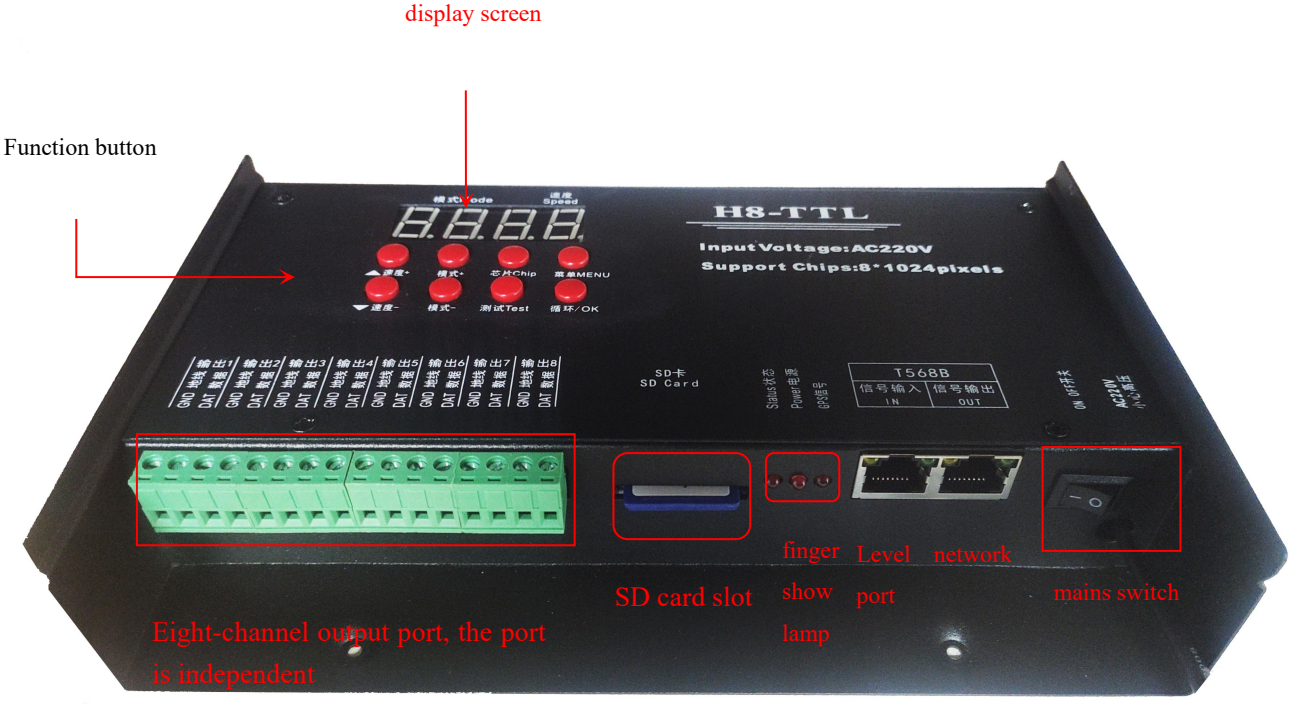
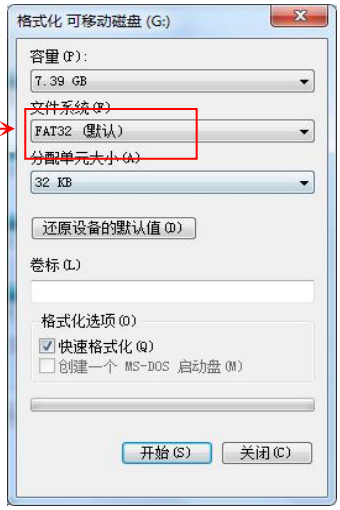
H8-TTL Controller Instructions

一、 Profile of controller



2. Detailed parameters:

1. Power supply voltage: AC220V
2. Control mode: TTL signal serial line
3. Synchronization mode: cascade synchronization
4. Size: 16212742 units (mm)
5. Weight and size: 1.25 Kg
6, SD format: FAT 32 format
7, SD capacity:1G



Note: Formats first before using the SD

2. GPS product features:

1. Solve the problem that the controller and the controller cannot be synchronized due to the failure to install the cable between the building.

