

MAGIC TUBE

Instruction Manual of MAGIC-Tube

This product manual contains important information about the safe installation and use of this product.Please read and follow these instruction carefully and keep this manual in a safe place for future reference.



1 Understanding of Product

1.1 Security Warning

- When unpacking and before disposing of the carton, check if there is any transportation damage before using the product. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.
- Product should install in a cool place. Keep away from the wall 50cm.
- Do not install the product or project the beam onto inflammable surfaces. Minimum distance is 5 M
 5 M
- The product is only intended for installation, operation and maintenance by qualified personnel. And read the user manual and labels on the lighting carefully before use.
- Do not look directly at the lamp light (especially for epilepsy), so as not to cause damage to the eyes.
- Keep the optical system clean. Do not touch the LED lens with bare hands. Do not use any alcohol liquid or any other liquid to clean the optical system. Use medicinal absorbent cotton to clean it.
- Please do not attempt to dismantle and/or modify the product inner structure. Otherwise, would not
 provide 1 year of free warranty.
- Electrical connection must only be carried out by qualified personnel.
- Before installation, ensure that the voltage and frequency of power supply match the power requirement of the product.
- It is essential that each product is correctly earthed and that electrical installation conforms to all relevant standards.
- Do not connect this device to any other types of dimmer apparatus.
- Make sure that the power-cord is never crimped or damaged by sharp edges.Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug.Never pull out the plug by tugging the power-cord.
- There is no user serviceable parts inside the product, do not open the housing and never operate the product with the cover removed.
- There are protection structure and circuit for the battery inside the unit, any inappropriate dismount of the light or battery might break the protection function and lead to batter getting hot, smoking, deforming or fire.
- Never short-circuit the unit.
- Heating and burning will melt the battery separator, causing loss of protection function or burning of electrolyte and overheat will cause heating, smoking, deformation or burning of batteries.
- Never use the unit in an environment over 40°C, not to charge the unit close to fire source or under direct sun. Even never wet or throw the unit to water, otherwise, the protection function inside the batter might lose or abnormal chemical reaction might arise, causing battery to be hot, smoking, deformation or fire.
- It is dangerous charging not to use the supplied power adapter.
- Never break the light or battery, not to weld the battery or dismount the battery to be used in other equipment, not to touch the leaked battery electrolyte.
- Place the unit where kids can't reach.

- If the charging time over the standard charging time for long, it is advised to stop charging. It will extend the charging time if charging while using, it is advised to turn off the light when charging.
- Never place the unit inside microwave oven or any pressure container, instant heating or leakage (or abnormal smell), the unit should be abandoned and treated properly.
- Not to use the unit in an environment where there is static electricity, the battery protection circuit might easily get broken if the static electricity is over 1000V, causing battery working abnormally, heating, smoking, deforming or fire.
- When using, keep away of hot source, high pressure, avoid kids, never throw or hit the unit.
- Use the supplied power adapter only, never charging over 24 hours.
- When not using the unit for long term, please save the unit properly in a dry place, battery should be half charged.
- Please bury the used unit, never throw to fire or water.

If you have any questions, don't hesitate to consult our dealer or manufacturer.

Important: Before any installation, maintenance and cleaning, please ensure that the power cut off!

1.2 Main Technical Parameters

Lithium battery

- Charging Voltage: DC12.6V/2A
- Battery Specification: 21700 4.2V/4.5Ah*12 cells (12.6V/18Ah)
- Charge Time: 8~10 hours
- Circulation Life: Not less than 300 times
- > Run Time Of Battery : Max. 20h

LED

- LED Type: 288pcs x0.3Watts RGBW 4in1 full-color LED
- Control Pixel: 32 Pixels
- Rated Power: 50W
- Colors: 16.7 million colors (0~100% saturation dimming)
- Life: 50000 hours

