

# Product Specifications

**Model number:** HC008

**Products name:** Aluminum Shell full color magic controller



## Product Description

Wireless Symphony LED Controller (JM-HC008) is suit for UCS1903 (TM2801 etc) output applications to drive LED directly. It is widely used in advertising, stage sets, home decorations, etc. It has many advantages such as low price, easy connection and simplicity to use. It has a memory function. Meanwhile, you could adjust brightness, static color choices and various dynamic changes in lighting effects through wireless remote control. It can also be used as a synchronous controller. That is to say you can synchronously control number of decoders and LED lights.

## Technical Parameters

Working temperature	-20-60°C
Supply voltage	DC5V, DC12~24V
Current	<60mA
External dimension	L122xW71xH24mm
Packing size	L137*W80*H55mm
Net weight	180g
Gross weight	270g
Effects model	133
Maximum control points	1024 (Low-speed) points, 2048 (High-speed) points
Controlled IC Model	Such as the TM16726, TM2801, TM8806, WS2811, UCS1903 etc. (specify the required model on orders)

## External Dimension



## Interface Specifications



Power input: Adopt DC plug seat connector



Load output: Adopt the 10 units of plug seat with screw.

Synchronization interface:



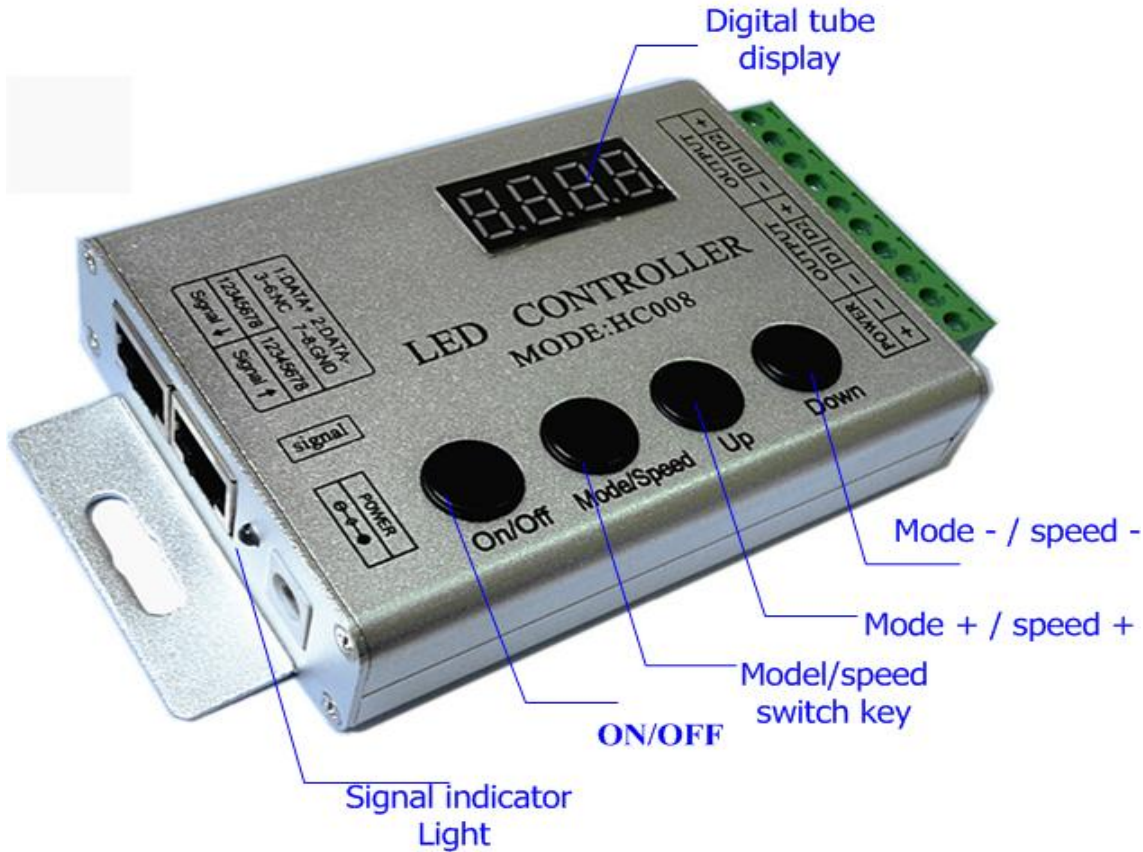
Adopt Standard network line interface.

