

# H802SE



## 1. Features

- (1). 4 ports drive maximum 6144 pixels.
- (2). SD card supports FAT32 and FAT16 format.
- (3). You can switch files, adjust brightness, set clock frequency and play speed by remote control or by four buttons.
- (4). Set DMX address for TM512, UCS512 and other DMX512 chips.

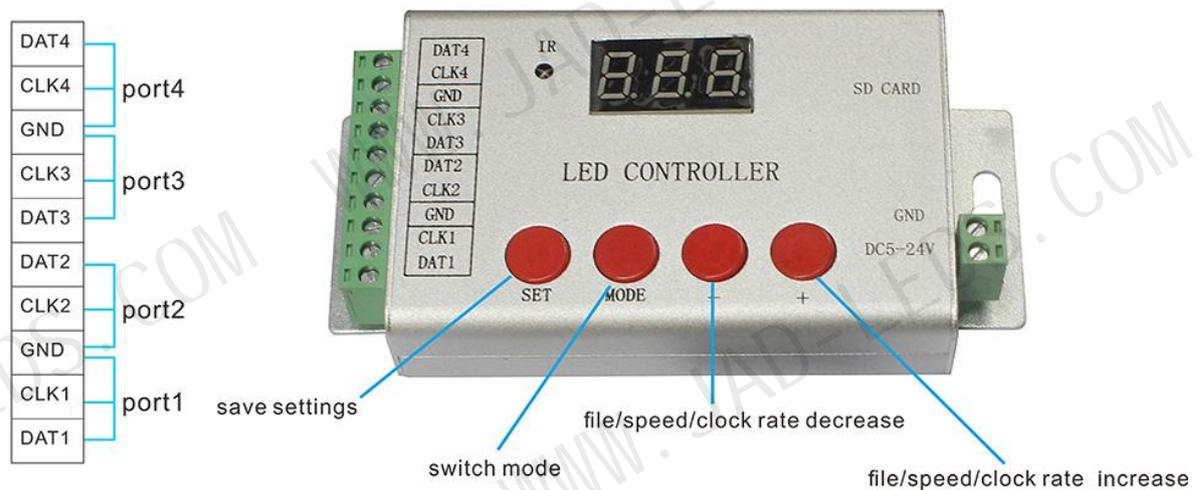
## 3. Supported driver chips

LPD6803、LPD8806、LPD6813、LPD1882、LPD1889、LPD6812、LPD1883、  
LPD1886、DMX512、APA102、UCS1903、UCS1909、UCS1912、UCS512、  
UCS8904、WS2811、WS2812、TM1803、TM1804、TM1809、TM1812、

TM1829、TA9912、TM1913、TM1914、TM1926、TM1814、TM512、  
 WS2801、WS2803、P9813、P9816、SM16716、SM16711、SM1651X、  
 MY9221、MY9231、MY9941、MY9943、LD151x、LD153x、MBI6021、  
 MBI6023、MBI6024、INK1003、TLS3001、GW6025、QED3110 etc.

Note: H802SE supports more than the chips listed above(for example  
 UCS2903 has the same sequence diagram with UCS1903, H802SE  
 supports them all).