Control

- Control Protocol: International standard DMX-512 signal
- Channel Protocol: 7 kinds of control channel mode. 2CH; 4CH; 6CH; 11CH; 32CH -8 Pixels; 64CH
 -16 Pixels; 128CH -32 Pixels;
- Control Mode: DMX-512,auto,master-slave,music,infrared remote control,wireless DMX-512 and Mobile APP WIFI control.
- Wireless Protocol: W-DMX

Wireless DMX Specs

- > 2.4G Communication Distance: 200M (clearing, it changes vary with different environments)
- > WIFI Communication Distance: 30M (clearing, it changes vary with different environments)

- > Band: 2.4G ISM, 126 channel frequencies
- Maximum Transmit Power: 20dBm
- Receiver Sensitivity: -94dBm

Optical System

- Dimmer: From 0~100 linear dimming.
- Flashing Rate: 1~20Hz
- Beam Angle: 180°

Physical

- Dimensions: Ø52 x 1190 mm
- Weight: 1.72kg

Security

- Cooling System: Convection
- Waterproof Rate: IP65
- > Temperature Protection: 60°C
- > Operating Environment: Indoor / Outdoor

1.3 Product Features

Using the latest LED control technology. The newest intelligent LED pixel tube light can realize intelligent operation and control through its special menu at the back. This product is designed for stage and around event sites and can be used to create stunning lighting effects, it is affordable also very powerful battery LED tube, A highly creative device that offers an infinite range of possibilities. Its main features include:

- 1) Product built-in lithium battery and the DMX signal wireless module.
- 2) Product built-in WIFI receiving module, which can be controlled by mobile APP.
- 3) Wireless DMX with transceiver function.
- 4) With music control function.
- 5) Custom color temperature settings.
- 6) Built-in commonly used film and television shooting effects.
- 7) With charging protection and current overload protection.
- 8) Intuitive and convenient battery display function.
- 9) The static power consumption of the control panel is 0.3W, and its efficiency will reach up to 97% during the process of high power output, which realizes the function of eco-friendly operation.
- 10) Overheating automatic protection function.
- 11) IR infrared remote control panel.
- 12) Touch button and LCD display.
- 13) Password protected keyboard.
- 14) 7 kinds DMX working mode.
- 15) Built-in 68 kinds of Auto effect.
- 16) Master-slave control, multi-units for synchronous wireless control.
- 17) Software system updates&upgrades are available through DMX 512 or wireless DMX.

1.4 Product Packing Information

Following accessories are packed together with the product, please check them carefully upon unpacking.

Spare parts Name	QTY	Unit	Remark
Magic Tube Light	1	piece	
Charger	1	piece	
DMX signal cable IN&OUT	2	pieces	
Infrared remote controller	1	piece	
Instruction Manual	1	piece	

2 Product Installation

2.1 DMX Connection Method



When set the DMX512 address code be CH4 MODE, as below:

needed.

 DMX address code can be any data between 001 and 512.



2.2 2.4G-Wireless Master-Slave Connection Method

- Set the wireless DMX signal of the first light to the sending state (Master), and the wireless DMX signal of other lights to the receiving state (Slave).
- When the Slave is set to DMX512 control mode, running auto effect or other static colors on the Master to achieve the wireless master-slave synchronization.
- The DMX address code of the Master and Slave can be any data between 001 and 512 without affecting master-slave online.

2.3 Mobile APP WIFI Master-Slave Connection Method

As below:



- Establish wireless communication between WIFI control of mobile phone and WIFI control of lights according to 3.5.7.
- Set the wireless DMX signal of the first light to the sending state (Master), and the wireless DMX signal of other lights to the receiving state (Slave).
- When the Slave is set to DMX512 control mode, running auto effect or other static colors on the phone APP to achieve the wireless master-slave synchronization.
- The DMX address code of the Master and Slave can be any data between 001 and 512 without affecting master-slave online.

3 Operation Method

3.1 Back panel functions introduction



- M : Menu button/return button,enter the menu selection interface or previous menu.
- **E** : Confirmation button, used to confirm the selected function.
- ♦ ▲ / ▼: Upward/downward select function or Parameter increment / decrement.
- POWER IN DC12.6V/2A: Charging port, both available.
- DMX IN / OUT: DMX-512 signal Input / Output.