## Direction for use

- Connect the load wire at first, following by the power wire; **Please ensure short circuit can not occur between connecting wire before you turn on the power. Then set the steps as follows.**
- Press the "On / off" button to take the controller off before setting the menu.
- Press the "up", "down" button one time at the time, and LED would be bright at this moment. Then press the "Mode / Speed" button to get into the menu settings screen.
- The first setting screen is for "High-speed, low-speed settings", and the LED would display "S-HI" or "S-LO". Then press the "up" and "down" button to select the mode. (If the IC on the light bar is high-speed mode, you should choose "S-HI", and choose "S-HI" when low-speed.) The factory default

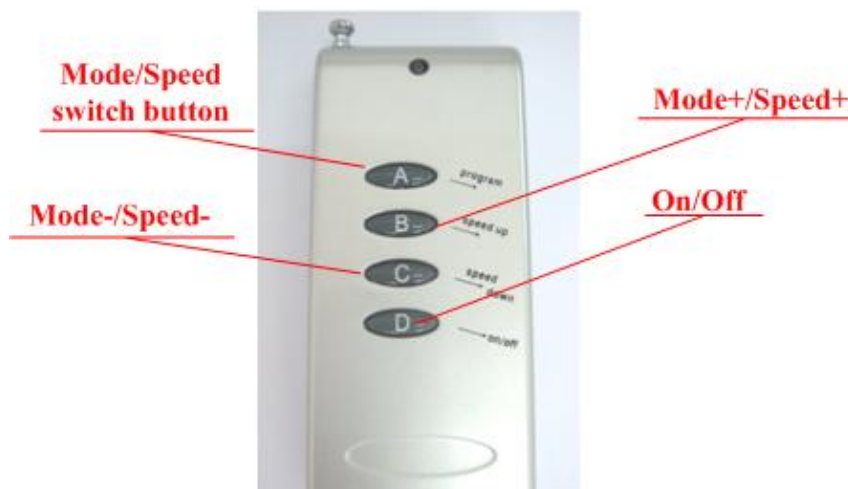
is for the high-speed mode.

- Continue to press the "Mode / Speed" button to enter the second screen-"Control points setting". The LED display 4-digit is for the number of control points. To plus or minus the number by pressing the "up" and "down" button (Long pressing can adjust quickly). The factory default is for 50.
- After setting well, press the "On / off" button to save and exit.
- There are 4 buttons in total on the control panel, function of each button as below:



- ★ **On/off:** It can turn on or turn off the output..
- ★ **Mode/Speed :** Mode adjustment / speed adjustment function switch (The first LED displays H for model adjustment, shows S for the speed adjustment.)
- ★ **UP:** Mode+/Speed+ button. When in mode regulator function, it is for "Mode+". When in speed regulator function, it is for "Speed+".
- ★ **DOWN:** Mode-/Speed- button. When in mode regulator function, it is for "Mode-". When in speed regulator function, it is for "Speed-".
- ★ **Remarks:** When power the controller, the red indicator light will be light up, and the green indicator light will be flash when press the button each time.

- Adopt wireless control method, 4keys in total, function of each key as below: :



- ★ **A:** Mode adjustment / speed adjustment function switch (The first LED displays H for model adjustment, shows S for the speed adjustment.)
- ★ **B:** Mode+/Speed+ button. When in mode regulator function, it is for “Mode+”. When in speed regulator function, it is for “Speed+”.
- ★ **C:** Mode-/Speed- button. When in mode regulator function, it is for “Mode-”. When in speed regulator function, it is for “Speed-”.
- ★ **D: On/Off button:** It can open or close output.
- ★ **Remarks:** When power the controller, the red indicator light will be light up, and the green indicator light will be flash when press the button each time.

● Synchronous controller system description

Synchronous control system can be made of any number of controller connections. Each of the sub-controller would follow to the first master controller to achieve a permanent synchronous change. And there is not delay.

After connecting the wiring diagram, the sub-controller need not be set. It will be in accordance with the master to controlling the speed and mode change. (That would be not synchronous when powering. You could close and open to be synchronous) When master is working, and the sub-control working well, the green signal light of sub-control would flick. The digital LED display the mode in operation.

● **The 133th Changing mode (Custom combination mode) operation specification:**

This Mode is an editable combination mode, you can edit 2 ~ 20 scenarios (1 to 132 of the pattern) combined into a cycle patterns, each pattern can set change speed separated, can identify the model number and play cycle automatic .

