-curve, exponential, and logarithmic.
- Wide CCT range from 2800K to 6500K.
- Bowens mount is perfectly compatible with more optical accessories.
- Various professional control methods: Bluetooth control/DMX512 remote control/2.4G wireless control.
- Super high color rendering index: CRI: ≥ 96 , TLCI: ≥ 97
- 21 simulated scenes light effects: flash, lightning, TV, broken bulb, candle, fire, firework, etc.
- Two power supply methods: AC power supply (100V~220V) and V-mount battery power supply (14.8V or 26V).
- The side with yellow battery removal button supports unilateral power supply.
- 2.4 inches TFT panel, 4 buttons, 1 knob, clear UI interface.

Warning

- ⚠ Always keep this product dry. Do not use in rain or in damp conditions.
- ⚠ Do not disassemble. Should repairs become necessary, this product must be sent to an authorized maintenance center.
- ⚠ Keep out of reach of children.
- ⚠ As this product do not have waterproof function, please take measures of waterproof in rainy or damp environment.
- ⚠ Do not leave or store the product if the ambient temperature reads over 40°C.
- ⚠ Do not use the product in the presence of flammable gases, chemicals and other similar materials.
- ⚠ **CAUTION: Hot parts!** When the product is always on and flickering, please do not touch the high temperature part of the LED head.
- ⚠ When replacing product accessories, please turn off the LED light and perform a cold cut.
- ⚠ The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
- ⚠ The lamp shall be changed if it has become damaged or thermally deformed.
- ⚠ The luminaire is intended for professional use only.

Name of Body

Light Body

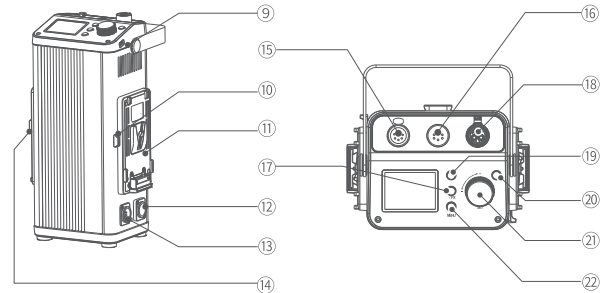


1. Bowens Mount
2. LED Bead
3. Metal U-bracket

4. Mount Fixing Pusher
5. DC INPUT Port
6. Handle Direction Adjustment Button

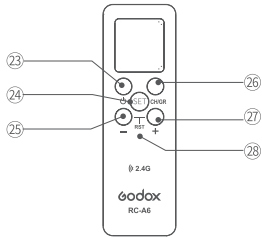
7. Locking handle
8. Sleeve Knob

Controller



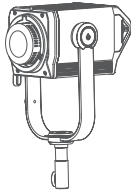
- 9.Type-A USB Port
- 10.Black Battery Removal Button
- 11.V-mount Battery Box
- 12.AC INPUT Port
- 13.48V DC Port
- 14.Yellow Battery Removal Button
- 15.DMX OUT XLR Port
- 16.DMX IN XLR Port
- 17. **FX** Button
- 18.DC OUTPUT Port
- 19.Fan Switch Button
- 20.Power Switch Button
- 21.SET Adjustment Knob
- 22.Menu Button

Remote Control (Separately Sold Accessory)



- 23.Power Switch Button
- 24.SET Setting Button
- 25.Reduction Button
- 26.CH/GR Button
- 27.Increase Button
- 28.RST- Reset Mark (Press Reduction Button and Increase Button simultaneously to reset)

What's in the Box



Light Body *1



Connecting Cord*1



5m Power Cord*1



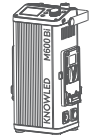
Connecting Cord Fixed Rope*1



Controller Clamp *1



Lamp Cover *1



Controller *1



Standard Reflector RFT-19 *1



Instruction Manual *1



Portable Bag *1

Separately Sold Accessories

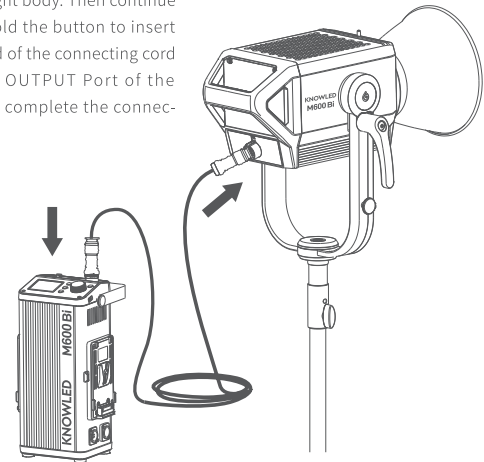
Better shooting effects and using experience matched with following accessories: Fresnel Attachment for COB LED lights FLS10, Safety Wire Rope and RC-A6 Remote Control.



