T863 (RGB)-i44

IR LED Controller

User Manual

Please read this manual carefully before using this controller.

Instructions:

Thanks for using T863-(RGB) i44 controller of our company. Before installation, please read this manual carefully to ensure fully understand and proper use in order to avoid unnecessary damages to the controller.

Before using, please check to confirm whether there is any damage caused during the transport process, if there is, please notify your supplier and do not use the product.

After-sale services:

Warranty of this product is one year, in this period we guarantee repairing or replacement service with no charge if it is normally used according to the instruction.

If the customer does not follow the instructions and following provisions in this manual, which results in product damage, the supplier is not responsible for any problems arising and defects, even in the warranty period, maintenance costs borne by the customer.

1. Damage caused by misuse, such as not in accordance with the instructions.
2. Damages caused by unauthorized removal, repair, modify of the circuit; incorrect connection and replacement of the chips.
3. Damage caused by transportation, shock, falling after purchase.
4. Damage caused by earthquake, fire, flood, lightning and abnormal voltage.
5. Damage caused by negligence or improper maintenance, such as storage at high temperature and humid environment, vicinity of hazardous chemical substances.
6. Upgrades of products.

Instructions for safety:

Making sure you use the product perfectly and safely, please observe the instructions and warning on this manual.

Attention! Operate cautiously and read these instructions carefully.

1. For installation, try to avoid the minefields, strong magnetic field and high-pressure area.
2. Ensure that the wire is connected correctly and firmly in order to avoid short-circuit damage to parts and posing a fire hazard.
3. Please install controller in a well-ventilated place to ensure the ambient temperature is moderate.
4. Before using this product, please check the DC power and voltage meet the product technical requirements; positive and negative polarity is defined consistent to the product.
5. Prohibit live wiring, check to confirm wiring is correct, if no short-circuit, then power!
6. If any problems do not make unauthorized repairs. Any doubts please contact your local supplier.

This manual applies only to this product of our company, subject to changes without notice.

Introduction

T863-(RGB) series controller is a smart RGB three colors light controller dedicated to long-illumination LED light, using the most advanced PWM (Pulse Width Modulation) digital control technology, the controller can be operated through IR wireless remote controller. The installation of LED controller can apply to commercial or home lighting on different occasion with different environment, extend the LED life span, and save energy; LED RGB lights can use this controller to decolorize.

1. Technology specifications

Type	T863-(RGB)-i44
Input power	DC12V~24V
Output signal	Three ways RGB
Max load current	2A*3
Output power	108W(12V)/216W(24V)
Controller dimension	L62×W35× H22 (mm)
Remote dimension	L125×W57×7(mm)

2. Functions

(1).RGB full colors LED strip controller.

(2).Control way: IR remote control, it is available in 8-meter (No barriers).

(3).Display:20 static, 3 colors jump change, 7 colors jump change, 3 colors gradual change, 7 colors gradual change and user defined colors;

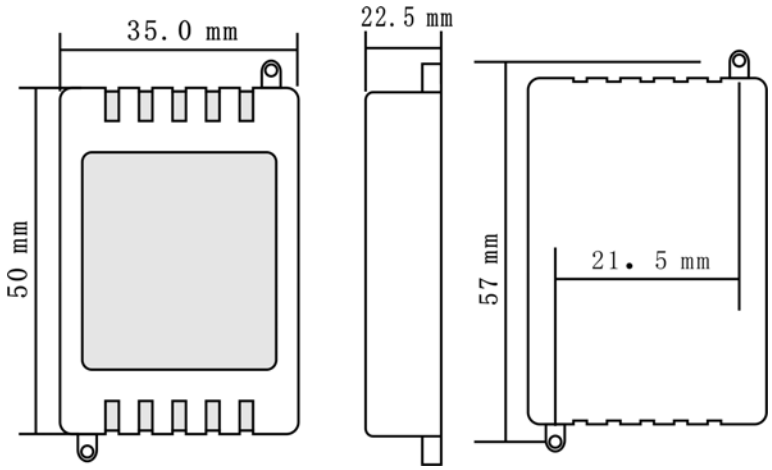
(4).Speed of dynamic can adjust; Brightness of static can adjust.

(5).Having memory when power fails.

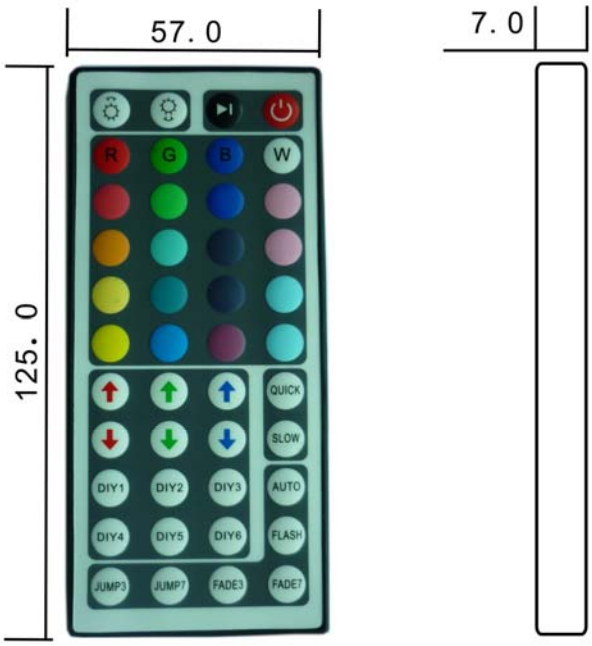
(6).RGB three channels signal (Common anode).