3.2 2.4G Wireless DMX Connection Method

3.2.1 Working mode

2.4G wireless DMX transceiver uses the W-DMX communication protocol which has two working modes: Transmit mode and Receive mode.

- Find [Set] menu and press [ENTER] to enter system settings menu.
- Press [UP/DOWN] key to select [Wireless 2.4g] to enter
 2.4g wireless DMX settings menu.
- [WIRELESS] for wireless DMX control ON/OFF.
 [CONNECT] means the paired connection of wireless DMX module. [RESET] means reset the data of wireless DMX control setting, [MODE] has transmitting mode and receiving mode.



WORKING MODE	ACTION	STATUS DESCRIPTION
	White	Connection is not established
W-DMX	Red fast flash	Connection is lost
Receive	Green fast flash	Connecting to transmitter
Receive	Green slow flash	Connected. Without DMX signal
	Green	Connected. Receiving DMX signal
	Red	Deleting all receivers' connection
W-DMX	Blue fast flash	Connecting with the Receiver(s)
Transmit	Blue slow flash	No DMX signal input
	Blue	Transmitting DMX signal

Note: The wireless transceiver will remember the chosen protocol even after you disconnecting the power supply. There is no need for repeated setting.

3.2.2 Working mode

- According to step 3.2.1 set the Slave to [Receive] mode.
- Select [Reset] menu to reset wireless connection. At this time, the indicator light is white, indicating that the wireless module is not connected to transmit module and is ready to receive the paired signal.
- According to step 3.2.1 set the Master to 【Transmit】 mode. At this time, the indicator light is blue slow flash, indicating that the wireless module is not connected to DMX signal.
- Select [Reset] menu to reset wireless connection. At this time, the indicator light is red, indicating that the connected receiving module is being deleted.
- Select 【CONNECT】 to transmit wireless paired signal, at this time the indicator light is blue fast flash.
- When the Slave receive the paired signal from Master, the indicator light is Green fast flash which means the connection is established.



3.3 Infrared Remote Controller Instruction



- ♦ Dimming up
- ♦ Dimming down
- ♦ Off light off
- ♦ ON light on
- ♦ R / G / B / W for 4 single color, A / UV (None)
- ♦ 9 number keys meas 9 kinds of static mix colour (AC1.....AC9)
- ♦ The "0" key for is to enter DMX-512 control state
- \diamond AUTO key is color change mode, press up and down key to adjust speed
- STROBE key is in color strobe mode (32 types are optional), press up and down key to adjust speed.
- ♦ FADE key is for color fading mode, press up and down key to adjust speed.
- SOUND key is for sound control mode, press up and down key to adjust the sound control sensitivity.

Note: The IR remote controller should be pointed at the IR infrared receiver. Otherwise, the light will not

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3.4 Menu Display



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3.5 Menu Overview

Main menu	Primary-menu	Sub-menu	Fu	nction	Note	
DMX Mode	001512		DMX address setting and Receive mode		DMX console mode	
		Auto Mode: 0-68	68 kinds of Auto effect			
	Auto	Speed: 1-16	1-16 from slow to	fast on speed setting	Auto mode	
	Auto	Color: 0-15	Color setting, 0	for automatic color	Automode	
			change, a to	otal of 15 colors		
		Sound Mode: 1-4	4 sound contro	ol modes optional		
	Sound	Sens: 1-100	Sound ser	sitivity setting	Sound mode	
	Sound	Color : 0-15	Color setting, 0	for automatic color	Sound mode	
		00101 : 0-13	change, a to	otal of 15 colors		
		Dimmer: 000-255	Overal	ll dimming		
		Strobe: 000-255	Strobe		Static color mode	
	Static	Red: 000-255	Red dimming			
Show		Green: 000-255	Green dimming			
SHOW		Blue: 000-255	Blue dimming			
		White: 000-255	White	White dimming		
		Red	Cyan	Blue+W		
		Green	Purple	Yellow+W	Built in static	
	Color	Blue	Warm White	Cyan+W	color mode	
		White	Red+W	Purple+W		
		Yellow	Green+W	Full		
		2800K, 3000K, 3200k	(, 3500K, 3800K, 40	000K, 4500K, 5000K,	Color	
	ССТ	5600K, 6000K, 6500k	000K, 6500K, 7000K, 7500K, 8000K, 8500K, 9000K		temperature	
			9500K,10000K		mode	
	WIFI	On the phone, connect WIFI address "Led_XXX" and turn on			WIFI mode	
	DMX Channel	APP [LED LAMP] to control				
Set	DMX Channel DMX Fail	2CH/4CH/6CH/11CH/32CH/64CH/128CH 7 DMX channel mode				
Divix Fail		Hold / Blackout		Status of light fixture after DMX fail		