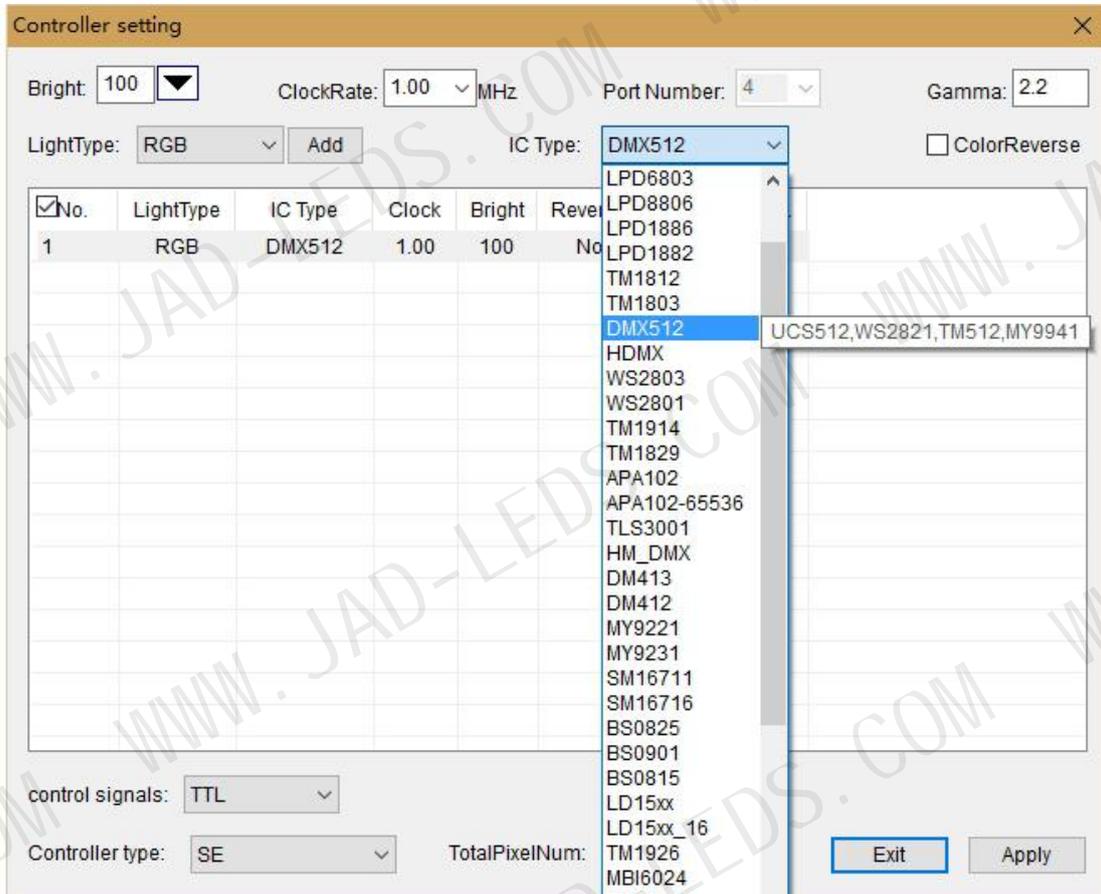
#### 4. Product Display

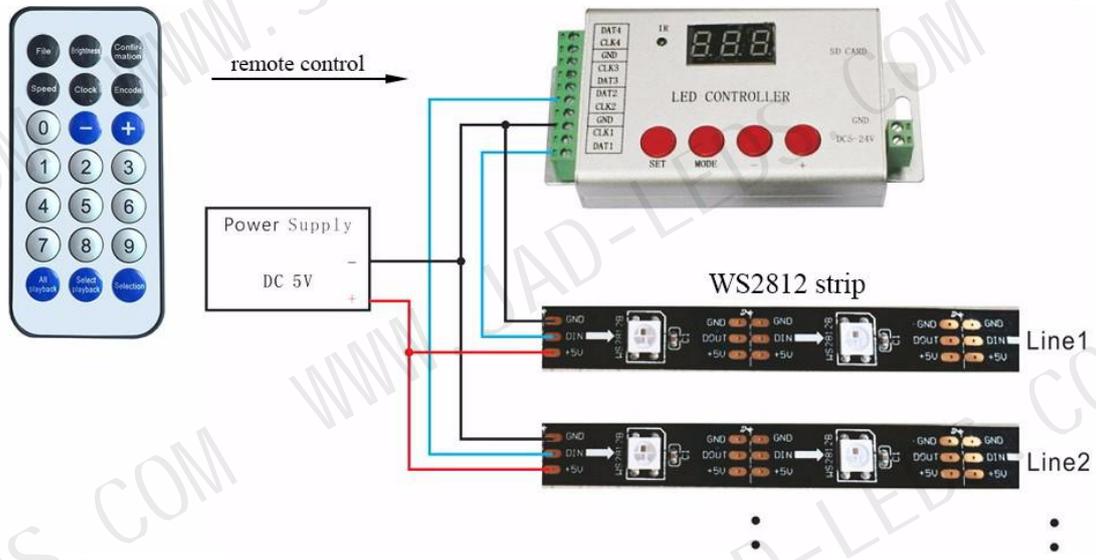


**GND, DAT:** for WS2811, WS2812, UCS1903, SK6812, etc.

**GND, CLK:** for APA102, etc.

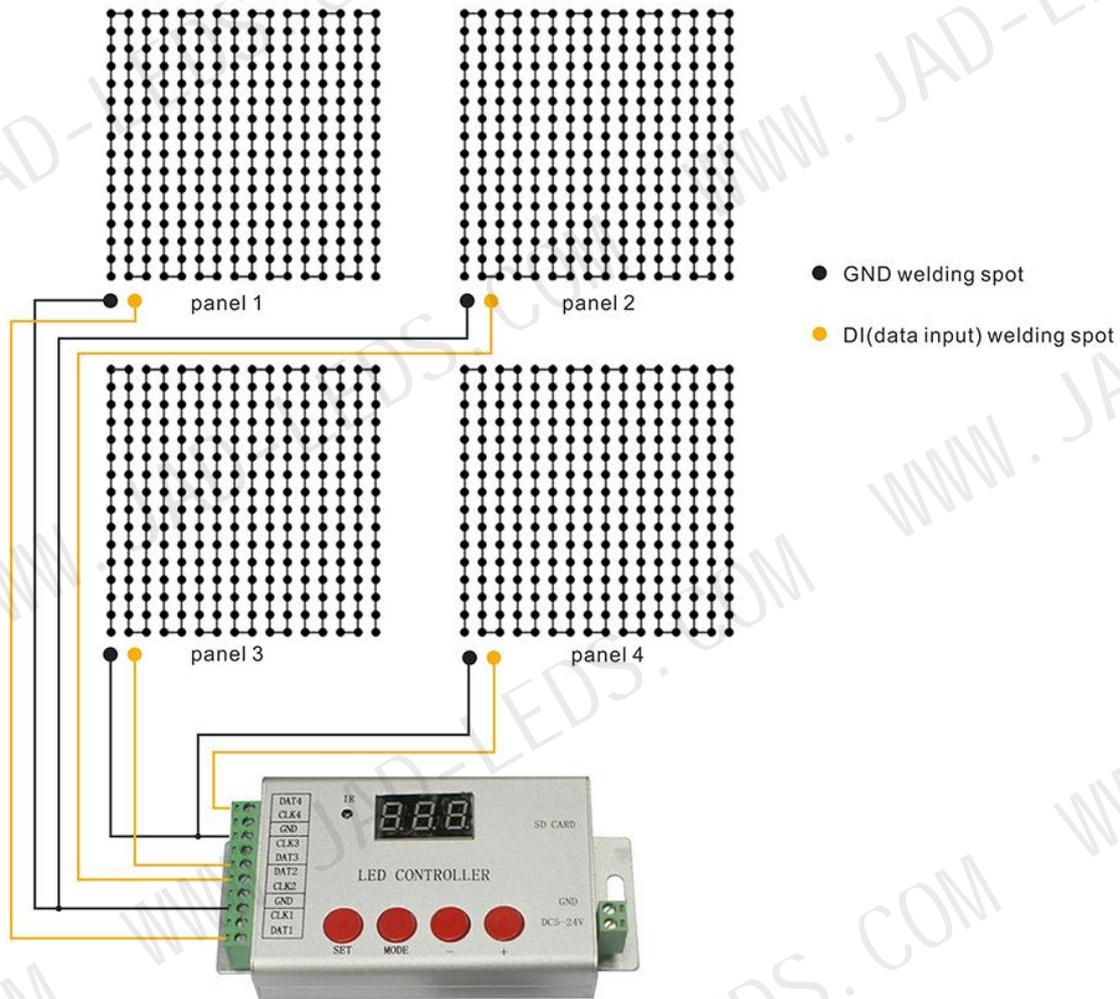
When you choose DMX512 in software, DAT and CLK turn to D+ and D-