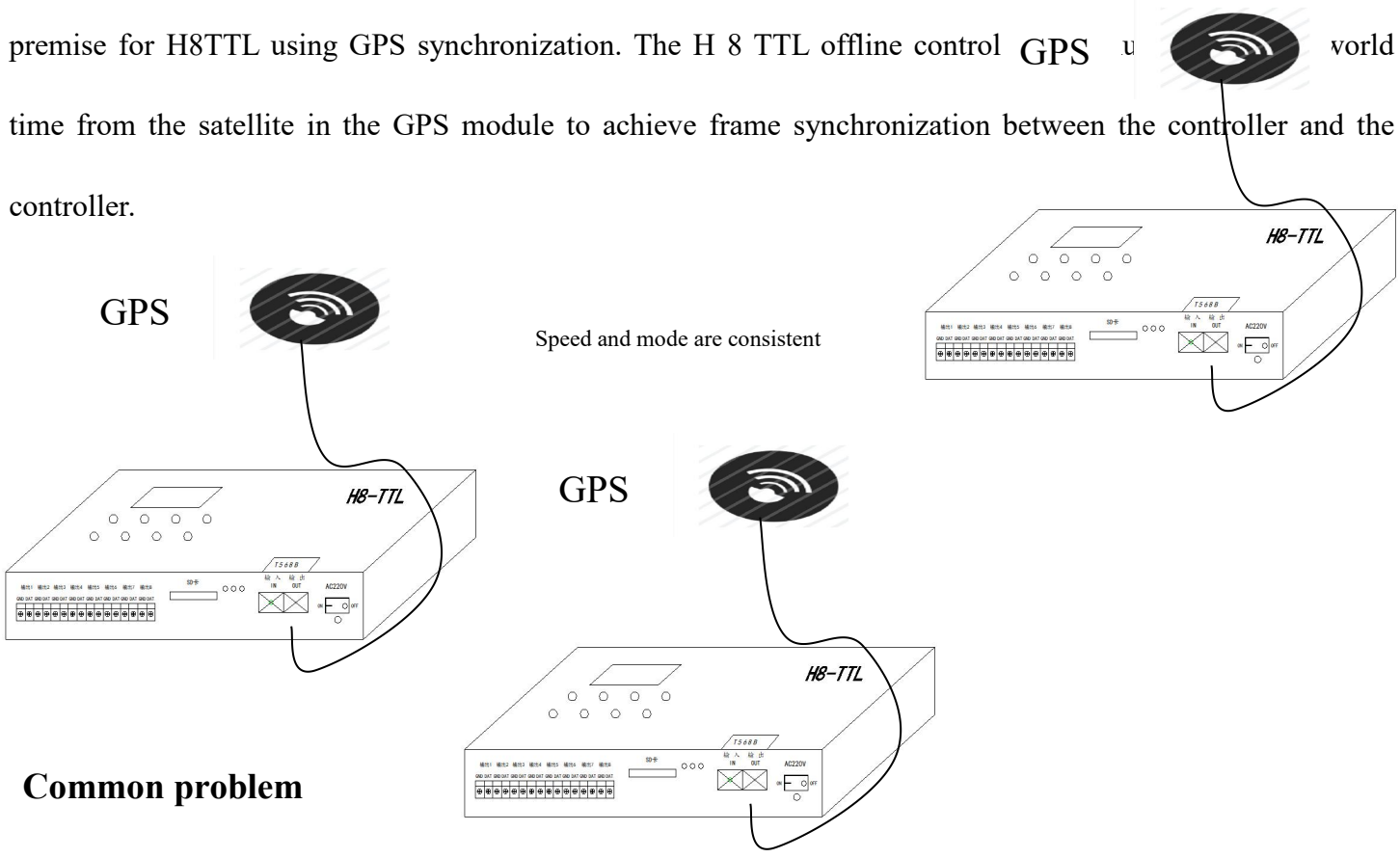
2. With GPS timing, as long as the place can receive satellite signals, the controllers can be synchronized and available globally.

3、External antenna, the antenna and GPS synchronization mode separation, can be better, faster, more stable to receive satellite signals.

