H801SB
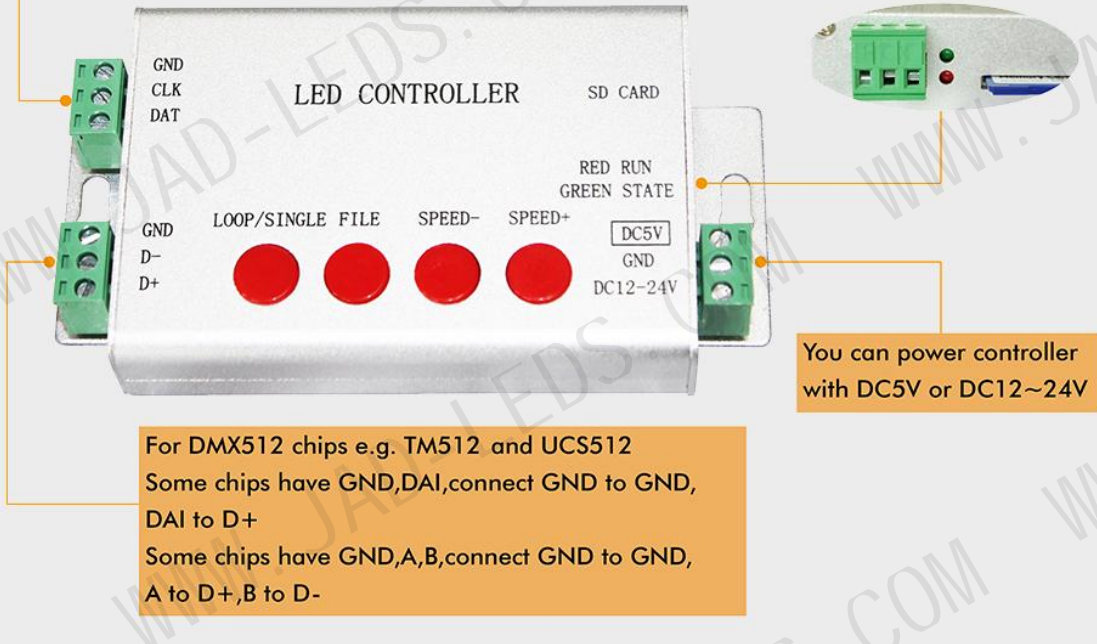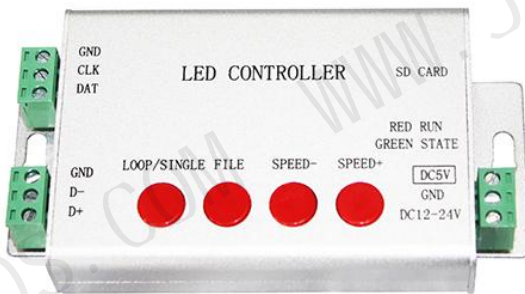
For single line chips e.g. WS2812,WS2811,UCS1903,
connect GND to GND, DAT to DI
For double line chips e.g. APA102,
connect GND to GND,DAT to DI,CLK to CI