3. Structure

(1).View of major controller：（chart 1）

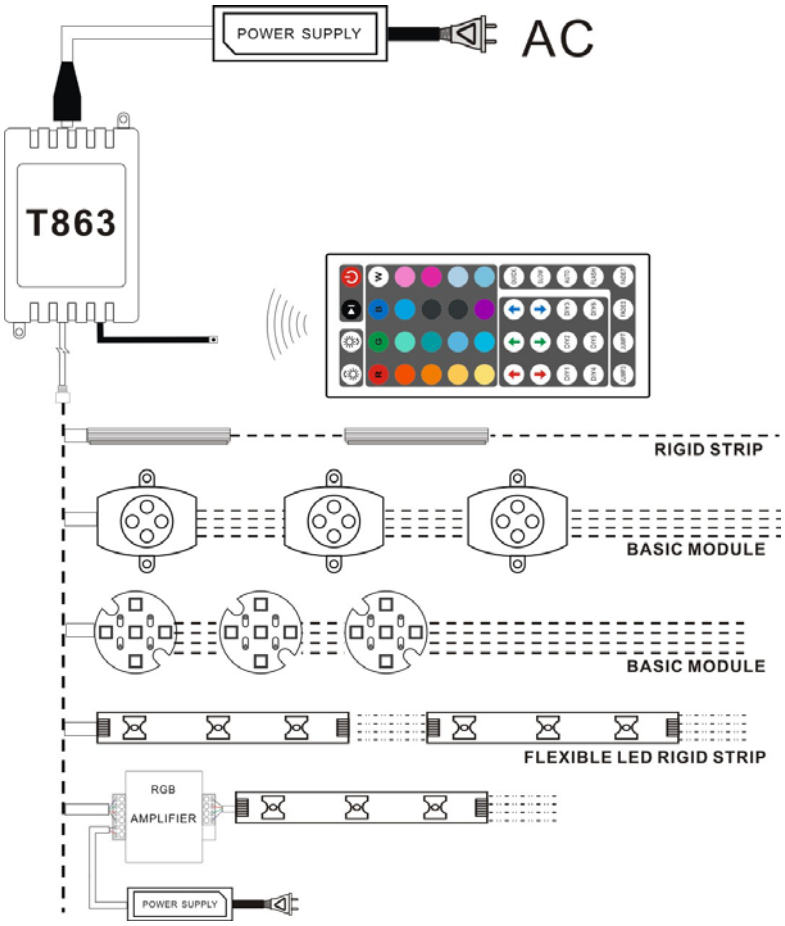


(2). View of remote controller (chart 2).

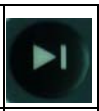
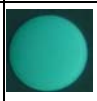
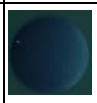


4. Connection diagram of controller

(1).Connection diagram to low power LED: （chart 3）



(2).Descriptions for panel and remote controller keys(Table 1)

	Light up(8 levels)		Light down(8 levels)		Pause/run		On/Off
	Static red		Static green		Static blue		Static white
	Static orange		Static light green		Static deep blue		Milk white
	Static deep yellow		Static cyan		Static blue-pulple		Pink white
	Static yellow		Static light blue		Static purple		Green white
	Static light yellow		Static sky blue		Static brown		Blue white
	Add red light		Add green light		Add blue light		Speed up
	Reduce red light		Reduce green light		Reduce blue light		Speed down
	User defined color 1		User defined color 2		User defined color 3		Auto color change
	User defined color 4		User defined color 5		User defined color 6		Fast change
	3-color jump change		7-color jump change		3-color gradual change		7-color gradual change

Additional remarks:

When users define colors, press custom key to enter the modes, then press red, blue, green add/reduce these 6 keys to mix colors.(Press any key out of the custom area to quit the custom modes, if not, the keys are unavailable). When presses the custom key the second time, the current color will be saved, if press next time, will show the latest color saved.

Totally 6 custom keys, so can set up 6 kinds colors arbitrarily. The keys are separately and will not interact, for example, press the custom key 1 once, and then custom key 2, the custom key 1 is invalid, only when press the custom key 2 again, current color can be saved.

5. Failure analysis and solutions (Table 2)

Failure	Analysis	Solutions
No light	1. No power. 2. Reversed the polarity. 3. Wrong connection or poor contact.	1. Check the power 2. Make sure the polarity is right. 3. Re-check the wire connection.
Brightness of LED is not consistent	1. Input wire is too long to cause wire loss. 2. Diameter of wire is too thin to cause wire loss. 3. Power overload. 4. Controller overload.	1. Shorten wire or use loop circuit. 2. Calculate the current, and then replace thick wire. 3. Replace larger power. 4.Add a power amplifier

Tips: The effective power is generally only 80% of the marked power, so it is recommended in selecting the power supply, the user choose a slightly larger one than the LED load power, at least for more than 20%!

Appendix: dynamic modes' description（Table 3）

Mode	Description
3-color jump change	Three colors jump change: red→green→blue
7-color jump change	Seven colors jump change: red→green→blue→yellow→cyan→purple→white
3-color gradual change	Three colors gradual change: red→green→blue
7-color gradual change	Seven colors gradual change: red→green→blue→yellow→cyan→purple→white

6. Packaging

(1).Packaging details (chart 4).

Symbol	Name	Picture	External dimension(mm)	QTY	Unit
A	T863(RGB) controller		L62*W35*L22(mm)	1	PCS
B	IR remote		L125×W57×L7(mm)	1	PCS
C	User manual	T862（RGB）i44	A6 sheet	1	PCS