Installation and Disassembly Guide

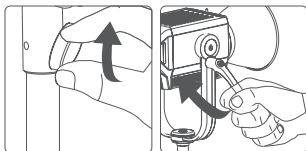
1. Connect the controller and the light body

Press and hold the spring latch button of the connecting cord, insert the connecting cord into the DC INTPUT Port of the light body. Then continue press and hold the button to insert the other end of the connecting cord into the DC OUTPUT Port of the controller to complete the connection.



2. Mounted on the tripod

Adjust the light body to a proper angle, rotate the screw of sleeve knob to install the light body on the tripod, then rotate the screw of sleeve knob to fix the light body on the tripod. The inclination angle of the light body could be adjusted by loosening the bracket angle adjustment handle and then screwing down the handle afterwards.

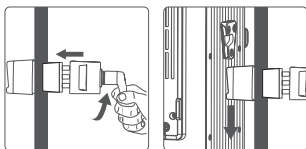


Note: The tripod belongs to separately sold accessories.

Tips: Press the handle direction adjustment button to adjust the handle by 360°.

3. Mounted on the light stand

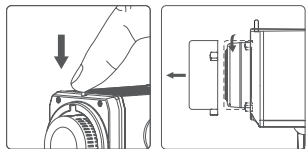
Loosen the handle of the controller clamp, then insert the light stand and rotate the handle to tighten. Finally, insert the V port of the controller into the clamp slot.



Tip: Press and hold the mount fixing pusher can easily remove the controller.

4. Installation and disassembly the lamp cover

Installation: Press the Mount Fixing pusher top-down, put the lamp cover on Bowers Mount, and rotate clockwise to tighten it.

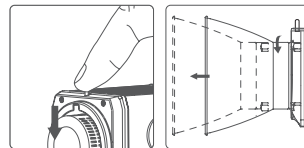


Disassembly: Press the Mount Fixing pusher top-down, then rotate counter-clockwise to remove it.

Note: Make sure to remove the lamp cover before use to avoid overheating damage. Put on the lamp cover to protect the lamp when not in use.

5. Installation and disassembly the standard reflector

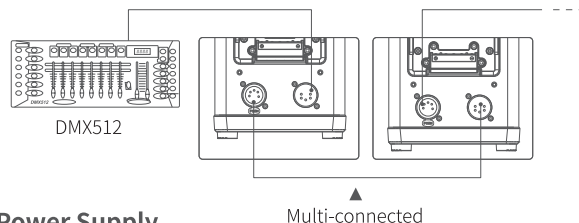
Installation: Press the Mount Fixing pusher top-down, put the standard reflector on Bowers Mount, and rotate clockwise to tighten it.



Disassembly: Press the Mount Fixing pusher top-down, then rotate counter-clockwise to remove it.

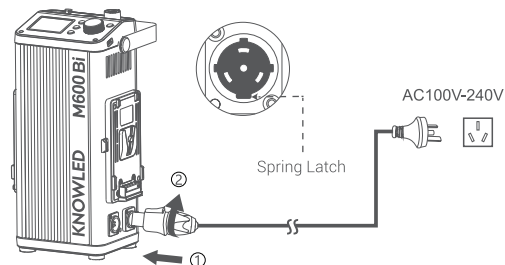
Connected to DMX Controller

The Connection operation diagram of Controller and DMX Controller is as follows:



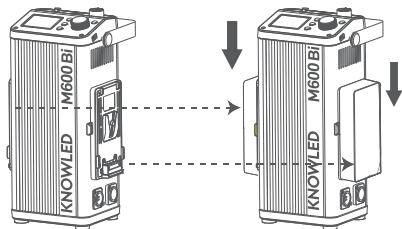
Power Supply

1. AC Power Supply



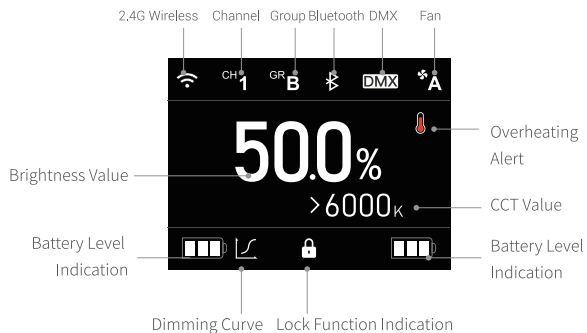
Note: Please press the latch button when installing or disassembling the power cord and connecting cord.

2.V-mount battery power supply



Note: The light can be supplied by 14.8V or 26V V-mount battery. Only the side with yellow battery removal button supports unilateral charging, one with. When it is powered by two batteries and one of which is low, the device still can't work normally even if the other one is full. The corresponding battery icon will blink in low battery mode. It is recommended to check whether both batteries have sufficient power when using two batteries.

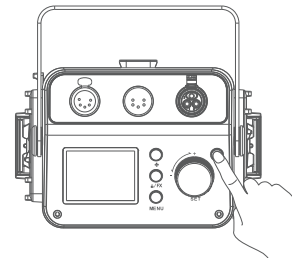
Display Screen



Connected to DMX Controller

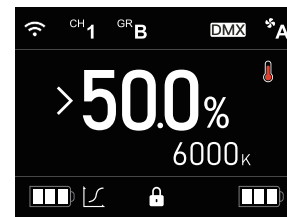
1. Turn On/Off

Press the controller < ⏻ > Button for 1 second after connecting to the power supply to turn on or off.



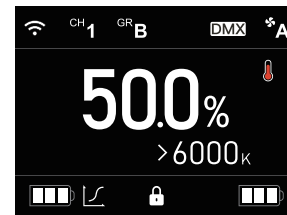
2. Brightness Adjustment (thousand-bit adjustment)

Turn the SET adjustment knob on the main interface to adjust brightness from 0% to 100%, with an increment of 0.1% in each level. Rotate clockwise to increase brightness, and counterclockwise to decrease brightness. The brightness will increase or decrease by 0.1% unit in normal rotation speed; and increase or decrease by 1% unit in rapid rotation speed; and increase or decrease by 10% unit if press and rotate.



3. CCT Adjustment

Short press SET adjustment knob on the main interface to make the arrow aimed at the CCT value, then turn it to adjust CCT from 2800K to 6500K, with a increase or decrease of 100K in normal rotation speed and 500K in rapid rotation speed.



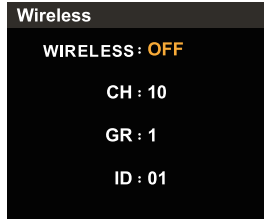
4. Menu Setting

Short press < MENU > Menu Button to enter the menu interface, displayed in order with Wireless, Bluetooth, DMX, Fan , Dimmer, Screen Bright, Language,Reset, Version & Update.

Turn and short press the SET adjustment knob on the menu interface to select and enter the corresponding setting options interface.

4.1 Wireless

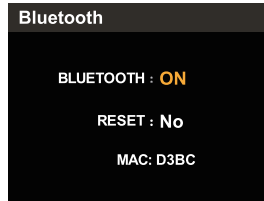
The Wireless interface is displayed in order with Wireless , CH, GR and ID. Short press & turn the SET adjustment knob to complete the settings of Wireless Switch, Channel, Group and ID.



4.2 Bluetooth

The Bluetooth Setting interface is displayed in order with Bluetooth , Reset and MAC.

Short press & turn the SET adjustment knob to complete the settings of Bluetooth Switch and Bluetooth Reset.

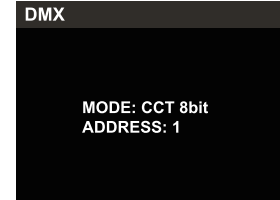


For more smartphone APP operations, please open the "help" in "GodoxLight" APP to gain detailed guidance.

Note: the APP can be used directly on the firstly installed device (smartphone or tablet). When changing to other mobile device, the light shall be reset before the normal usage of APP.