### 5. Basic Workflow

Assume you have 4 pcs individual 16\*16 (pixels) WS2812 panel, and want to put them together to make a larger display.



## Step 1: Use LED Build Software to program

LED Build Software download:

<https://drive.google.com/open?id=0B1gzqyV6hfOgN2pkMV8yMFozYzQ>

zYzQ

LED Build Tutorial Video download:

<https://drive.google.com/open?id=0B1gzqyV6hfOgUnFjeG9EM3VRZjA>

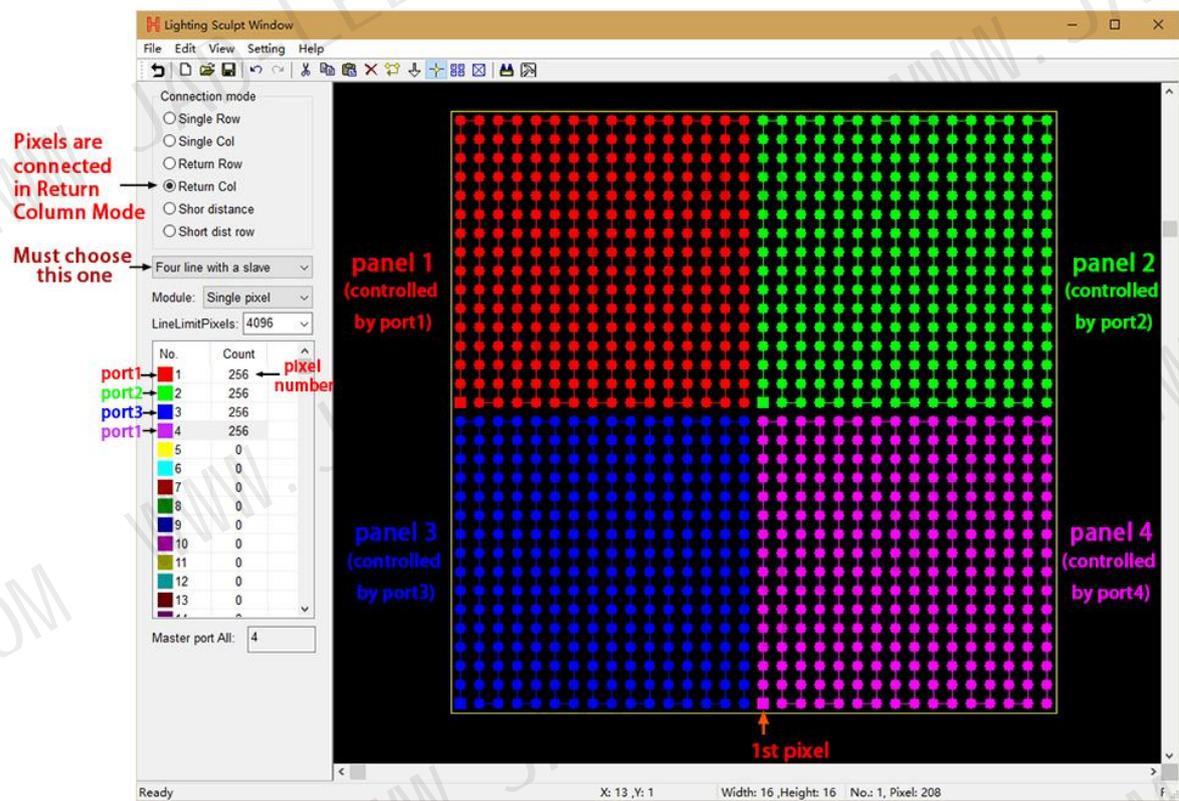
ZjA

Video especially for H802SE download:

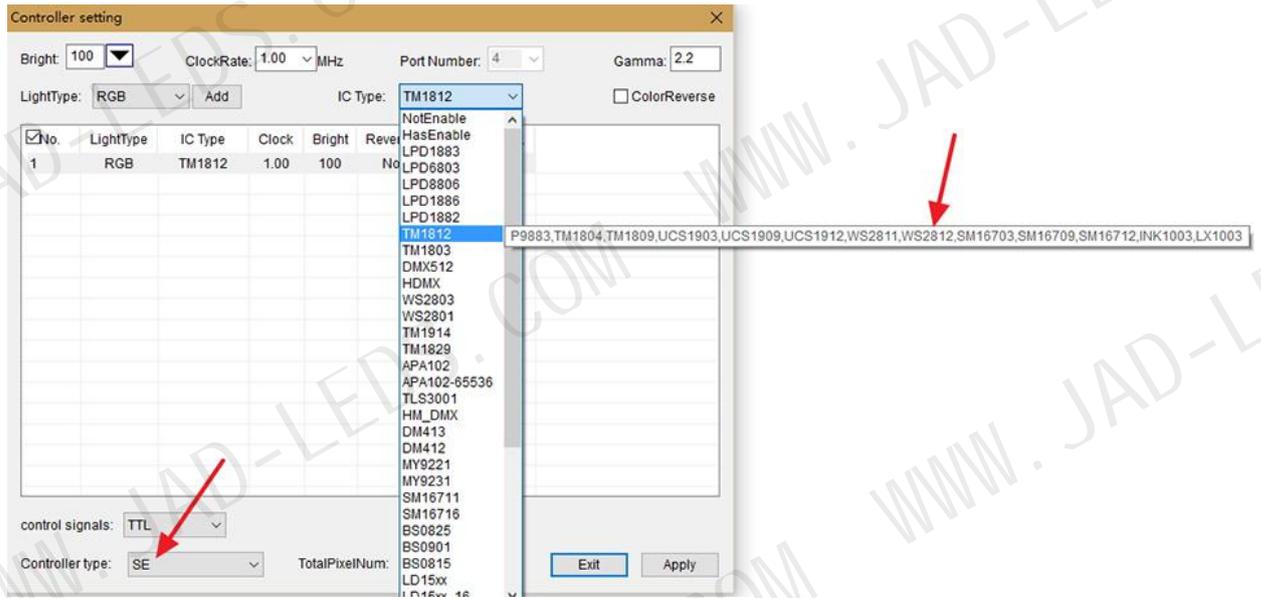
<https://drive.google.com/open?id=0B1gzqyV6hfOgMU9xNXZYLXU>