GND
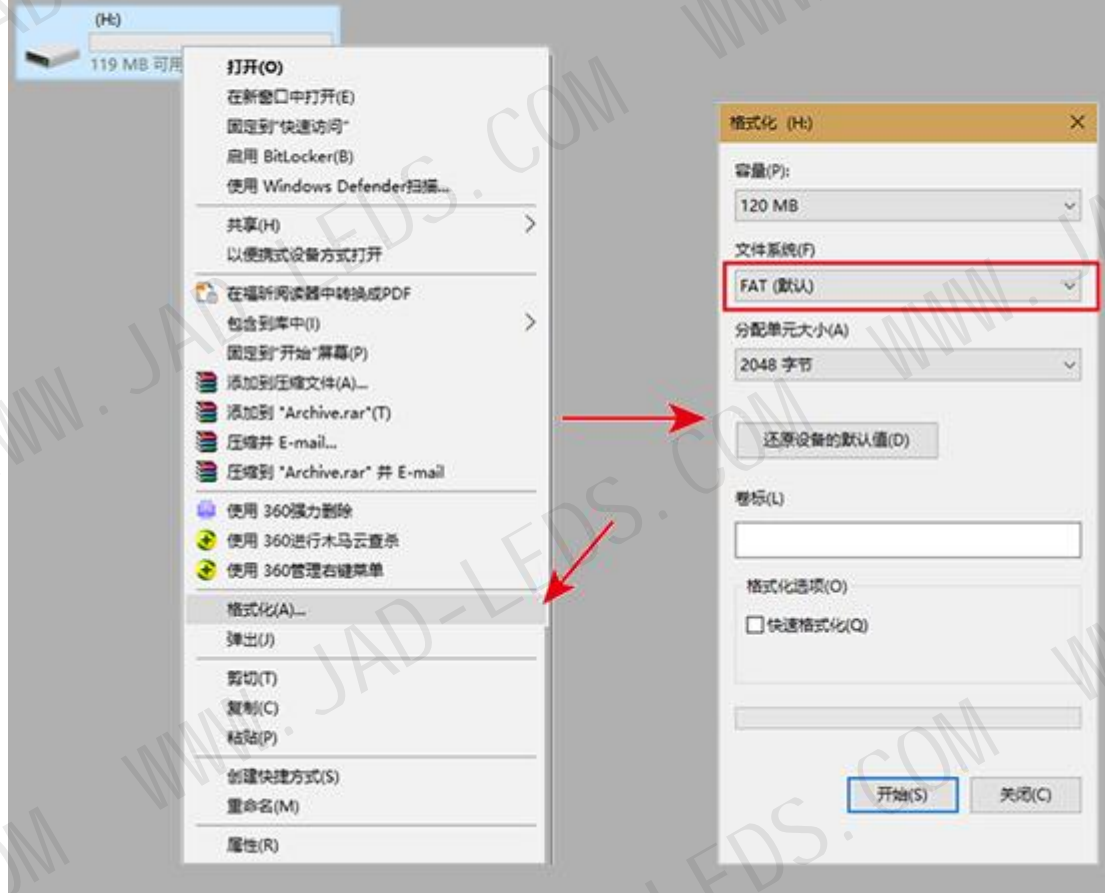CLK
DAT

LED CONTROLLER

SD CARD

RED RUN
GREEN STATE

GND
D-
D+

LOOP/SINGLE FILE   SPEED-   SPEED+

DC5V
GND
DC12-24V

You can power controller
with DC5V or DC12~24V

For DMX512 chips e.g. TM512 and UCS512
Some chips have GND,DAI,connect GND to GND,
DAI to D+
Some chips have GND,A,B,connect GND to GND,
A to D+,B to D-

GND
CLK
DAT

LED CONTROLLER

SD CARD

RED RUN
GREEN STATE

GND
D-
D+

LOOP/SINGLE FILE   SPEED-   SPEED+

DC5V
GND
DC12-24V

Support Chips:

LPD6803, LPD8806, LPD1882, LPD1889, LPD6812,
LPD1883, LPD1886, DMX512, HDMX, APA102, MY9221,
UCS6909, UCS6912, UCS1903, UCS1909, UCS1912,
UCS8904, WS2801, WS2803, WS2811, WS2812, TM1803,
TM1804, TM1809, TM1812, TM1829, TA9912,TM1913,
TM1914, TM1926, TM1814, INK1003, LX1003, LX2003,
LX2006, TLS3001, P9813, P9816, SM16711, SM16716,
LD151x, LD153x, MBI6021, MBI6023, MBI6024

format SD card after many times of deleting or adding files

(H:)
119 MB 可用

打开(O)
在新窗口中打开(E)
固定到"快速访问"
启用 BitLocker(B)
使用 Windows Defender扫描...

共享(H)   >
以便携式设备方式打开

在福昕阅读器中转换成PDF
包含到库中(I)   >
固定到开始"屏幕(P)
添加到压缩文件(A)...
添加到 "Archive.rar"(T)
压缩并 E-mail...
压缩到 "Archive.rar" 并 E-mail

使用 360强力删除
使用 360进行木马云查杀
使用 360管理右键菜单

格式化(A)...
弹出(J)

剪切(T)
复制(C)
粘贴(P)

创建快捷方式(S)
重命名(M)

属性(R)

格式化 (H:)   ×

容量(P):
120 MB   ⌄

文件系统(F)
FAT (默认)   ⌄

分配单元大小(A)
2048 字节   ⌄

还原设备的默认值(D)

卷标(L)

格式化选项(O)
☐ 快速格式化(Q)

开始(S)   关闭(C)

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5 Kinds of Working Mode:

SD card control mode

LED CONTROLLER

GND
CLK
DAT

SD CARD

RED RUN
GREEN STATE

GND
D-
D+

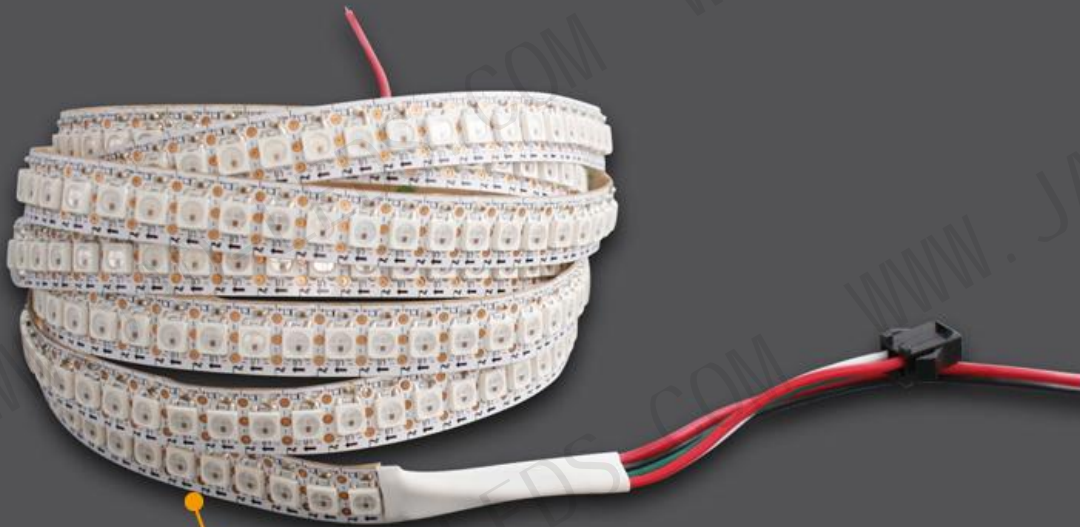LOOP/SINGLE FILE   SPEED-   SPEED+

DC5V
GND
DC12-24V

DMX512 Console mode
(connect DMX console)