Note: The antenna of the GPS global synchronization module must be placed outdoors, not in an indoor confined space.

3. operational principle:

GPS + H8-TTL + H8-TTL offline control system, or GPS + H 8 TTL, GPS + H 8 TTL, GPS + H 8 TTL independent offline master synchronization, using the software automatically divides the picture, each controller runs independent and unified effect, the controller and the controller only needs to realize the timing function to achieve frame synchronization can realize the whole picture, which provides a reliable theoretical premise for H8TTL using GPS synchronization. The H 8 TTL offline control GPS u world time from the satellite in the GPS module to achieve frame synchronization between the controller and the controller.



Common problem

handling:

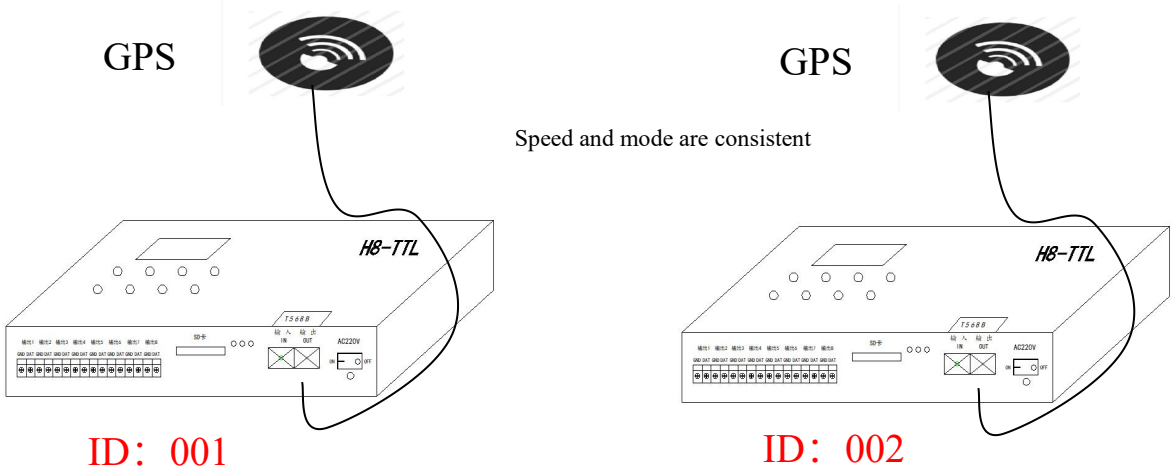
Question 1: After the power-on, two or more GPS, not synchronized

Answer: 1) The antenna of the GPS global synchronization module is not pulled outdoors, and the synchronization module cannot receive the satellite synchronization signal.

2) Due to too many pixels in the controller band, the frame frequency of GPS global synchronization module can not be reached.