	Display	OFF / ON		Display Reverse OFF / ON
	Reverse			
	Display On	200 / 600		Diaplay start time
	Time	30S / 60S		Display start time
				When Menu Lock is ON, the button will
	Manulask	OFF / ON		is locked after 30 seconds without any
	Menu Lock	OFF / ON		operation, and press the UP+DOWN
				button for 5 seconds to unlock.
	IR Remote	OFF / ON		Infrared remote control OFF / ON
		Wireless	OFF / ON	
	Wireless 2.4g	Connect	NO / YES	Wireless DMX OFF / ON
	Wireless 2.4g	Reset	NO / YES	WITCHESS DWA OFF / ON
		Mode	Receive / Transmit	
	Factory Reset	NO / YES		YES: Restore factory settings
Info		Name		MAGIC
1110		Version		V1.3

3.5.1 DMX Address Settings (Dmx512)



- Find [DMX Mode] menu and press [ENTER] to enter DMX address code setting.
- Press [UP/DOWN] button to adjust parameters.
- After setting the DMX address code, press [ENTER] to save the settings.

3.5.2 Auto Effect Settings (Auto)



- Find [Auto] menu and press [ENTER] to enter auto effect setting.
- Press [UP/DOWN] button to select [Auto Mode], [Speed] or [Color].
- Press [ENTER] to enter the settings.
- Press [UP/DOWN] button to select auto effect, speed, or color, press [ENTER] to save the settings.

3.5.3 Sound Effect Settings (Sound)



- Find [Sound] menu and press [ENTER] to enter sound effect setting.
- Press [UP/DOWN] button to select [Sound Mode], [Sens] or [Color].
- Press [ENTER] to enter the settings.
- Press [UP/DOWN] button to select sound effect, sound control sensitivity or color effect, press [ENTER] to save the settings.

3.5.4 Static Color Settings (Static)



- Find [Static] menu and press [ENTER] to enter static color setting.
- Press [UP/DOWN] button to select [Dimmer], [Strobe], [Red], [Green], [Blue] or [White].
- Press [ENTER] to confirm menu and press [UP/DOWN] button to adjust parameters, then press [ENTER] to save the settings.

3.5.5 Built-in Static Color Settings (Color)



- Find [Color] menu and press [ENTER] to enter built-in static color setting.
- Press [UP/DOWN] button to select [Red], [Green], [Blue] ... 15 built-in colors.
- Press [ENTER] to save the settings.

3.5.6 Color Temperature Settings (CCT)



- Find [CCT] menu and press [ENTER] to enter color temperature setting.
- Press [UP/DOWN] button to select [2800K] [3000K] [3200K] ... 18 kinds of color temperature effect.
- Press [ENTER] to save the settings. Hold [ENTER] for more than 3 seconds to enter the screen for customizing the current color temperature.
- Built-in [Red], [Green], [Blue], [White] 4 base colors with 0~255 brightness adjustment, can freely customize the current color temperature according to your needs.