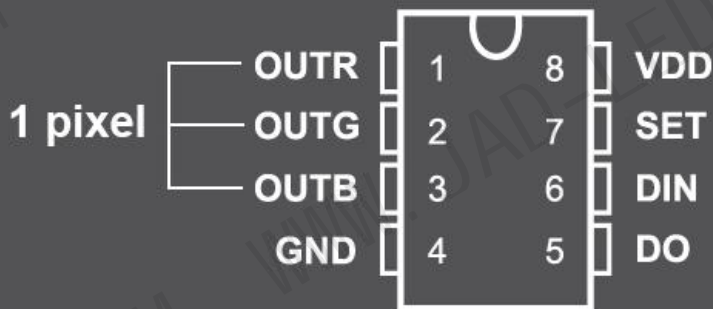Multiple controllers work
in synchrony

Set address for
DMX512 chips

H801SB drives maximum 2048 pixels
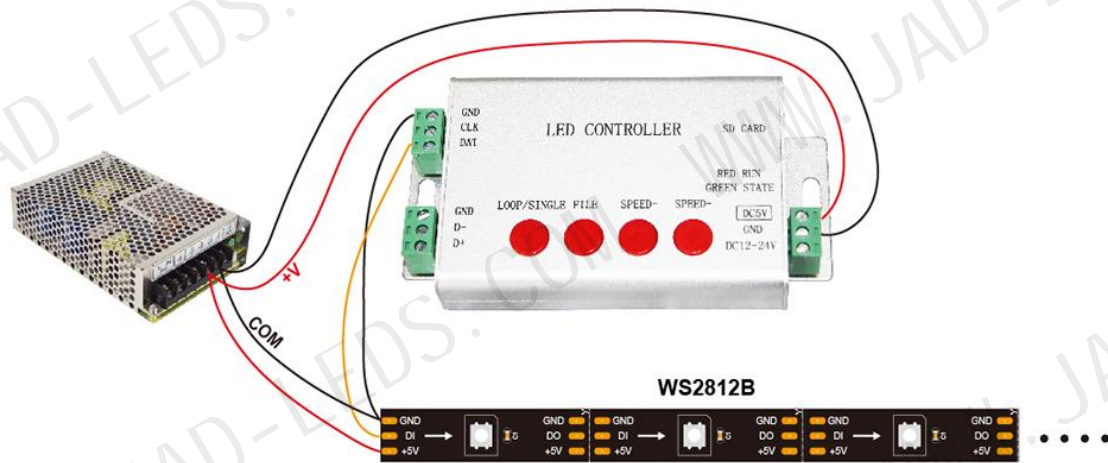
WS2812,1m 144 leds 144 pixels

OUTR	1		8	**VDD**
1 pixel	**OUTG**	2		7	**SET**
	OUTB	3		6	**DIN**
	GND	4		5	**DO**
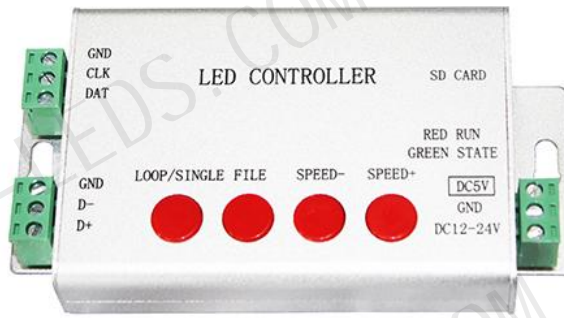
Manual

SD Card Control Mode

Step 1. Connect controller to lights

Assume you have a roll of 5m strip, 1m 30 pixels, WS2812B, RGB(color order)

Step 2. Program with LED Build

LED Build download:

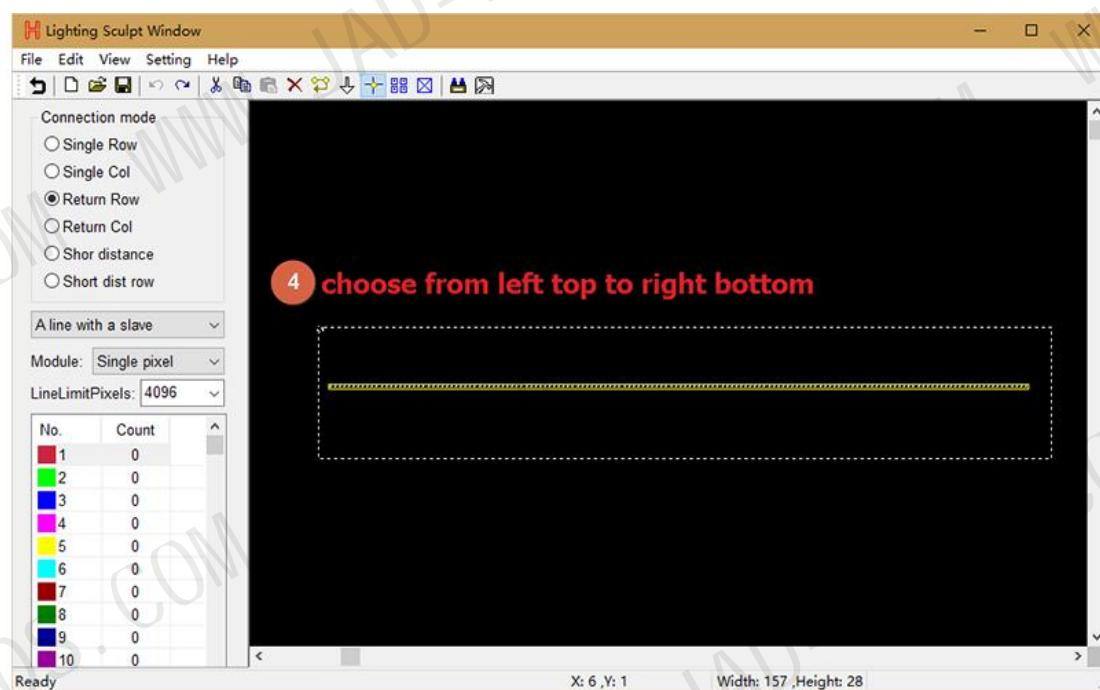https://drive.google.com/open?id=0B1gzqyV6hfOgN2pkMV8yMFozYzQ