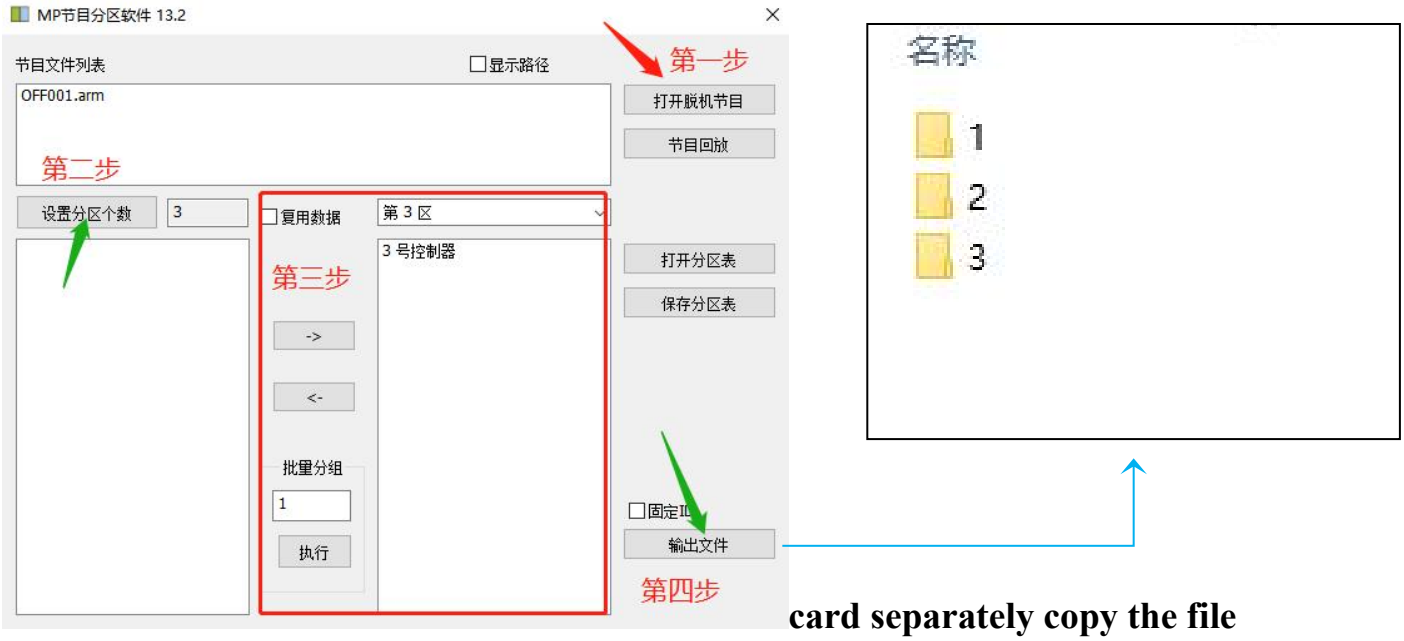
4、Operation mode (GPS synchronization is divided into two schemes)

Scheme 1: the same effect file set different ID number SD card no distinction copy file



Refer to the following controller operation steps for how to set the specific ID number

Scheme two: the same ID number of different effect file (program partition) SD



card separately copy the file

The controller SD card shall separately copy the corresponding file:

Controller 1- - - - - - -folder 1-----OFF001.arm

Controller 2- - - - - - -folder 2---OFF001.arm

Controller 3- - - - - - -folder 3-----OFF001.arm

3. The H8-TTL system features

1,32-65536 gray scale control, software Gamma correction processing.

2、 Support a variety of point, line, surface light source, support a variety of rules, special shape processing.

3. The controller can only control the lamps of TTL signal, and each port can be output independently, and each port can carry 1024 lights.

4, use AC220V AC, each with an independent program, eight-port output.

5、 Controller SD card maximum capacity is 8G. Eight ports are independent output without interference.

6、 The controller must be equipped with SD card for single use and multiple synchronous use

7、 Support for conventional RGB lamps and RGBW lamps (UCS2904, SK6812).

8、 The controller adds a one-button reset function, and hold down the cycle / OK button and speed + select button, power off and restart.

4、Digital display screen and key meaning:

Menu display	**Digital display**	liquid-crystal display	**Chinese translation**
①	**1-c P**	Set Chip x x x x	Set the chip
②	**2-100**	Set Bright 100%	Set the brightness, and the gamma value

③	**d-01**	Set ID	Set up the controller number
④	**4-RGB**	Set RGB Mode	Set the channel
⑤	**LA24**	Set pixes	Set the point number
⑥	**6-100**	Set the refresh rate	Set refresh rate
⑦	**7000**	Synchronization delay setting	Sync time-lapse settings
⑧	**R-oF**	Setting domain Space	Set the domain space

Key name	**meaning**
Speed + / Speed-	Up and down key selection, the number switch up and down, channel up and down selection
Mode + / Mode-	Switching of programs
slug (CHIP)	Press the chip key will display the digital model on the digital screen, and press up and down to switch to the corresponding model of the lamp
test (Test)	A total of five test effects, to detect whether the signal is smooth and whether the power supply is sufficient, press this button to switch
Menu (MENU)	Settings: chip, brightness, number, channel, points, refresh rate, delay setting, domain space setting
recurrence (OK)	For the above items, press the cycle / OK key to save and switch the cycle mode

5. Detailed operation steps are as follows:

1, set chip (CHIP): chip is the model of lamps, commonly used chips on the market can be controlled:

Full-color lamps and lanterns are controlled through the chip, no matter what full-color lamps and lanterns are models, so when using the specific chip model of the lamp, know the model and then operate the controller.

