## Operation Instructions of Controller (4 in 1)

### I. Specifications:

Working temperature: -20-60 °C
Output: 4 CMOS drain- open output Max load current: 6A each color Net weight:115g PWM:2KHz

Controller supply voltage: DC12~24V Connecting Mode: Common anode Product size: L160\*W46\*H25 mm Wireless-sync-control RF:2.4GHz

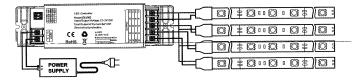
Controller has wireless synchronization function(not only static mode but also dynamic mode), keep the distance of same zone devices less than 10m, like



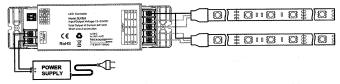
#### Remote control:

Controller are delivered with common control model, it can be controlled by any one remote which is compatible with it. Please pair it with the remote if zone-setting or unique-control is needed, you can find the instructions of the operation from the remote control manual. Or please contact the seller for more information.

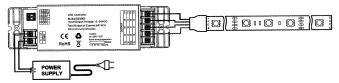
II. Panel specification and connecting drawing as follows: Application Circuit 1: Single color ( V+→V+、CH1→GND、CH2→GND、CH3→GND、CH4: GND.)



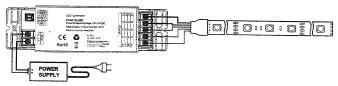
Application Circuit 2: CW+WW( V+→COMMON、CH1→CW、CH2→WW、CH3→CW, CH4: WW.)



Application Circuit 3: RGB ( V+→COM、CH1→R、CH2→G、CH3→B, CH4: NC.)



Application Circuit 4: RGBW (V+→COM、CH1→R、CH2→G、CH3→B, CH4: W.)



- III. Warning:
- 1. Supply voltage of this product is DC12-24V, never connect to AC220V or others.
  2. Lead wire should be connected correctly according to colors that connecting diagram offers.
  3. Warranty of this product is two years, exclude the artificial situation of damaged or overload words. working.

S01

FCC-401 RGBW Controller Insturctions



## Manual

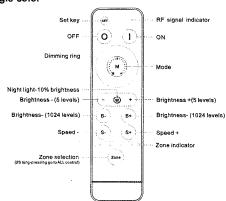
### **Specifications**

Working temperature: -20-60 °C Product size: L150\*W40\*H20 mm Net weight:110g

Powered by: DC3V (AAA\*2) RF distance: 20M RF:2.4GHz

### RF remote button functions

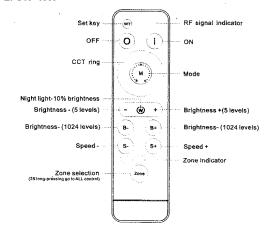
1 color ring and 12 buttons in total, the function of buttons are shown as below: Type 1: Single color



Name	Description
SET	Nonfunctional.
l	Turn on.
0	Turn off.
DIM ring	Dim down brightness by clockwise direction.
М	2 modes in total: flash, fade.
₩	10% night light hot key.
_	Brightness - by 5 levels (10%, 30%, 50%, 70%, 100%).
+	Brightness + by 5 levels (10%, 30%, 50%, 70%, 100%).
B-	Brightness – by 1024 levels. Long-press can get fast adjusting.
B+	Brightness + by 1024 levels. Long-press can get fast adjusting.
S-	Speed down for dynamic mode (100 levels). Long-press get fast adjusting.
S+	Speed up for dynamic mode (100 levels). Long-press get fast adjusting.
Zone	Zone selection, 2 seconds long-press get "all-control".

(Tips: Please ensure to set correct output type according to the load LED strip, then you can get the right function)

Type 2: CW+WW



Name	Description
SET	Nonfunctional.
1	Turn on.
0	Turn off.
CCT ring	Corresponding full range color temperature of the tunable LED from 100%CW to 100%WW.
М	4 modes in total: all flash, 2 color flash, all fade, 2 color fade.
₩	10% night light hot key.
-	Brightness – by 5 levels (10%, 30%, 50%, 70%, 100%).
+	Brightness + by 5 levels (10%, 30%, 50%, 70%, 100%).
B-	Brightness – by 1024 levels. Long-press can get fast adjusting.
B+	Brightness + by 1024 levels. Long-press can get fast adjusting.
S-	Speed down for dynamic mode (100 levels). Long-press can get fast adjusting.
S+	Speed up for dynamic mode (100 levels). Long-press can get fast adjusting.
Zone	Zone selection, 2 seconds long-press get "all-control".