(1) In the OFF station, press the “Mode/Speed”、“Up” two button at the same time then to enter the edit menu, the digital show “-01-”, “-\*\*-” ,it means that at this moment can press the “+”、“-” button to edit the scene number.

(2) After setting the scene number, press the “Mode/Speed” for one time , the digital tube will show “H\*\*\*”, and enter the scene setting state, at this moment can press “+”、“-” button to edit the scene changing function, and the effect of the scene can be seen by the led lights. When the digital show “H000” means that the scene still not be set.

(3) After setting Mode, press the Mode/Press button again, the digital tube will be show “S0\*”, Its to show the Speed of the current scene Mode, at this time can adjust the changing speed by press Button “+/-”, and this effect can be seen through the led strips.

(4) After chose the Changing speed, press the “Mode/Speed” button again to enter the scene number setting state “-\*\*-” , at this time can enter another scene and edit it or press the the “On/Off” button to save your choice .

**Note:** when setting the scene less than 20 kinds, the scene is to start from the first scene (because the 133th mode starts running scene "01"), the scene has not be set the scene mode please set to "H000". If you need to set up five scenarios into 133 model, after entering the edit menu editor "01" to "05" scenario respective model and speed (edit can be not follow order), after edited needs to be checked the "06" scene mode is "H000" or not, if not please press the "+", "-" button to adjust it.

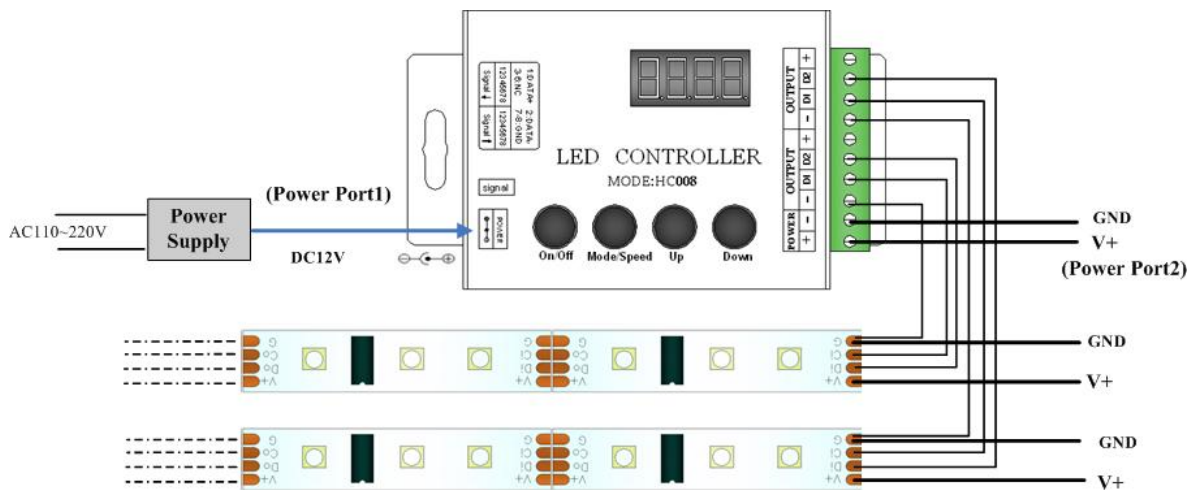
● Standard color changes as follows:

NO.	Function Description	NO.	Function Description
1	Static red	2	Static green
3	Static blue	4	Static yellow
5	Static cyan	6	Static purple
7	Static white	8	Three color jumpy change
9	Seven color jumpy change	10	Seven color stroboflash
11	Red horse race lamp to right direction	12	Purple horse race lamp to left direction
13	Blue horse race lamp to right direction	14	Cyan horse race lamp to left direction
15	Seven color cycling horse race lamp to right direction	16	Seven color cycling horse race lamp to left direction
17	Seven color horse race lamp back-for-ward direction	18	Seven color horse race lamp to left direction
19	Seven color jumping horse race lamp to right direction	20	Three color gradually change
21	Seven color gradually change	22	Red background scan lamp back-for-ward direction
23	Green background scan lamp back-for-ward direction	24	Blue background scan lamp back-for-ward direction
25	Yellow background scan lamp back-for-ward direction	26	Cyan background scan lamp back-for-ward direction
27	Purple background scan lamp back-for-ward direction	28	White background scan lamp back-for-ward direction
29	Seven color scan lamp back-for-ward direction	30	Red water move to right direction
31	Red water move to left direction	32	Green water move to right direction
33	Green water move to left direction	34	Blue water move to right direction
35	Blue water move to left direction	36	Yellow water move to right direction
37	Yellow water move to left direction	38	Cyan water move to right direction
39	Cyan water move to left direction	40	Purple water move to right direction
41	Purple water move to left direction	42	White water move to right direction
43	White water move to left direction	44	Seven color cycling water move to right direction
45	Seven color breathing lamp back-for-ward direction	46	Red trail to left single direction
47	Purple trail to left single direction	48	Blue trail to left single direction
49	Cyan trail to left single direction	50	White trail to left single direction
51	Green trail to left single direction	52	Yellow trail to left single direction
53	Seven color jumping trail to left single direction	54	Seven color queue trail to left single direction
55	Seven color alternation trail to left single direction	56	Red trail to right single direction
57	Purple trail to right single direction	58	Blue trail to right single direction
59	Cyan trail to right single direction	60	White trail to right single direction
61	Green trail to right single direction	62	Yellow trail to right single direction
63	Seven color jumping trail to right single direction	64	Seven color queue trail to right single direction
65	Seven color alternation trail to right single direction	66	Red water trail to right direction
67	Purple water trail to right direction	68	Blue water trail to right direction
69	Cyan water trail to right direction	70	White water trail to right direction
71	Green water trail to right direction	72	Yellow water trail to right direction
73	Seven color jumping water trail to right direction	74	Seven color queue water trail to right direction
75	Seven color alternation water trail to right direction	76	Red trail to left double direction
77	Purple trail to left double direction	78	Blue trail to left double direction
79	Cyan trail to left double direction	80	White trail to left double direction
81	Green trail to left double direction	82	Yellow trail to left double direction
83	Seven color jumping trail to left double direction	84	Seven color queue trail to left double direction
85	Seven color alternation trail to left double direction	86	Red trail to right double direction
87	Purple trail to right double direction	88	Blue trail to right double direction
89	Cyan trail to right double direction	90	White trail to right double direction
91	Green trail to right double direction	92	Yellow trail to right double direction
93	Seven color jumping trail to right double direction	94	Seven color queue trail to right double direction
95	Seven color alternation trail to right double direction	96	Full color wave to right direction
97	Seven color water move to left direction	98	Purple background trail to right double direction
99	Blue background trail to right double direction	100	White background trail to right double direction
101	Cyan background trail to right double direction	102	Green background trail to right double direction
103	Yellow background trail to right double direction	104	Seven color background trail to right double direction
105	Seven color spread from the middle to both sides	106	Seven color breathing from the middle to both sides

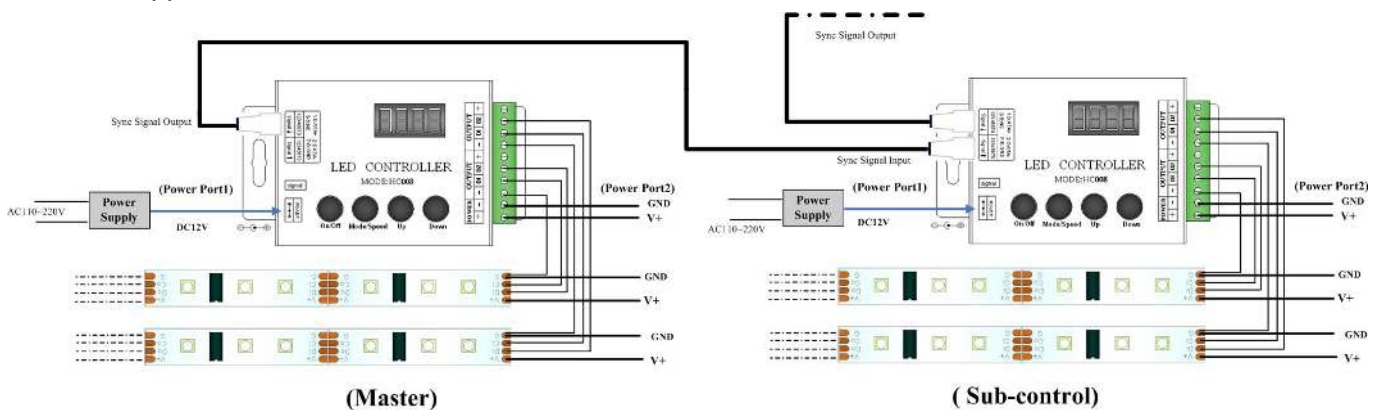
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|-----|---|-----|--|
| 107 | Seven color draw curtain                            | 108 | Seven color lower curtain                            |
| 109 | Seven color spread from both sides to the middle    | 110 | Colorful switch                                      |
| 111 | Seven color overlay to right direction              | 112 | Seven color overlay to left direction                |
| 113 | Seven color overlay to left and right direction     | 114 | Seven color background overlay to double direction   |
| 115 | Seven color overlay from middle to both sides       | 116 | Seven color background overlay middle to both sides  |
| 117 | Seven color overlay from both sides to middle       | 118 | Seven color background overlay both sides to middle  |
| 119 | Sub seven color move back-for-ward direction        | 120 | Sub seven color jump and move back-for-ward          |
| 121 | Sub seven color background move back-for-ward       | 122 | Sub seven color background move single direction     |
| 123 | Sub seven color overlay to left and right direction | 124 | Sub seven color background overlay to left and right |
| 125 | Sub seven color spread to single direction          | 126 | Sub seven color spread back-for-ward                 |
| 127 | Sub seven color water move to left and right        | 128 | Sub seven color spread from middle to both sides     |
| 129 | Sub seven color stretch from middle to both sides   | 130 | Sub seven color stretch to single direction          |
| 131 | Sub seven color overlay to single direction         | 132 | Auto play circularly                                 |
| 133 | Custom combination mode                             |     |  |