LED Build Tutorial Video:

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

Video especially for H801SB:

https://drive.google.com/open?id=0B1gzqyV6hfOgR1lUVEJ2cTNRbm8

Basic Procedure

Setting size

Width: 150 Pixel

Height: 1 Pixel

☐ Scale

4 choose from left top to right bottom
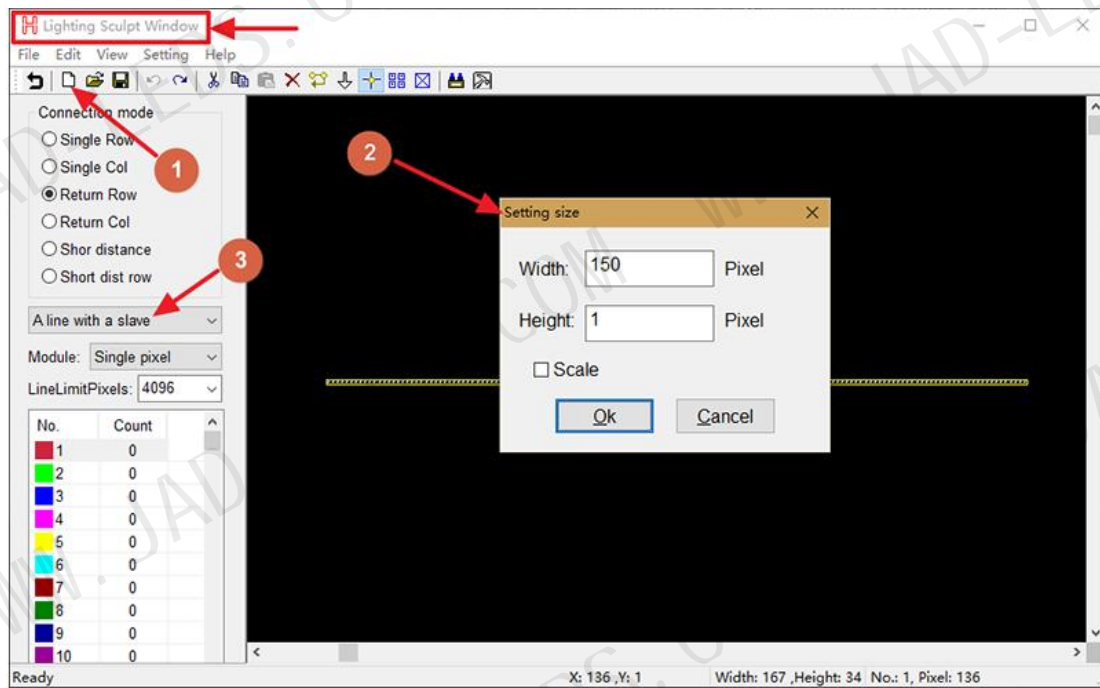
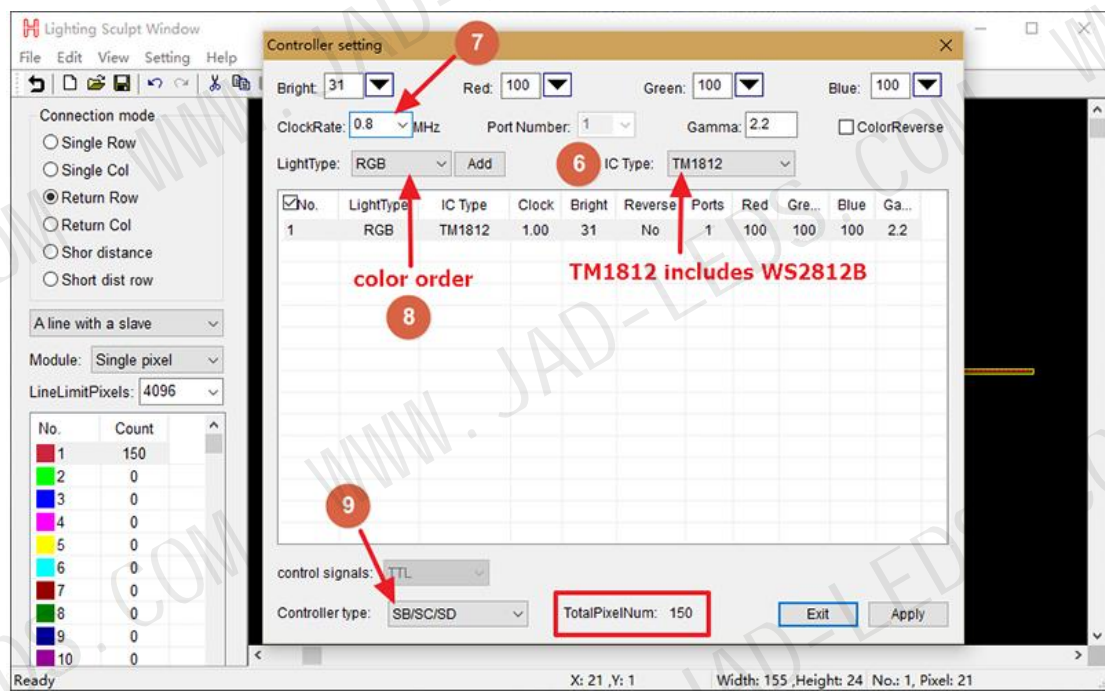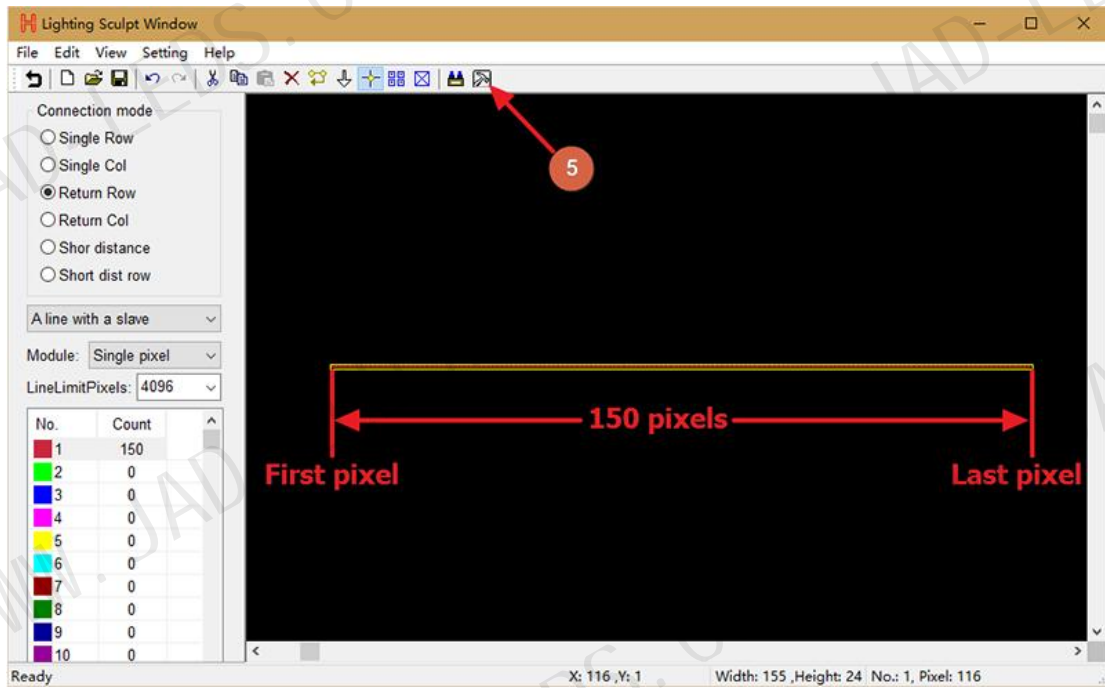**Note: lots of chips share one option**