3.5.7 Mobile APP Control Mode Settings (WIFI)





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- Find [WIFI] menu and press [ENTER] to turn on WIFI.
- "Led_XXX" displayed on the screen is the WIFI address of the light fixture.
- Scan the above QR code to install 【LED LAMP】 APP first on mobile phone.
- On the phone, find WIFI and search WIFI address, and the words beginning with LED appear. For example, "LED-XXX", click the link.
- Turn on the **[LED LAMP]** APP installed on the phone and show the link is successful then you can control it.

3.5.8 System Settings (Set)



- Find [Set] menu and press [ENTER] to enter system setting.
- Press [UP/DOWN] button to select corresponding function setting.

• After setting, press [ENTER] to save the settings.

3.5.9 Menu Lock Function (Menu Lock)



- Form [Set] menu to find [Menu Lock] menu.
- Press [ENTER] button to enter select [ON].
- When the menu locked, at the same time long press button ▼▲, the display appears a small lock icon and have a number count down to "0", it will unlock successfully.

3.5.10 Charging Display



Note: In the process of charging, the display screen will have a charging display. If the lamp needs to work while charging, press [MENU] button to enter for operate menu.

4 Control Channel

4.1 DMX Channel Table

4.1	4.1.12CH 2CH Mode:					
Channel	DMX Data	Control function	Detail description			
1	0 ⇐⇒ 255	Overall dimmer	Linear dimming from 0~100%			
	0 ⇐⇒ 10	NO FUNCTION				
	11 ҉ 24	2800K				
	25 ⇒ 38	3000K				
2	39 ⇒ 52	3200K	ССТ			
	53 ⇒ 66	3500K				
	67 ⇒ 80	3800K				
	81 💭 94	4000K				

95 📛 108	4500K	
109 📛 122	5000K	
123 📛 136	5600K	
137 📛 150	6000K	
151 📛 164	6500K	
165 📛 178	7000K	
179 📛 192	7500K	
193 📛 206	8000K	
207 📛 220	8500K	
221 📛 234	9000K	
235 📛 248	9500K	
249 📛 255	10000K	

4.1.2----4CH 4CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⇐⇒ 255	Red dimmer	Linear dimming from 0~100%
2	0 ⇐⇒ 255	Green dimmer	Linear dimming from 0~100%
3	0 ⇐⇒255	Blue dimmer	Linear dimming from 0~100%
4	0 ⇐⇒255	White dimmer	Linear dimming from 0~100%

4.1.3----6CH 6CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⇐⇒ 255	Overall dimmer	Linear dimming from 0~100%
0	0 ⇐⇒ 10	Ctrobe	NO FUNCTION
2	11 ҉ 255	Strobe	From slow to fast(1HZ-20HZ)
3	0 ⇐⇒ 255	Red dimmer	Linear dimming from 0~100%
4	0 ⇐⇒ 255	Green dimmer	Linear dimming from 0~100%
5	0 ⇐⇒ 255	Blue dimmer	Linear dimming from 0~100%
6	0 ⇐⇒ 255	White dimmer	Linear dimming from 0~100%

4.1.4----11CH 11CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⇐⇒ 255	Overall dimmer	Linear dimming from 0~100%
2	0 ⇐⇒ 10	Strobe	NO FUNCTION
2	11 ҉ 255	Stobe	From slow to fast(1HZ-20HZ)
3	0 ⇐⇒ 10	Static macro	NO FUNCTION
3	11 ҉ 255	Static macro	17 values for each color
4	0 📛> 16	Maara background color	NO FUNCTION
4	17 ҉ 255	Macro background color	17 values for each color
5	0 ⇐⇒ 255	Macro background color brightness	Linear dimming from 0~100%
	0 ⇐⇒ 10	Maara	NO FUNCTION
	11 🚑 220	Macro	3 values for each macro effect