4.3 DMX

The DMX Setting interface is displayed with Mode and Address. Short press the SET adjustment knob to choose between mode and address, then turn it to set mode and address.



DMX Mode

Mode	Channel	Function	DMX Value	Parameter		
CCT 8bit	1	Brightness	0 – 255	0% – 100.0%		
	2	Color temperature	0 – 255	2800K – 6500K		
FX 8bit	2	Light effect type	0 – 255	0% – 100%		
			0 – 36	Flash		
			37 – 73	Lightning		
			74 – 109	Broken Bulb		
			110 – 146	TV		
			147 – 183	Candle		
	184 – 219	Fire				
	220 – 255	Fireworks				
	3	Light effect level	0-85	I		
			86-171	II		
172-255			III			
CCT 16bit	1	Brightness	0 – 65535	0% – 100.0%		
	2					
	3					
	4				Color temperature	0 – 65535
FX 16bit	2	Brightness	0 – 65535	0% – 100.0%		
					0 – 36	Flash
					37 – 73	Lightning
					74 – 109	Broken Bulb
					110 – 146	TV
					147 – 183	Candle
	184 – 219	Fire				
	220 – 255	Fireworks				
	4	Light effect level	0-85	I		
			86-171	II		
172-255			III			
ULTIMATE 8bit	1	Brightness	0 – 255	0% – 100.0%		
	2	Mode selection	0 – 51	CCT		
	3		52-255	FX		
	4			Mode Parameter (refer to table below)		

ULTIMATE 8bit Mode Parameter	Channel	Function	DMX Value	Parameter
CCT Mode Parameter	3	CCT	0 – 255	2800K – 6500K
FX Mode Parameter	3	Light effect type	0 – 36	Flash
			37 – 73	Lightning
			74 – 109	Broken Bulb
			110 – 146	TV
			147 – 183	Candle
			184 – 219	Fire
			220 – 255	Fireworks
			0-85	I
4	Light effect level	86-171	II	
		172-255	III	

Mode	Channel	Function	DMX Value	Parameter
ULTIMATE 16bit	1	Brightness	0-65535	0% – 100.0%
	2			
	3	Mode selection	0 – 51	CCT
			52-255	FX
	4	Mode Parameter (refer to table below)		
	5			

ULTIMATE 16bit Mode Parameter	Channel	Function	DMX Value	Parameter
CCT Mode Parameter	4	CCT	0 – 65535	2800K – 6500K
FX Mode Parameter	4	Light effect type	0 – 36	Flash
			37 – 73	Lightning
			74 – 109	Broken Bulb
			110 – 146	TV
			147 – 183	Candle
			184 – 219	Fire
			220 – 255	Fireworks
			0-85	I
	5	Light effect level	86-171	II
			172-255	III

Calculation formula:

Brightness

8bit

$$\text{DMX value} = \frac{\text{Brightness value}}{0.3922}$$

$$\text{Brightness value} = \text{DMX value} \times 0.3922$$

16bit

$$\text{DMX value} = \frac{\text{Brightness value}}{0.001526}$$

$$\text{Brightness value} = \text{DMX} \times 0.001526$$

CCT

8bit

$$\text{DMX value} = \frac{\text{CCT value} - 2800}{14.51}$$

$$\text{CCT value} = \text{DMX value} \times 14.51 + 2800$$

16bit

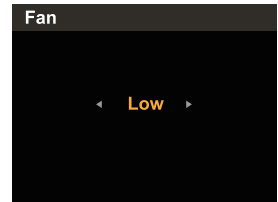
$$\text{DMX value} = \frac{\text{CCT value} - 2800}{0.056458}$$

$$\text{CCT value} = \text{DMX value} \times 0.056458 + 2800$$

4.4 Fan

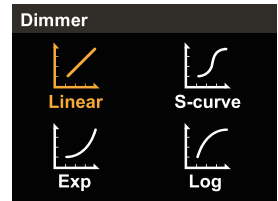
Turn the SET adjustment knob on the Fan Setting interface to choose Cooling Mode, Off Mode, Low-Speed Cooling Mode, High-Speed Cooling Mode.

Note: Enter mute mode when turning off the fan.