(Tips: Please ensure to set correct output type according to the load LED strip, then you can get the right function)



# (3) Code learning operation between remote controls: Used to unify system code values or copy a new remote controls.

Since each remote control has its own unique code at the time of delivery, when there are multiple remote controls in one system, one of them (for example, remote control A) must be selected as the system code value, and the code value of the rest remote controls (for example, remote control B) should be copied to the same one.

Step	Operation	Instructions	
1	A remote control: Press and hold "ON" on the remote control for 5 seconds, the indicator of the remote control will flash quickly, means it enters the pairing code transmission status.	Will automatically exit code transmission status after 60 seconds, or pressing any key to exit.	
2	B remote control: long press "mode key" for 5 seconds, the remote indicator light changes from 100% light to off, means entering the code value receiving state.	Will automatically exit the code value receiving state after 30 seconds, or exit after learning the code value successfully.	
3	see the B remote control indicator light flash 3 times.	Code copying is finished and exit code value receiving status.	

### (4) Copying code from receiver to remote control.

A new remote control can also copy code from any one of the receivers in the whole system, after the successful operation, the new remote control can replace the original remote (if it is lost).

Step	Operation	Instructions	
1	Cut off the power of receiver.	Which one will be controlled by remote.	
	Long-press "mode key" for 5 seconds,	Will automatically exit the code value	
2	the remote indicator light changes	receiving state after 30 seconds, or exit	
	from 100% light to off, means entering	after learning the code value	
	the code value receiving state.	successfully.	
3	Power on the receiver, will see remote	Code copying is finished and exit code	
	control indicator light flash 3 times.	value receiving status.	

<sup>\*</sup> For security of the system, the distance from remote control to the one receiver should be less than 2 meters in this operation.

## (5) The remote control restores the factory setting: it means that the remote control will be restored to the factory's unique code value.

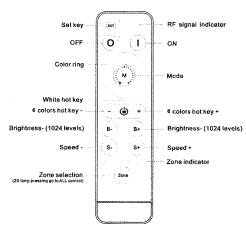
Step	Operation	Instructions	
1	Long press "mode " for 20 seconds.	The remote indicator light dim down and flashes continuously until the 20th second and then back to 100% light. Means this step is finished.	
2	Press the "OFF" to confirm, the remote indicator light flashes 3 times.	Restore factory settings successfully.	

### About installation of remote control's bracket:

- 1.Accessories include: bracket 1pc, 3M foam sponge glue 1pc, screw 2pcs, expansion tube 2pcs.
- 2. There are 2 options for bracket installation:
- 1) Using screw and expansion tube make drilling installation (suitable for uneven and ash surface);
- 2) Using 3M foam sponge glue make free drilling installation (suitable for flat no ash surface).



<sup>\*</sup>Only one time operation is requested for the whole system, no need different operation for different zones.



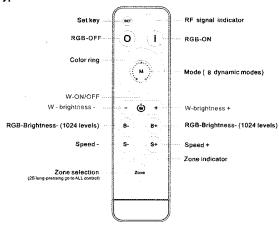
SET	Description  Nonfunctional.
1	Turn on.
0	Turn off.
Color ring	Static color options, 64 colors in total.
M	Dynamic modes, 8 modes in total.
(4)	White on/off hot key.
	6 static colors (cyan, purple, yellow, blue, green, red).
+	6 static colors ( red, green, blue, yellow, purple, cyan).
B-	Brightness – for static colors by 1024 levels. Long-press get fast adjusting.
B+	Brightness + for static colors by 1024 levels. Long-press get fast adjusting.
S-	Speed down for dynamic mode (100 levels). Long-press get fast adjusting.
S+	Speed up for dynamic mode (100 levels). Long-press get fast adjusting.
Zone	Zone selection, 2 seconds long-press get "all-control".

(Tips: Please ensure to set correct output type according to the load LED strip, then you can get the right function)

## 8 dynamic modes as below:

•						
No	Patterns	Remarks	No	Patterns	Remarks	
1	White breathe	Speed is	5	7 color fade	Conned in adjustable	
2	3 color jumpy	adjustable,	6	R/G cross fade	Speed is adjustable,	
3	7 color jumpy	brightness is	7	R/B cross fade	brightness is unadiustable	
4	3 color fade	unadjustable	8	G/B cross fade	unaujustable	

Type 4: RGBW



Name	Description
SET	Nonfunctional.
ı	RGB channels-Turn on.
0	RGB channels-Turn off.
Color ring	Static color options, 64 colors in total.
М	Dynamic modes, 8 modes in total.
⊗	W channel-Turn ON/OFF.
	W channel- brightness -, 1024 levels, long-press can get fast adjusting.
+	W channel- brightness +, 1024 levels, long-press can get fast adjusting.
B-	Brightness – for RGB static colors by 1024 levels. Long-press get fast adjusting.
B+	Brightness + for RGB static colors by 1024 levels. Long-press get fast adjusting.
S-	Speed down for dynamic mode (100 levels). Long-press get fast adjusting.
S+	Speed up for dynamic mode (100 levels). Long-press get fast adjusting.
Zone	Zone selection, 2 seconds long-press get "ali-control".