The specific operation steps are provided as follows:

Step 1: press the menu (MENU) key once or press, and the chip (Chip) key will enter once

Step 2: Press the cycle / OK key to enter the chip selection interface

Step 3: Press the speed + / speed-switch the chip model and select the corresponding model of the lamp.

Chip selection corresponding table			
01：1903	02：6812	03：1670	04：1804
05：2904	06：2811	07：2812	08：1914
09：9883	10：8206	11：8205	12：5603
13：1923	14：1814		

Step 4: Press the cycle / OK key, save to the controller, the lamp begins to effect.

2. Adjust the brightness (Bright):

When the actual brightness of the actual lamp is bright or low, the brightness value can be appropriately adjusted, can only adjust the overall brightness, grade 5% - -100%, the larger the 100%, the higher the brightness.

Step 1: press the menu (MENU) key twice, and the interface displays below

Step 2: Press the cycle / OK key to enter the brightness adjustment interface.

Step 3: press the speed + / -key to switch the number level, select the appropriate lamp brightness 005-100, the larger the number, the higher the brightness.

Step 4: Press the cycle / OK key to save to the controller, and the lamp will adjust to the selected corresponding brightness.

2.1. Set the Gamma value:

Step 1: press the menu (MENU), key twice, the interface display

Step 2: Press the cycle / OK key twice to enter the gamma adjustment interface.

Step 4: Press the speed + / -key, switch the gamma value, adjust the value, press the cycle / OK key to save and return to the main interface.

3. Set the ID:

When multiple controllers are used synchronously, the user can choose to set the ID number of each controller, or separate each controller. If the ID number is set, set it in sequence. The single use ID number is 0001, because the drawing port number will be set when doing the program. For example, the port range of 1-2 must be the first controller.

Step 1: press the menu (MENU) key 3 times, the interface displays below

Step 2: Press the cycle / OK key to enter the ID setting interface, the flashing flicker can be adjusted

Step 3: Press the speed + / -key to switch the number and select the number corresponding to the controller.

Step 4: Press the cycle / OK key to determine the return to the main interface.

4. Channel switching:

Channel refers to the order of R, G and B of the lamp, with a total of 7 orders; when the color of the actual lamp deviates, the order of RGB must be misplaced, so the order of RGB should be adjusted through the controller.

The specific operation steps are described as follows:

Step 1: Press the menu (MENU) key 4 times, and the interface displays below

Step 2: Press cycle / OK to confirm the channel selection interface.

Step 3: Press the speed + / -key to switch the channel (1 rgb, 2 rbg, 3 gbr, 4 grb, 5 bgr, 6 brg, 7 rgbw) and select the channel corresponding to the lamp.

Step 4: Press the cycle / OK key, save and return to the main interface.

5. Set the number of points:

Step 1: press the menu (MENU) key 5 times, and the interface displays below

Step 2: Then press the cycle / OK key to confirm the entry point setting interface, and the number flashing representative can be adjusted.

Step 3: Press the speed + / -key, switch the number up to 1024 points, and select the required number.

Step 4: Press the cycle / OK key, save and return to the main interface.

6. Set the refresh rate:

Step 1: Press the menu (MENU) key 6 times, and the interface displays below

Step 2: Then press the cycle / OK key to confirm the refresh rate setting interface, the number flashing representative can be adjusted.

Step 3: Press the speed + / -key, switch the number (50-300), and select the required refresh rate value.

Step 4: Press the cycle / OK key, save and return to the main interface.

7. Synchronous delay setting:

Step 1: press the menu (MENU) key 7 times, the interface shows below

Step 2: Then press the cycle / OK key to confirm the synchronization delay setting interface, the number flicker representative can be adjusted.

Step 3: Press the speed + / -key, switch the number (0-999), and select the desired value.

Step 4: Press the cycle / OK key, save and return to the main interface.

8. Set up the domain space:

Step 1: Press the menu (MENU) key 8 times, and the interface displays below

Step 2: Press the cycle / OK key to confirm the domain space setting interface, the flashing flicker can be adjusted.

Step 3: Press the speed + / -key, switch the number (oF, 01,02), and select the desired value.