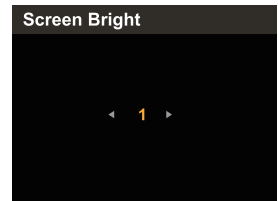
4.5 Dimmer

Turn the SET adjustment knob on the Dimming Curve Setting interface to choose linear/S-curve/exponential/logarithmic dimming curve.



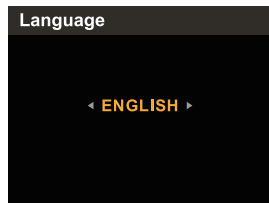
4.6 Screen Bright

Turn the SET adjustment knob on the Screen Bright setting interface to choose 1, 2, 3 levels of screen brightness.



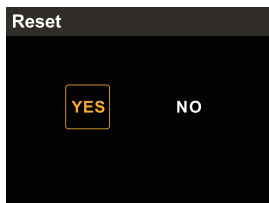
4.7 Language

Turn the SET adjustment knob on the Language Setting interface to choose English or Simplified Chinese.



4.8 Reset

Turn the SET adjustment knob on the Restore Factory Setting interface to choose "Yes" or "No" and short press to confirm. If you choose "Yes", the system will initiate resetting program and resetting progress bar is displayed on the screen, after which it will return to the main interface.



4.9 Version & Update

The Version Code displayed on the Version & Update interface is the firmware version of the product.



5. Light Effect Setting

Short press <⏸/FX> button to enter FX Light Effect interface, turn the SET adjustment knob to choose among 21 effects: flash, lightning, broken bulb, TV, candle, fire and firework.

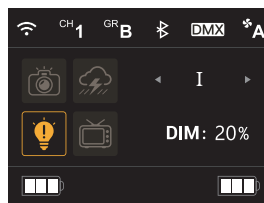
Note: Short press the SET adjustment knob to change the rate and adjust brightness after choosing one of the above Light Effects.



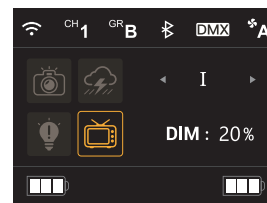
Flash Mode



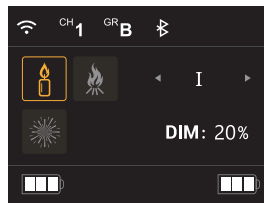
Lightning Mode



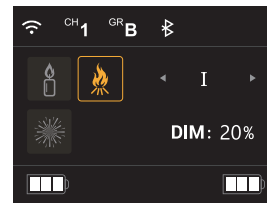
Broken Bulb Mode



TV Mode



Candle Mode



Fire Mode



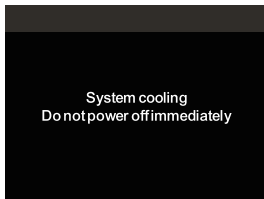
Firework Mode

Tip: Long press <Lock/FX> button for 3 seconds to lock or unlock.

Status Description

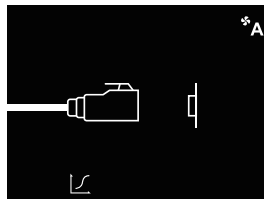
Long Term Use

1. Do not cut off the power immediately when the product is turned off after a long period of operation. The controller will automatically enter cooling state, and "System cooling, do not power off immediately" is displayed on the panel. You can cut off the power after system cooling is done and the screen turns black.



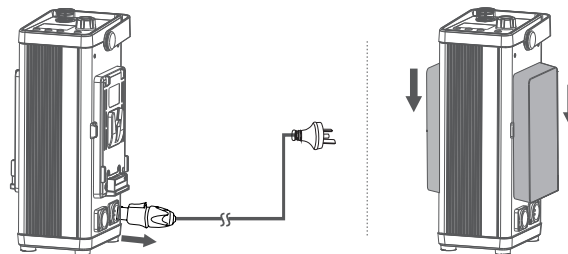
Connecting Cord Issue

2. When the connecting cord is not correctly connected to the light or controller, a separated icon of connecting cord and device is displayed on the panel. Please check the connecting ports of the controller and light.



Switch from AC Power Supply to V-Mount Battery Power Supply

3. Unplug the power cord and install V-mount battery then turn on the product.



Note: If you install the V-mount battery before unplugging the power cord, and the brightness value is set higher than the maximum brightness that the battery can be turned on, then you switch to V-mount battery power supply by unplugging the power cord, the light and the controller will automatically power off. The machine can only resume normal operation after reboot.