Lighting setting

Bright: 100
control signals: TTL
ClockRate: 1.00 MHz GrayLevel: 4096 Port Number: 1 Gamma: 2.2
LightType: RGB Add IC Type: TM1812 ColorReverse

No.	LightType	IC	Clock	Bright	Gray	Gam...
1	RGB	TM1812	1.00	100		2.2

IC Type dropdown:
RGB Parallel
LPD6803
LPD8806
LPD1886
LPD1882
LPD1883
TM1812
TM1803
WS2801
WS2803
DMX512
HDMX
TM1829
APA102
P9813
TLS3001
TLS3002
DM413
DM412
MY9221
MY9231
SM16711
SM16716
BS0825
BS0901
BS0815
LD15xx
LPD6812
TM1926
MBI6024

P9883,TM1804,TM1809,UCS1903,UCS1909,UCS1912,WS2811,WS2812,SM16703,SM16709,SM16712,INK1003,LX1003

Controller type: SB/SC/SD TotalPixelNum: Exit Apply

LED Build

File Edit View Tool Setting Help

Speed: 30 Frame: 1 <   choose color pattern ⑩   >

Design Color

Back: Color:

Transition mode
⦿ Transition grade: 2
◯ Transitional colors: 128

Color Total: 768

Clear Delete Save

Sample color
 Remove

☐ Fill LineWidth: 1

Ready   X: 30, Y: 1   Width: 155 ,Height: 24 R: 0, G: 0, B: 0

Make Design ⑪

Action: Moving
- Moving
- Symmetry
- Interleaving
- Diffusing
- Rotation
- Gradual changing
- Dropping
- PictureAndText
- Toy bricks
- Jalousie
- V shape
- Text
- Other

Speed: 30 Frame: 289

X: 42, Y: 1   Width: 155 ,Height: 24 R: 0, G:160, B:255
Ready

File Edit View Tool Setting Help

New	Ctrl+N
Open...	Ctrl+O
Save	Ctrl+S
Save As...	
Supplemental	⑫ A
Out SWF or AVI	
Import	I
Import DAT file	
Output Controller Data	O
MRU file	
Exit	

Romance: Not
Step length: 1

X: 42, Y: 1   Width: 155 ,Height: 24 R: 0, G:160, B:255

test

put it into SD card

For more details of software, please refer to the video.

Test File Download:

https://drive.google.com/open?id=0B1gzqyV6hfOgTkRHRTR2dGs

wT0U

(one port controls 200 pixels, for WS2812B, UCS1903 and other

single line chips, just put them into SD card)

Button operation and indicator lights status

Power controller on.

With SD card inserted, green light is on and keeps still, red light is
flashing.

Without SD card, green and red light are on and all keep still.