## Typical Applications

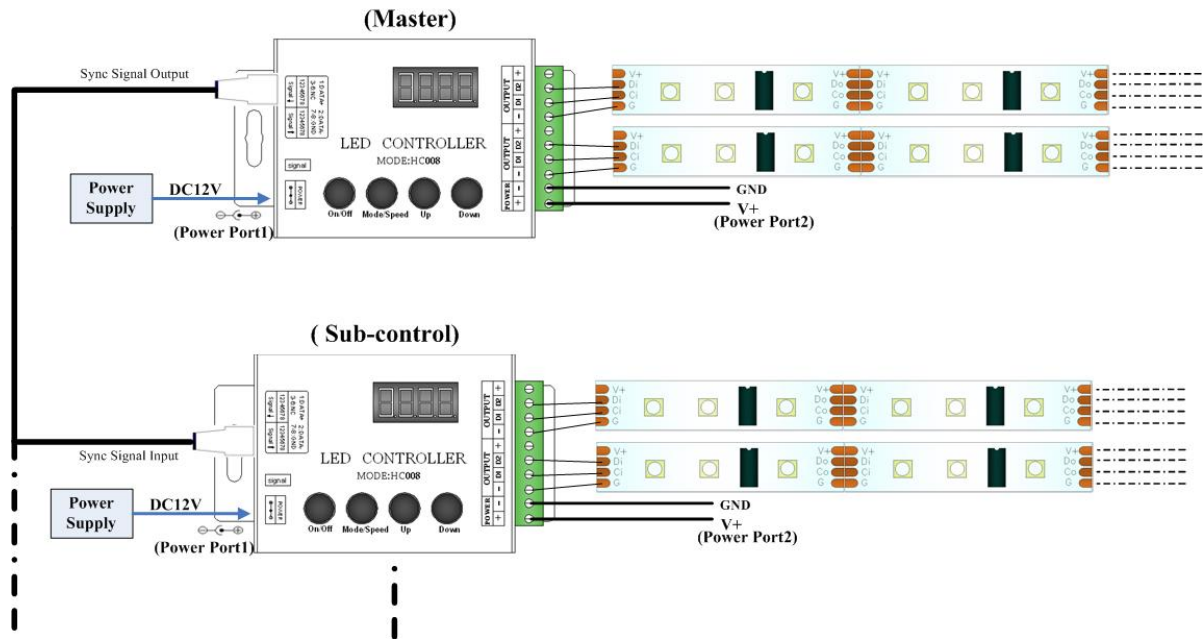
Application Circuit1:



Application Circuit2: Multi-motor synchronization function application:



( a. **Cascade Connection**, the master controller just output the signal to the first branch controller, and the next branch controller is from the previous branch controller, etc)



( b.Bus connection, all branch controller's signal output are from the master controller directly.)



### Cautions:

- 1、 This products Input voltage is DC5V,DC12-24V,other input voltage are not allowed.
- 2、 Lead wire should be connected correctly,according to the wire color and the connecting diagram offers.
- 3、 Overload are prohibited.