Maximum Brightness in Different States

CCT mode: Maximum Brightness (%) in Auto Cooling Mode or High-Speed Cooling Mode when supplied by V-mount battery

V-mount battery	linear	S-curve	exponential	logarithmic
14.8V(single)	20%	30%	50%	4%
14.8V(double)	40%	43%	72%	8%
26V(single)	30%	38%	63%	5%
14.8V+26V	50%	48%	78%	10%
26V(double)	60%	50%	84%	15%

CCT mode: Maximum Brightness (%) in Fan Off Mode when supplied by V-mount battery

V-mount battery	linear	S-curve	exponential	logarithmic
14.8V(single)	20%	30%	50%	4%
14.8V(double)	25%	35%	55%	4%
26V(single)	25%	35%	55%	4%
14.8V+26V	25%	35%	55%	4%
26V(double)	25%	35%	55%	4%

CCT mode: Maximum Brightness (%) in Low-Speed Cooling Mode when supplied by V-mount battery

V-mount battery	linear	S-curve	exponential	logarithmic
14.8V(single)	20%	30%	50%	4%
14.8V(double)	40%	43%	72%	8%
26V(single)	30%	38%	63%	5%
14.8V+26V	50%	48%	78%	10%
26V(double)	50%	48%	78%	10%

CCT mode: Maximum Brightness (%) in different Fan Mode when supplied by AC power

Fan Mode	linear	S-curve	exponential	logarithmic
Auto Cooling	100%	100%	100%	100%
Off	25%	35%	55%	4%
Low-Speed Cooling	50%	48%	78%	10%
High-Speed Cooling	100%	100%	100%	100%

FX mode: Maximum Brightness (%) in different Fan Mode when supplied by AC power

Auto Cooling	100%
Off	25%
Low-Speed Cooling	50%
High-Speed Cooling	100%

FX mode: Maximum Brightness (%) in different Fan Mode when supplied by V-mount battery

V-mount battery	Auto Cooling	Off	Low-Speed Cooling	High-Speed Cooling
14.8V(single)	20%	20%	20%	20%
14.8V(double)	40%	25%	40%	40%
26V(single)	30%	25%	30%	30%
14.8V+26V	50%	25%	50%	50%
26V(double)	60%	25%	50%	60%

Note: The dimming curve is not adjustable in FX mode, it is linear in default. The above data is based on 26V 270Wh 10.5Ah battery and 14.8V 150Wh 10.2Ah battery.

Software Upgrade

1. Download the new firmware to the U disk from the official website (<http://www.godox.com.cn/Downloads.html>).
2. Turn off the LED light. Insert the U disk with new firmware into the USB upgrade port.
3. Turn on the LED Light, and it will automatically enter the upgrading interface..
4. It will return to main interface after completion.

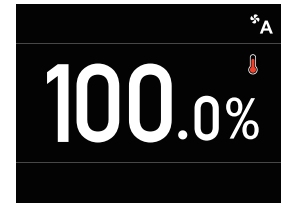
Notes:

1. New firmware must be downloaded from the official website, and keep only one BIN file in the root directory of the USB disk.
2. The USB port can only support firmware upgrade function.


Over-Temperature Protection

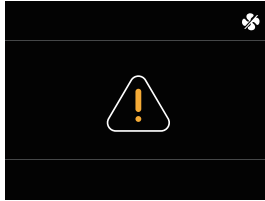
If the temperature of the light body is too high, the Over-Temperature Protection icon flashes on the main interface, the light body can be used normally.

If the temperature of the light body exceeds the limit of Over-Temperature Protection, the Over-Temperature Protection icon flashes on the main interface and the screen works properly after the light goes out in 3 seconds. When the temperature decreases to 50°C, the Over-Temperature Protection icon disappears, then the light body can resume working.



Fan Troubleshooting

If  icon appeared and blinking and fan off icon is also appeared on the display, It might be the fan failure. Please contact with customer service.



Maintenance

This product, except consumables e.g. adapter and power cable, is supported with one-year warranty.

Maintenance of the light must be performed by our authorized maintenance department which can provide original accessories.

Unauthorized service will void the warranty.