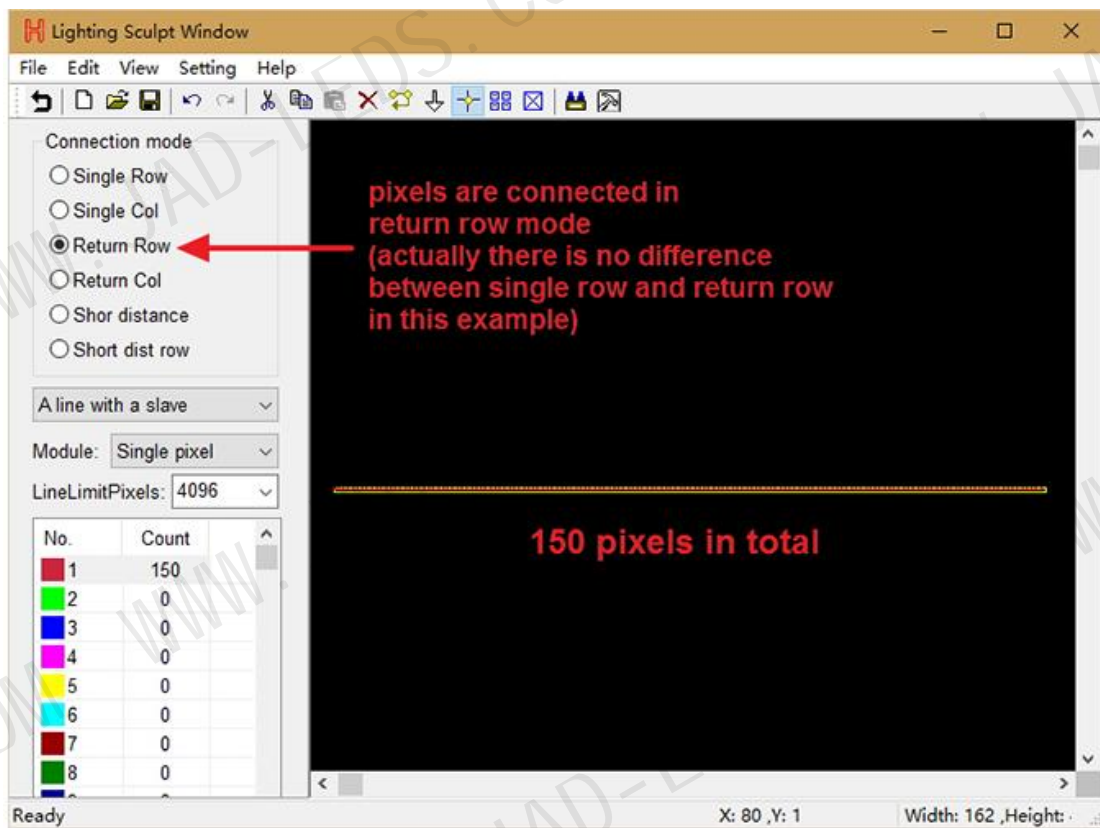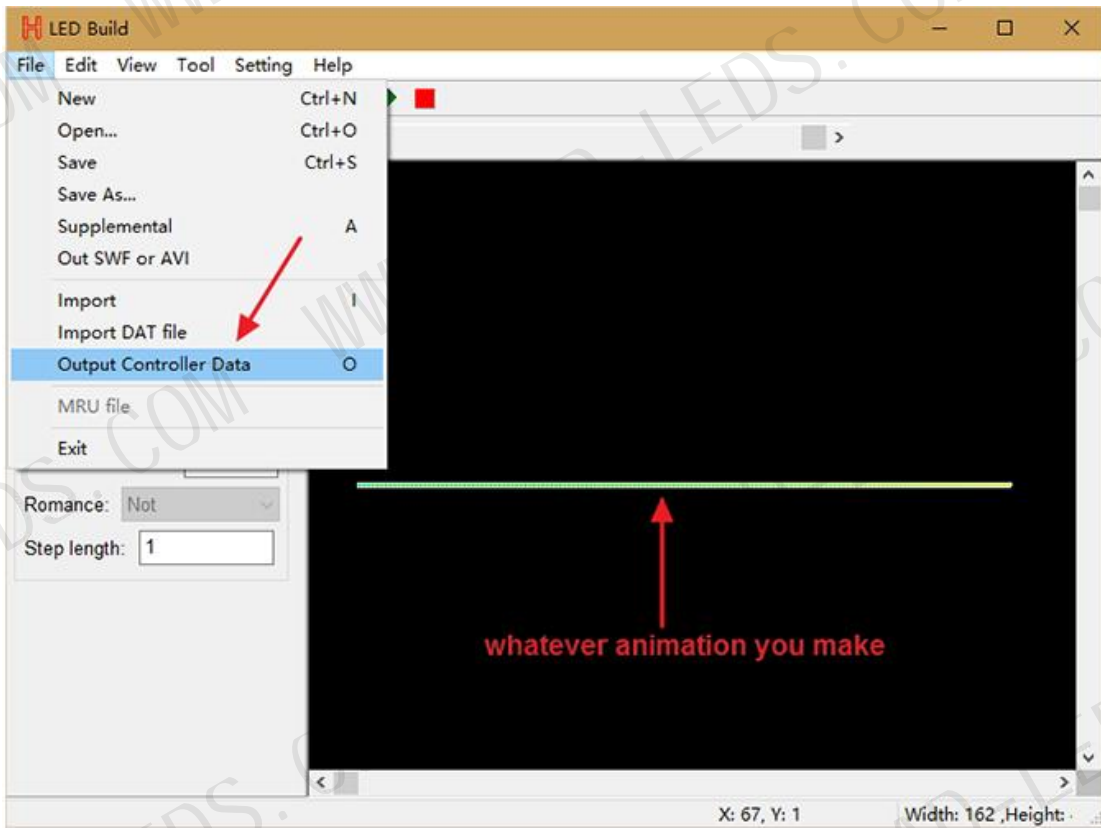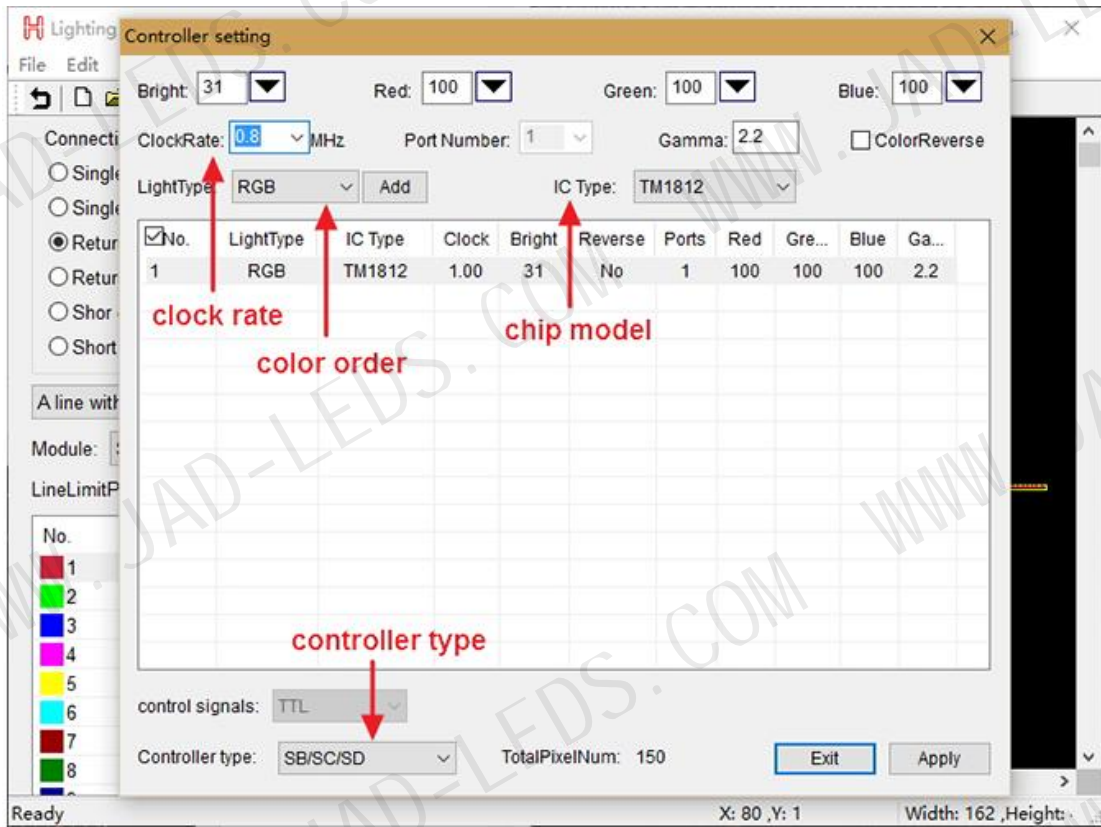| Button	Function	Indicator lights status
LOOP/SINGLE	Switch between loop playback and single playback	Loop playback: green light is on Single playback: green light is off
File	Switch files	Nothing changes
SPEED-, SPEED+	Set speed, maximum speed is 100, minimum speed is 1	Nothing changes
"LOOP/SINGLE" + "SPEED+"	Press and hold "LOOP/SINGLE" + "SPEED+", then loose them all to set address for UCS512 or TM512.	Red light is off, green light is on