wVDA

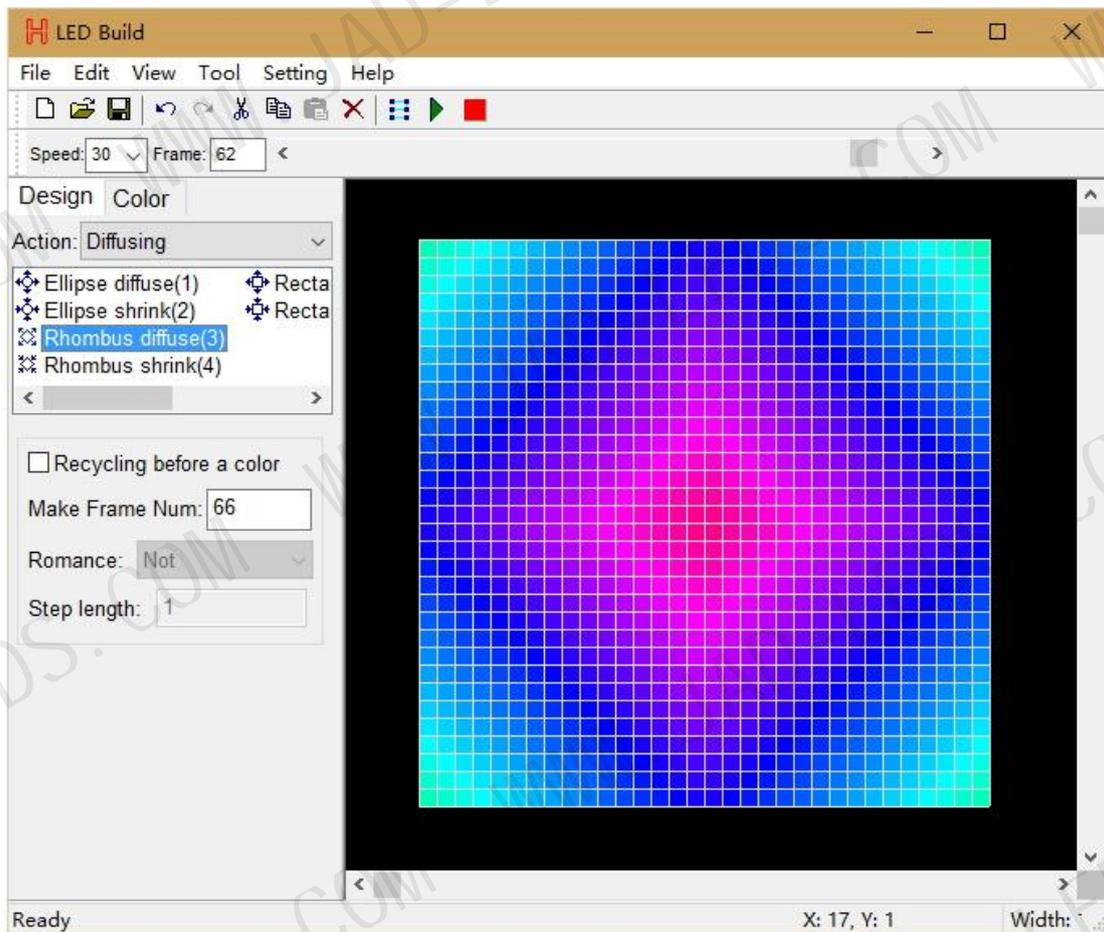
## (1). Place Pixels



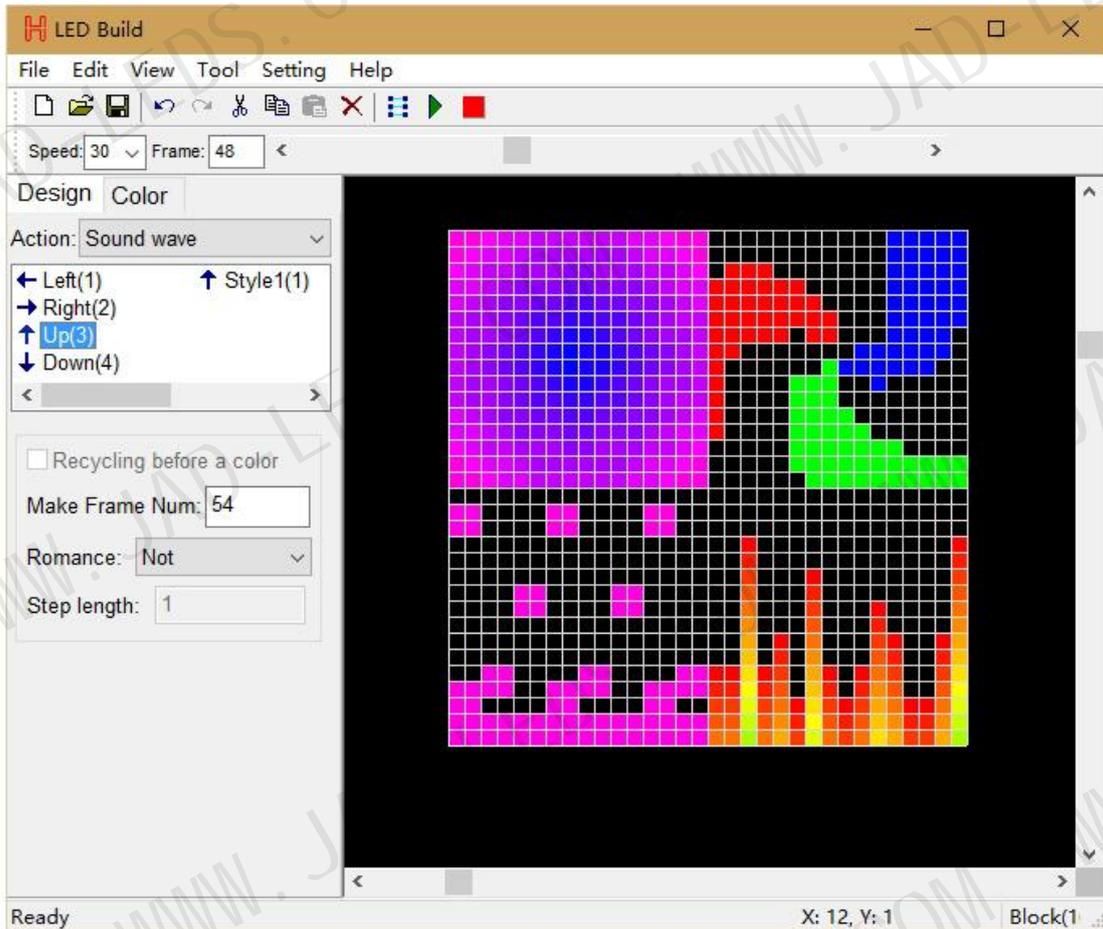
## (2). Light Setting



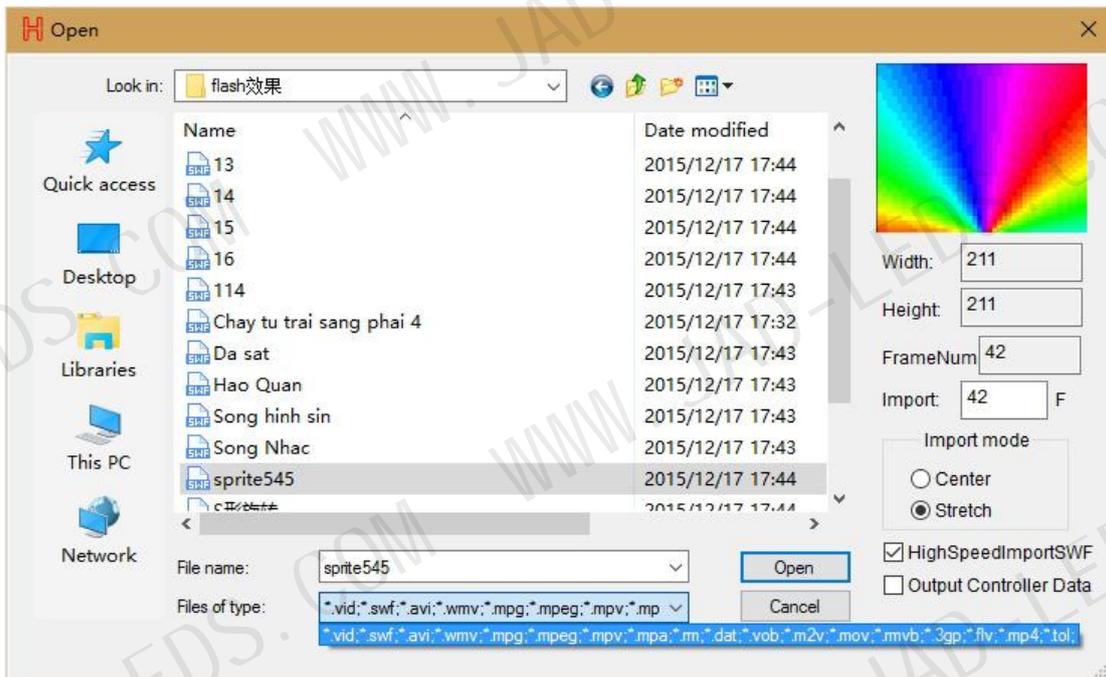
### (3). Make Effects

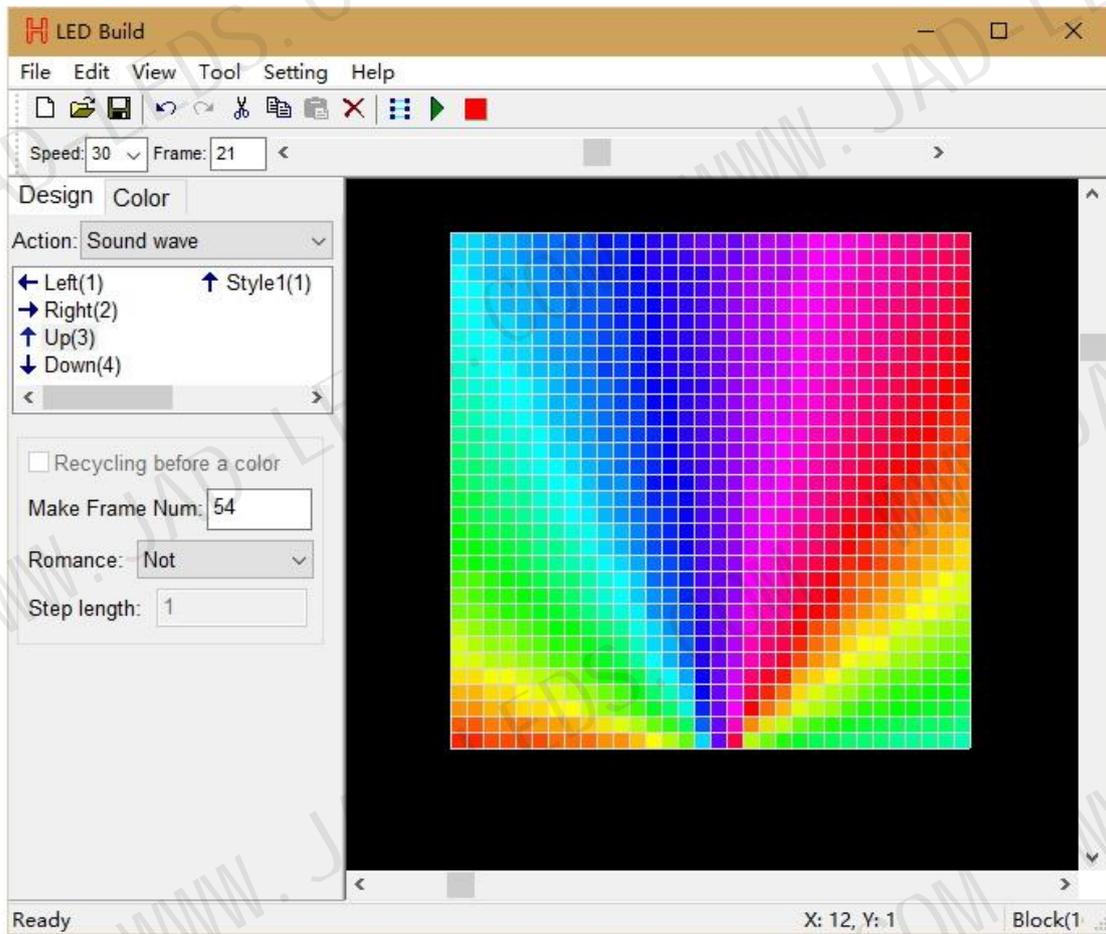


Effect for each panel could be different

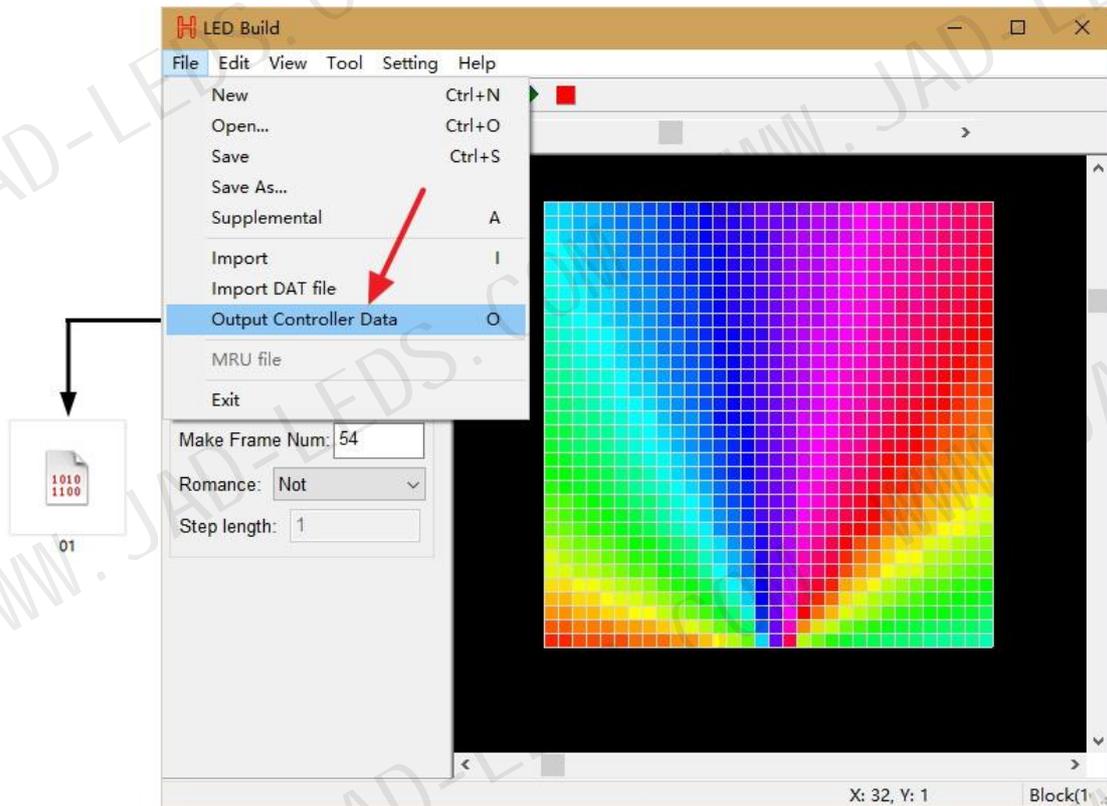


You can also import video





(4). Output controller data and put it into SD card



For more details, please refer to the video post above.

## 6. Set DMX address for DMX512 chips (TM512, UCS512, etc)

### Connection:

#### UCS512

lamps		Controller
GND	to	GND
D+ (or marked as A)	to	DAT(DAT1,DAT2,DAT3, or DAT4)
D- (or B)	to	CLK(CLK1,CLK2,CLK3, or CLK4)

## For other chips

lamps		Controller
GND	to	GND