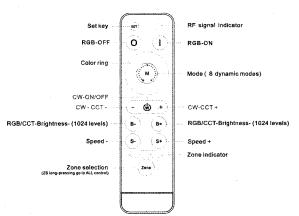
(Tips: Please ensure to set correct output type according to the load LED strip, then you can get the right function)

### 8 dynamic modes as below:

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1	White breathe	C ::	5	7 color fade	0	
2	3 color jumpy	Speed is adjustable,	6	R/G cross fade	Speed is adjustable,	
3	7 color jumpy	brightness is	unadiustable	7	R/B cross fade	brightness is
4	3 color fade	unaujustable	8	G/B cross fade	unadjustable	



### Type 5: RGB+CCT



Name	Description
SET	Nonfunctional.
I	RGB channels-Turn on.
0	RGB channels-Turn off.
Color ring	Static color options, 64 colors in total.
M	Dynamic modes, 8 modes in total.
₩	CW(means: cool white+ warm white) channels-Turn ON/OFF.
_	Balance to warm white. Long-press can get fast adjusting.
+	Balance to cool white. Long-press can get fast adjusting.
B-	Brightness – for RGB/CCT static colors. Long-press can get fast adjusting.
B+	Brightness + for RGB/CCT static colors. Long-press can get fast adjusting.
S-	Speed down for dynamic mode. Long-press can get fast adjusting.
S+	Speed up for dynamic mode. Long-press can get fast adjusting.
Zone	Zone selection, 2 seconds long-press get "all-control".

Tips: B+, B- is universal for RGB and CCT, adjusting RGB brightness after color ring operation, or adjusting CCT brightness after CW-CCT+/ CW-CCT-/ CW-ON operation.

### 8 dynamic modes as below:

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No	Patterns	Remarks	No	Patterns	Remarks
1	White breathe	0	5	7 color fade	0
2	3 color jumpy	Speed is adjustable, brightness is unadjustable	6	R/G cross fade	Speed is adjustable, brightness is
3	7 color jumpy		7	R/B cross fade	unadjustable
4	3 color fade		8	G/B cross fade	unaujustable

#### About "all-control".

This system is available to achieve mixed control, like zone 1-single color, zone 2-CCT, zone 3- RGB, zone 4- RGBW.

The all buttons' functions are active in all-control mode, the effect for each zone will according to the output type setting of each receiver (4 in 1 controller); RGB+CCT type has a special controller item for it, no need to set.

### RF CODE

(1) Code pairing operation: means that the receiver will only be controlled by the value code remote controller.

Step	Operation	Instructions		
1	Connecting the load to the receiver and power on it.	1.It is necessary to clear the code first, if the receiver was coded before.     2.Batch operation can be performed within the remote control range.		
2	Select area.	Select the area with the "Zone" key and the corresponding indicator lights up.		
3	Press and hold "ON" on the remote control for 5 seconds, the indicator of the remote control will flash quickly, means it enters the pairing code transmission status.	Will automatically exit code transmission status after 60 seconds, or pressing any key to exit.		
4	See the load light flashes 3 times and return to the initial state.	Pairing coding is finished successfully.		

(2) Code clearing operation: means that the original code value of the receiver will be cleared and returned to the factory state. Then it can be controlled by any compatible remote control, and can learn to a new code.

Step	Operation	Instructions
1	Connecting the load to the receiver and power on it.	The clearing operation should be finished within 1 minute after the receiver is powered on. If exceeds the time, can be powered on again.     Batch operation can be performed within the remote control range.
2	Press and hold the remote control "Off" for 5 seconds. The indicator of the remote control flashes quickly, means it enters the clearing code transmission status. There is no need to select the corresponding area when clearing code.	Will automatically exit code transmission status after 60 seconds, or pressing any key to exit.     If the original remote control is lost, the new remote control can be used for clearing operations.
3	See the load light flashes 3 times and return to the initial state.	Clearing coding is finished successfully.