Step 4: Press the cycle / OK key to save the controller at the same time to enter the following interface, the flashing value can be adjusted

Step 5: Press the speed + / -key to select the desired value.

Step 6: Press the cycle / OK key to save to the controller and enter the following interface

Step 7: Press the speed + / -key to select the desired value.

Step 8: Press the cycle / OK key to save to the controller and return to the main interface

9. Switching mode (MODE):

It can be divided into SD card program mode and built-in effect mode, the two modes can switch between each other, press and hold down the cycle / OK key for 3 seconds to switch between the two modes. If you don't like the built-in effect of the controller, the programmer need to design the program to copy into the SD card; if the simple contour effect does not need much variation, you can directly use the built-in effect, a total of 130 kinds.

9.1, SD card program mode: it is designed through the program software, according to the requirements of customers, or the designers themselves design.

The specific operation steps are described as follows:

Step 1: Press the cycle / OK key for 3 seconds to switch between the SD card program and the built-in program, which will be displayed as follows

Program mode of d: SD card; 01: first program; 5: speed 5

Step 2: Press the mode + / -key to switch the mode files up and down.

Step 3: Press the speed + / -key to adjust the controller speed (1-8) the larger the number, the faster the speed.

Press the cycle / OK key for a single time to switch a single program cycle and all program cycles.

And d: a single cycle representing the SD card program; A: representing the SD card program.

F: represents a single cycle of built-in programs; E: represents the full cycle of built-in programs

9.2, built-in effect mode: (controller card and card can call out the built-in effect, simply speaking, has nothing to do with SD card.)

The controller itself comes with the effect program, these built-in effect program is relatively simple, mainly used to test whether the lamp is smooth and the controller is working normally, if you want to be more gorgeous effect, you need to write the program file placed into the SD card. Like some simple contours, you can use a built-in effect.

The specific operation steps are described as follows:

Step 1: Long press the cycle (OK) key for 3 seconds, until the interface displays

F: Controller built-in program mode; 01: first program; 5: speed 5

Step 2: Press the mode + / -key to switch the program, with a total of 86 modes

Step 3: Press the speed + / -key to switch the program speed (1-8).

Press the cycle / OK key for a single time to switch a single program cycle and all program cycles.

And d: represent the SD card program; A: cycle for the SD card.

F: single loop representing built-in programs; E: single loop representing all built-in programs.

10. Set-up test (Test):

The following cases need to be used in the test function: ① Do not know the number of lamps ② do not know the channel order of lamps RGB, RBG, GRB, GBR, BGG, BGR ③ lamps ④ the power supply is sufficient ⑤DMX512 the lamp is normal, whether the code) the questions mentioned in the appeal can be tested through the test function.

Step 1: Press the test Test key to enter the test interface

Step 2: Press the speed + / -key to switch the 3 / 4 channel lamps, take 3 channels as an example

Step 3: Press the cycle / OK key, and the interface display

Step 4: Press the speed + / -key to switch the number and select the corresponding port test

Step 5: Press cycle / OK to enter the manual point interface

Step 6: Press the speed + / -key to manually test individually and in turn (1-1024).

Step 7: Press the menu (MENU) key to automatically measure the point, and press this key again to return to the manual point interface

Press the Test Test at the manual point interface

Press the Test Test key again to jump to the next color

- 0 2 - - 0 3 - - 0 4 - - 0 5 -

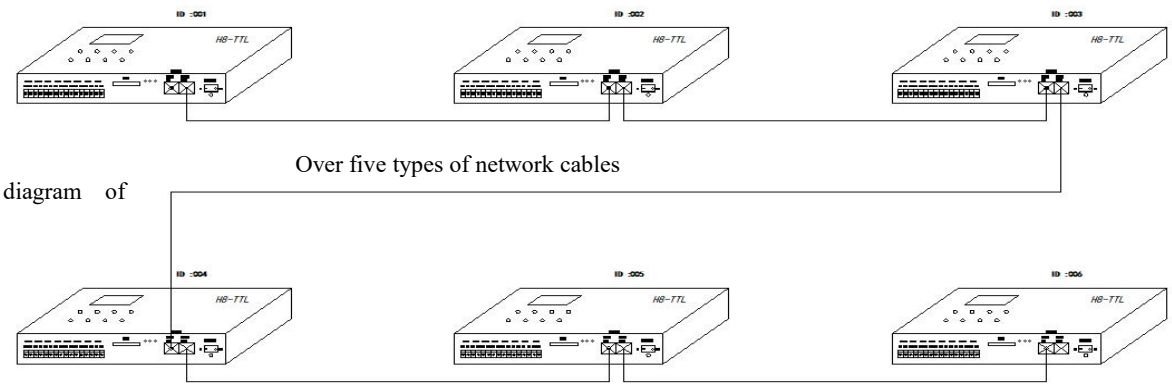
Always bright red, always bright green, always bright blue, always bright white