	221 📛 228		Sound control mode 1
6	229 ⇒ 236		Sound control mode 2
	237 🚐 244		NO FUNCTION
	245 🚐 255		Sound control mode 3
7	0 ⇐⇒ 255	Macro speed	From slow to fast
8	0 ⇐⇒ 255	Red dimmer	Linear dimming from 0~100%
9	0 ⇐⇒ 255	Green dimmer	Linear dimming from 0~100%
10	0 ⇐⇒ 255	Blue dimmer	Linear dimming from 0~100%
11	0 ⇐⇒ 255	White dimmer	Linear dimming from 0~100%

4.1.5----32CH 32CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⇐⇒ 255	Red 1 dimmer	Linear dimming from 0~100%
2	0 ⇐⇒ 255	Green 1 dimmer	Linear dimming from 0~100%
3	0 ⇐⇒ 255	Blue 1 dimmer	Linear dimming from 0~100%
4	0 ⇐⇒ 255	White 1 dimmer	Linear dimming from 0~100%
•••			
29	0 ⇐⇒ 255	Red 8 dimmer	Linear dimming from 0~100%
30	0 ⇐⇒ 255	Green 8 dimmer	Linear dimming from 0~100%
31	0 ⇐⇒ 255	Blue 8 dimmer	Linear dimming from 0~100%
32	0 ⇐⇒ 255	White 8 dimmer	Linear dimming from 0~100%

4.1.6----64CH 64CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⇐⇒ 255	Red 1 dimmer	Linear dimming from 0~100%
2	0 ⇐⇒ 255	Green 1 dimmer	Linear dimming from 0~100%
3	0 ⇐⇒ 255	Blue 1 dimmer	Linear dimming from 0~100%
4	0 ⇐⇒ 255	White 1 dimmer	Linear dimming from 0~100%
	•••		
61	0 ⇐⇒ 255	Red 16 dimmer	Linear dimming from 0~100%
62	0 ⇐⇒ 255	Green16 dimmer	Linear dimming from 0~100%
63	0 ⇐⇒ 255	Blue 16 dimmer	Linear dimming from 0~100%
64	0 ⇐⇒ 255	White 16 dimmer	Linear dimming from 0~100%

4.1.7----128CH 128CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⇐⇒ 255	Red 1 dt	Linear dimming from 0~100%
2	0 ⇐⇒ 255		Linear dimming from 0~100%
3	0 ⇐⇒ 255	Blue 1 der	Linear dimming from 0~100%
4	0 ⇐⇒ 255	White 1	Linear dimming from 0~100%
•••	•••	\cdots	
125	0 ⇐⇒ 255	Red 32	Linear dimming from 0~100%
126	0 ⇐⇒ 255	Green 🍋 mer	Linear dimming from 0~100%
127	0 ⇐⇒ 255	Blue 32 dimmer	Linear dimming from 0~100%
128	0 ⇐⇒ 255	White 32 dimmer	Linear dimming from 0~100%

5 Maintenance

5.1 Product Maintenance

To prolong the life of the product, it is very important to do maintenance work. The environment is hash outdoors, or if the product is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its LED lens cover, fan vents and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates.Soft cloth and typical glass cleaning products should be used for cleaning.It is recommended to clean product at least one every 20 days.

Friendly notice: Please do not use any organic solvent, e.g.alcohol to clean housing of the apparatus, lest cause damage.

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5.2 Trouble Shooting

Problems	Action	
	The battery is dead. Charging it.	
The product doesn't	Power supply is damaged or abnormal. Call a qualified personnel to fix it.	
switch on	Control section is damaged. Call a qualified personnel to fix it.	
	Connection of internal circuitry is not correct. Call a qualified personnel to fix it.	
The product can turn	DMX address is wrongly setting up. Resetting it according to instruction book.	
on,but LEDs do not emit	DMX Signal wrongly connected. Connect it correctly according to instruction book.	
light and are out of control	Control section is damaged. Call a qualified personnel to fix it.	
The beam appears dim	The product is too hot. Take ventilation measures to make it cool.	

Remark: This product warranty for one year. We provide pay-needed maintenance service after the warranty. But because of natural and man-made disasters or improper operation caused damage not under warranty range.