SPI-16S
Mini LED Fantastic Controller

RF WIRELESS

FC CE RoHS warranty 5 years

SPI-16S is a Mini LED pixel controller, equipped with RF remote M16S, almost able to control all IC-driven LED lights. Compact and powerful, various built-in changing effects and customized scene modes can bring you fantastic color!

By RF remote control M16S, you can select from a variety of dynamic lighting effects, set controlled pixels quantity, adjust the changing speed and brightness, change the lighting moving direction, adjust RGB sequence, select the IC type, store and play customized scene etc.

1. Product parameter:

SPI-16S Controller:

Power Input:	5~24Vdc
Output:	SPI (Max 10A)
Wireless Signal:	RF 2.4GHz
Working Temperature:	-30°C~55°C
Pixel Range:	8~1020px
Dimensions:	L135×W30×H20(mm)
Weight(N.W.):	52g

M16S Remote:

Working Voltage:	3V (battery CR2032)
Wireless Signal:	RF 2.4GHz
Changing Mode:	16 kinds
Working Temperature:	-30°C~55°C
Dimensions:	L104×W58×H9(mm)
Weight(N.W.):	42g

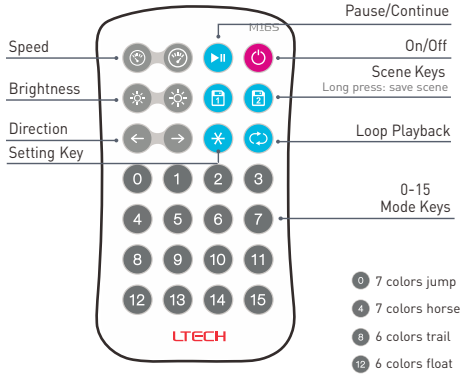
Compatible driving IC: any kinds, can be customized also.

Package size: L132×W198×H22(mm) **Total weight(G.W.): 145g**

★ Connect power supply to pixel LEDs separately, in case of overvoltage, overcurrent to the receiver. Receiver only supply a signal to the LEDs.

LTECH
SPI-16S LED Fantastic controller

2. The remote instruction:



The Learning ID Method:

The receiver and remote are Pre-synced at factory. If deleted accidentally, the sync method is as follows (multiple remotes could be synced to one receiver):

Learning ID:

Short press "ID learning button" on SPI-16S receiver, the running light is on. Then press any key on M16 remote , the running light flicker several times, activated.

Canceling ID:

Press "ID learning button" on SPI-16S receiver for 5s, the running light flicker several times, canceled.

0 7 colors jump	1 7 colors flash	2 7 colors fade	3 7 colors smooth
4 7 colors horse race	5 7 colors circle horse race	6 7 colors flow	7 7 colors gradients flow
8 6 colors trail	9 6 colors circle trail	10 Gradients trail	11 White meteor
12 6 colors float	13 6 colors double trail	14 Color white float	15 Bi-color float

Other Setting Instructions of Remote

1. Loop playback: Short press ✳ key, then continuous press any 0-15 numeric keys, last press ∞ key to finish. Controller will play cycle the corresponding mode of the numeric key.
2. After the remote being paired with the controller, the IC model, pixel ranges and RGB sequence can be set by the remote.
   By factory default, controller works with TM1809IC pixel light. If work with different IC model, please setting follow below instructions. This controller is compatible with following IC models:
   TM1803/TM1804/TM1809/Tm1812/TM1814/TM1914/TM1914A/UCS1903/UCS1909/UCS1912/UCS2903/UCS2904B/UCS2909/UCS2912/UCS5603A/UCS6909/UCS6912/WS2801/WS2803/WS2811/WS2812/WS2812B/WS2821/AP A102/APA104/KL590/KL592D/LPD6803/LPD1101/LPD8803/LPD8806, P9813/TLS3001/TLS3002//P943/SK6812(RGB)/GS8206(BGR)/GS8208/SM16703.

Manipulate table for choosing ICs, RGB order or pixel No.

IC Type	Setting e.g.
TM1809	*1809*
LPD6803	*6803*
KL590	*0590*
KL592D	*0592*
APA102	*0102*
.....	✳□□□□✳

Pixel	Setting e.g.
8	**008
16	**016
100	**100
160	**160
1020	**1020
Range: 8-1020 pixels	

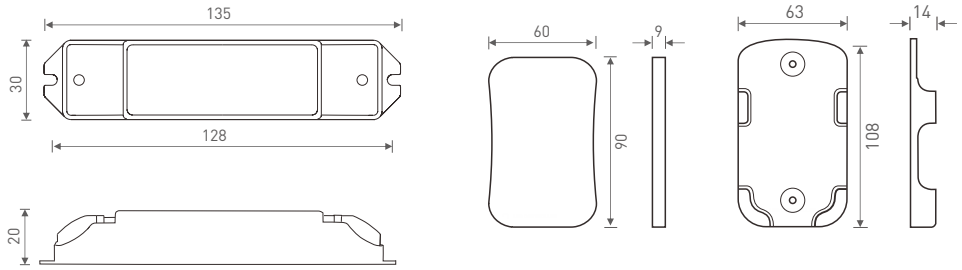
RGB Order	Setting
RGB	*123*
RBG	*132*
GRB	*213*
GBR	*231*
BRG	*312*
BGR	*321*

[Attn]: The running light of SPI-16S controller flashes 2s means set completed.

When setting IC type, pixel number and RGB order, select multiple keys at uniformed speed. Not too fast.

3. Product dimension:

Unit: mm



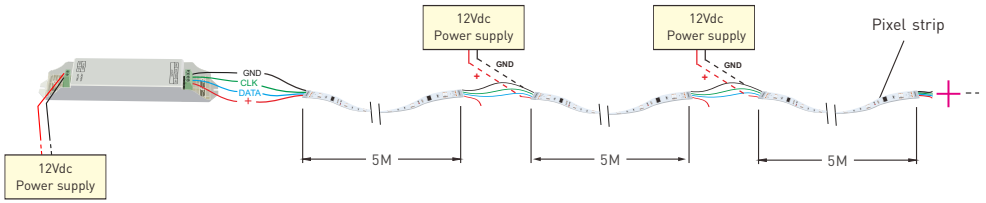
Controller　　Remote　　Remote Holder

4. Terminal description:

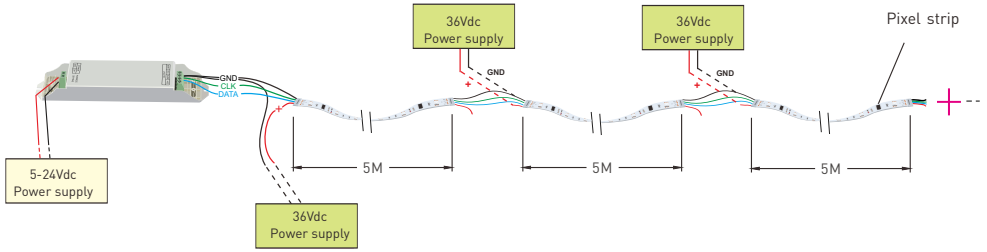
5. Wiring diagram:

LED pixel strip wiring diagram:

a. Conventional connection method.



b. Light fixtures and controller using different operating voltages.



* No further notice if any changes in the manual. Product function depends on the goods.
  Please feel free to contact your supplier if any question.