Internal Control Mode

In this mode, controller needs to know

(1). pixel number

(2). how pixels are connected

(3). clock rate

(4). chip model

(5). controller type

(6). color order

Still, we take one roll 5 meters WS2812B strip for example. Color

order: RGB. 1m 30 pixels

Step 1. Make file needed for this mode in LED Build

Controller setting

Bright: 31 ▼   Red: 100 ▼   Green: 100 ▼   Blue: 100 ▼

ClockRate: 0.8 ▼ MHz   Port Number: 1 ▼   Gamma: 2.2   ☐ ColorReverse

LightType: RGB ▼ Add   IC Type: TM1812 ▼

☑No.	LightType	IC Type	Clock	Bright	Reverse	Ports	Red	Gre...	Blue	Ga...
1	RGB	TM1812	1.00	31	No	1	100	100	100	2.2

clock rate ↑

color order ↑

chip model ↑

controller type ↓

control signals: TTL ▼

Controller type: SB/SC/SD ▼   TotalPixelNum: 150   [Exit] [Apply]

LED Build

File Edit View Tool Setting Help

New	Ctrl+N
Open...	Ctrl+O
Save	Ctrl+S
Save As...	
Supplemental	A
Out SWF or AVI	
Import	I
Import DAT file	
Output Controller Data	O
MRU file	
Exit	