PI	to	DAT4(after encode success, PI must be disconnected)
D+ (or marked as A or DA1)	to	DAT3(DAT1 or DAT2)
D- (or B)	to	CLK3(CLK1 or CLK2)

## Workflow:

### Use buttons

Address multiple DMX chips. The dat file in the SD card must be used to control the DMX512 lamp. **If the SD card is not inserted, it remembers the last chip model.**

1. Pi of most DMX chips should not be connected to the controller:

GND connect to GND

D + (also called A) connected to Dat (DAT1, dat2, dat3, dat4)

D - (also called B) connected to CLK (CLK1, CLK2, clk3, clk4)

**Pi of h801dmx must be connected to GND.**

2. TM512AL, UCS512, DMX512AP wiring:

GND connect to GND

PI must be connected to dat4; **after address compilation, PI must be disconnected or connected to GND**

D + (also called a or DAI) connected to dat3 (also connected to dat2 or DAT1)

D - (also called B) connected to clk3 (also connected to CLK2 or CLK1)

3. Sm16500 / sm17500 address:

Press the mode key continuously, **“F”** represents the file, **“P”** represents the speed, **“n”** represents the color number of each pixel, RGBW's light is 4, RGB's light is 3. Press the mode key again to **“d”**. count the points.

Press mode key to mode **“C”**, select IC type, press **“+”** key to C11, and then press mode key to mode **“n”** to set the total channel number occupied by this transcoding chip, for example, the chip has 16 sm168803, which is set as 48 here; if it has 16 sm16804, which is set as 64 here.