If the product breaks down or gets wet, please do not use it until repaired by professionals.

If there is anything abnormal during LED light' s working, please turn it off immediately and identify the reasons.

Illuminance Testing Data

M600Bi					
CCT	Testing Condition	Illuminance Unit	1m	3m	5m
2800K	Bare Light	lux	16100	2010	804
		fc	1500	187	74.7
	With Reflector	lux	135000	12100	4200
		fc	12600	1120	390
3200K	Bare Light	lux	19500	2400	953
		fc	1810	223	88.5
	With Reflector	lux	164000	14300	5050
		fc	15200	1330	469
4300K	Bare Light	lux	22400	2750	1090
		fc	2080	255	101
	With Reflector	lux	186000	16500	5790
		fc	17300	1530	538

5600K	Bare Light	lux	23900	2930	1160
		fc	2220	272	108
	With Reflector	lux	198000	17500	6170
		fc	18400	1620	573
6500K	Bare Light	lux	23600	2870	1140
		fc	2190	267	106
	With Reflector	lux	192000	17100	6060
		fc	17900	1590	563

Collocated with Fresnel lens FLS10					
CCT	Testing Condition	Illuminance Unit	1.5m	3m	5m
2800K	Focusing	lux	107000	27100	9360
		fc	9910	2520	870
	Diffusing	lux	36000	9540	3440
		fc	3340	886	319
3200K	Focusing	lux	129000	32700	11300
		fc	12000	3040	1050
	Diffusing	lux	43500	11500	4160
		fc	4040	1070	386
4300K	Focusing	lux	149000	37700	13100
		fc	13800	3500	1210
	Diffusing	lux	50400	13300	4810
		fc	4690	1240	447
5600K	Focusing	lux	159000	40100	14000
		fc	14700	3730	1300
	Diffusing	lux	53500	14200	5130
		fc	4970	1320	476
6500K	Focusing	lux	155000	39400	13700
		fc	14400	3660	1270
	Diffusing	lux	52500	13900	5020
		fc	4880	1290	466

All the above tests are based on the condition of 100% brightness.

Technical Data

Model	M600Bi
Power	730W (Max)
Controller Power Input	AC 100~240V 50/60Hz 7.5 (Max.)

Light Head Input	48V \approx 13A
V-mount battery (optional) Specifications	14.8V, 150Wh / 26V, 260Wh
Channel	32(1~32)
Group	16(0~9, A~F)
ID	1~99, OFF
Color-Temperature	2800K-6500K
CRI	\geq 96
TLCI	\geq 97
Working Environment Temperature	-20°C~40°C
FX Light Effect	21 kinds within 7 types
Controlling Method	Support DMX512 , 2.4G Wireless Control, Bluetooth APP
Dimming Curve	4 types: linear/S-curve/exponential/logarithmic
Mute Mode	YES
2.4G Wireless Control Distance	\approx 60m
Bluetooth Transmission Distance	\approx 30m
Display Screen	2.4 inches
Light Body Dimension	481.3*242.8*152.9mm
Controller Dimension	332.4*121.6*179.2mm
Light Body Weight	4.96kg
Controller Weight	3.74kg
2.4GHz Transmission Frequency	2412MHz~2464.5MHz
Bluetooth Transmission Frequency	2402.00~2480.00MHz
Maximum Transmit Power	5dbm

* Product design and specifications are subject to change without notice.

Maintenance

This product, except consumables e.g. cable, is supported with a one-year warranty.

Avoid sudden impacts and the product should be dedusted regularly.

Maintenance of the flash must be performed by our authorized maintenance department which can provide original accessories.

Unauthorized service will void the warranty.

If the product had failures or was wetted, do not use it until it is repaired by professionals.

Changes made to the specifications or designs may not be reflected in this manual.

FCC 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any 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 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.

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction.

Warning

Operating frequency:2412.99MHz – 2464.49MHz(2.4G only receive)/2402MHz – 2480MHz (BT)
Maximum EIRP Power: 7.53dBm

Declaration of Conformity

GODOX Photo Equipment Co.,Ltd. hereby declares that this equipment are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), this product is allowed to be used in all EU member states.For more information of DoC, Please click this web link:

<https://www.godox.com/eu-declaration-of-conformity/>

The device complies with RF specifications when the device used