The bright color order of the lamp is the channel order of the lamp

Step 8: Press the cycle / OK key to return to the main interface.

VI. Schematic diagram of H8-TTL wiring:

Schematic diagram of cascade:

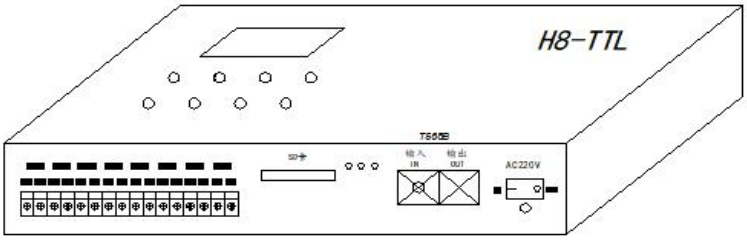


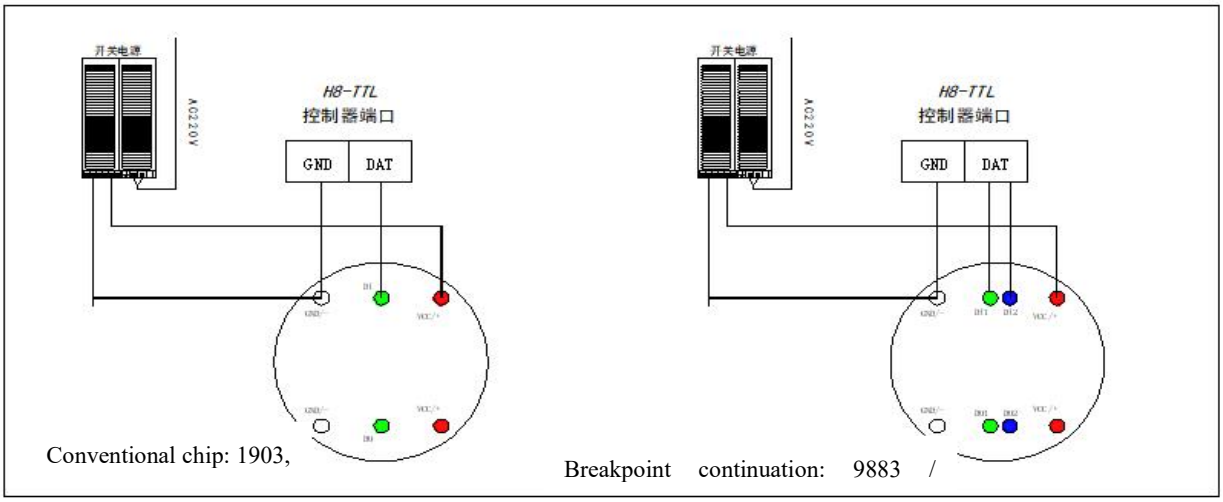
Note: A, cascade synchronization use crystal head network cable (568B parallel through).

B、Each controller to copy the same program, the SD card capacity should be consistent.

C、Network cable uses super five types of shielding network cable.

D、The controller sets the ID number of each unit. After the cascade, the first one is the master control, and the first one can be adjusted.





Conventional chip: 1903,

Breakpoint continuation: 9883 /

Requirements: 1, GND must be connected, to ensure that the ground line is the same.

2. Clear the data lines. The data lines of different chips are different: one conventional data line, and two data lines at breakpoints.

3, the positive and negative electrode of the power supply, the positive and negative signal should be marked clearly.