Press the mode key to “C” mode to set the power on color. 0-8 indicates power on Color: black, red, green, yellow, blue, purple, green, white, fourth channel white.

Then press the mode key to a mode to set the current gain. For the corresponding current of 1-16, please refer to the instructions of the serial chip.

Press the mode key again, and the display “1C1” indicates that the serial chip is sm16813, and 1c0 indicates that other chips are connected in series.

Then press the mode key to display “R01” for transcoding output DMX512 protocol and R00 for zeroing protocol.

Press the mode key to the e mode, input the serial number of the starting pixel point, and then press the set key. Please wait patiently for a few seconds.

#### 4. Sm1751x, sm1752x and ucs512d address:

Press the mode key continuously, “f” represents the file, “P” represents the speed, “n” represents the color number of each pixel, RGBW’s light is 4, RGB’s light is 3. Press the mode key again to D. count the points.

Press mode key to “C” mode, select IC type, sm1751x select C07, sm1752x select C09, ucs512d select C08. Then press the mode key to the N mode to set the total number of channels occupied by the transcoding chip. For example, if the chip has 16 RGB lights, it is set as 48 here; if it has 16 RGBW lights, it is set as 64 here.

Press the mode key to “C” mode to set the power on color. 0-8 indicates power on Color: black, red, green, yellow, blue, purple, green, white, fourth channel white.

Press the mode key to the e mode, input the serial number of the starting pixel point, and then press the set key. Please wait patiently for a few seconds.

#### 5. Ucs512e address:

Press the mode key continuously, “F” represents the file, “P” represents the speed, “n” represents the color number of each pixel, RGBW’s light is 4, RGB’s light is 3. Press the mode key again to D. count the points.

Press mode key to “C” mode, select IC type, press + key to C13, press mode key to “n” mode, set the total channel number occupied by this transcoding chip, for example, the chip has 16

RGB lights, which is set as 48 here, and if it has 16 RGBW lights, which is set as 64 here.

Press the mode key to “C” mode to set the power on color. 0-8 indicates power on Color: black, red, green, yellow, blue, purple, green, white, fourth channel white.

Press the mode key to a mode, and set the current gain to 1-16, which is only valid when ucs512eh forwards ucs9812.

Press the mode key to the e mode, input the serial number of the starting pixel point, and then press the set key. Please wait patiently for a few seconds.

#### 6. Hi512a address:

Press the mode key continuously, “f” represents the file, “P” represents the speed, “n” represents the color number of each pixel, hi512a4 selects 4, hi512a6 is 3. Press the mode key again to D. count the points.

Press mode key to mode “C”, select IC type, press + key to C12, press mode key to mode n, hi512a4 is 4, hi512a6 is 6, hi512a0 is the actual number of transcoding channels.

Press the mode key to “C” mode to set the power on color.  
0-8 indicates power on Color: black, red, green, yellow, blue,  
purple, green, white, fourth channel white.

Press the mode key to the e mode, input the serial number of  
the starting pixel point, and then press the set key. Please wait  
patiently for a few seconds.

#### 7. Hi512d address:

Press the mode key continuously, “F” represents the file,  
“P” represents the speed, n represents the number of colors of  
each pixel, select 5. Press the mode key again to D. count the  
points.

Press mode key to “C” mode, select IC type, press + key to  
C14, press mode key to n mode, select 5.

Press the mode key to “C” mode to set the power on color.  
0-8 indicates power on Color: black, red, green, yellow, blue,  
purple, green, white, fourth channel white.

Then press the mode key to a mode to set the current gain 1-16.

Press the mode key to the e mode, input the serial number of the starting pixel point, and then press the set key. Please wait patiently for a few seconds.

#### 8. Address of other chips:

Press the mode key continuously, "F" represents the file, "P" represents the speed, "n" represents the color number of a pixel, RGBW's light is 4, RGB's light is 3, 2 represents occupying two channels, 1 represents occupying one channel, and this parameter should be set correctly when encoding.

Press the mode key again to D. count the points.

Press mode key to "C" mode, select IC type, tm512a1 and ucs512 use default 1, that is, C01, C02 for h801dmx, C03 for dmx512ap, C04 for sm1651x, C05 for h860, C06 for ucs512c, tm512ac, qed512, C07 for sm1751x, C08 for ucs512d, C09 for sm1752x, C10 for tm512ac, C11 for sm16500 / sm17500, C12 for hi512a, C13 for ucs512e, C14 for hi512d.

Then press the mode key to the "n" mode, and set the total number of channels occupied by the transcoding chip or the transcoding board. For example, if a transcoding chip has 16 RGB

lights, it is set as 48 here; if it is not a transcoding chip, this parameter setting is the same as n.

Press the mode key to the “E” mode, input the serial number of the starting pixel point, and then press the set key. Please wait patiently for a few seconds. The lamps of Tianwei and lianxinke chips will first turn white, then turn green (monochrome), address 800 points at a time, and then update the power on address. H860 encoding succeeded

## 8. Specifications

**Input Voltage: DC 5~24V**

**Power Consumption: 0.8W**

**Control Pixels Number: 6144**

**Weight: 0.15KG**

**Dimension: L132 x W71 x H24**