Romance: Not ▼

Step length: 1

whatever animation you make ↑
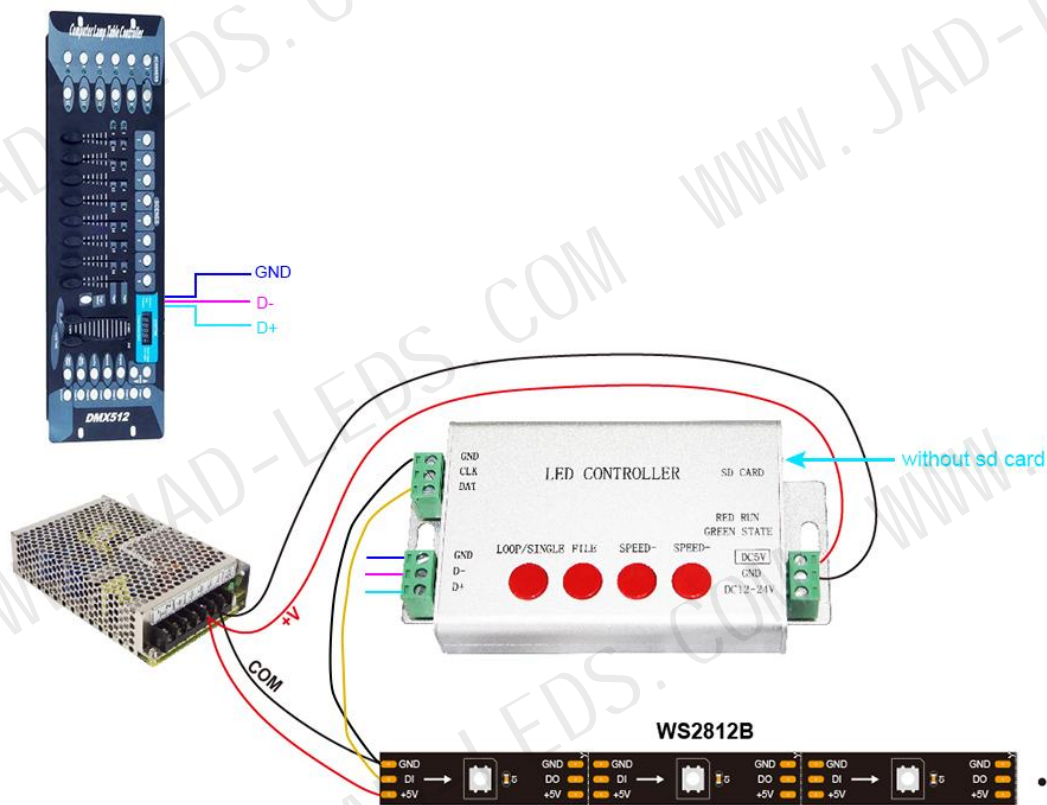
X: 67, Y: 1   Width: 162, Height:

Step 2. Put the file into SD card, insert SD card, power controller on then off, take SD card out, power controller on

Step 3. Connect them all together
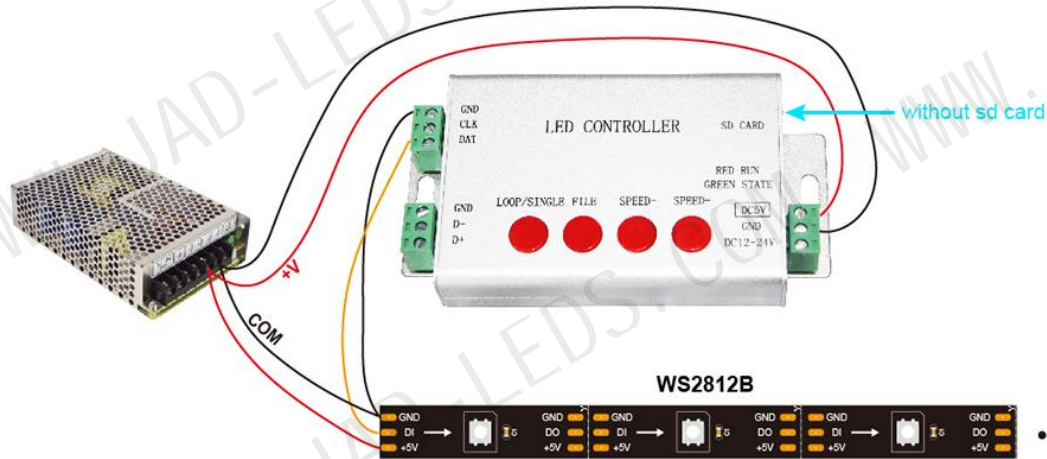
There are 18 kinds of animation built-in, press four buttons to control them.

DMX512 Console Mode

The chip type and clock of the control are obtained from the DAT file on the last inserted SD. The control output is from the address of the starting channel to 512 channels. The actual number of lamps connected can be less than that of the control output. When the total number of input channels is less than the initial channel address, the controller has no output.

Note that the channel address is used here, not the point address.

DMX address is set by TXT file name, open SD card root directory, right-click the mouse - > New - > Text document, change the file name to the DMX address to be set. For example: Address 1 file name is 1.TXT, Address 16 file name is 16.txt.

DMX File Exchange Function

If the SD card is inserted and the file name is not, that is to say, the differential synchronization function is not used. D-and D+are connected to the DMX512 console, and files can be switched by the DMX console. Channel value 0-3 corresponds to the first file, 4-7 corresponds to the second file, and so on.

DMX address is set by TXT file name, open SD card root directory, right-click the mouse - > New - > Text document, change the file name to the DMX address to be set. For example: Address 1 file name is 1.TXT, Address 16 file name is 16.txt.

16.txt
Text Document
0 字节

Note:

 In this mode, H801SB only supports the following chips

LPD6803, LPD8806, LPD1882, LPD1889, LPD1883, UCS6909, UCS6912, UCS1903, UCS1909, UCS1912, WS2801, WS2811, WS2812, TM1803, TM1804, TM1809, TM1812, TM1913, TM1914, TM1926, TM1814, INK1003, LX1003, LX2003, LX2006, TLS3001, P9813, P9816, SM16711.

Multiple H806SBs work in synchrony mode

In this mode, every controller needs sd card

If you use 3 pin shielded cable, distance between two controllers is up to 100 meters