

LED DMX512/RDM Controller DMX-SPI-202 V6.0



DMX-SPI-202 V6.0 converts DMX512/RDM signal into SPI(TTL) digital signal and controls most of the pixel LED lights in the market. With the standard RDM remote device management protocol. DMX digital console can control every channel of the LED lights, realizing 0~100% dimming or defining all sorts of changing effects.

With OLED display, it's easy to select the IC type, RGB sequence, etc. Built-in 16 changing modes, would be worked as a single SPI controller independently.

An additional function in DMX-SPI-202 V6.0: connect to the DMX console, 6 [8] times of the LED lights can be controlled and the max. 1024 pixel can be controlled by 1pcs DMX-SPI-202 when virtual pixel function.

DMX-SPI-202 V6.0 can realize parameters setting and firmware upgrading by long-range setting when work with LTECH RDM editor, it is convenient for current using and later versions upgrading.

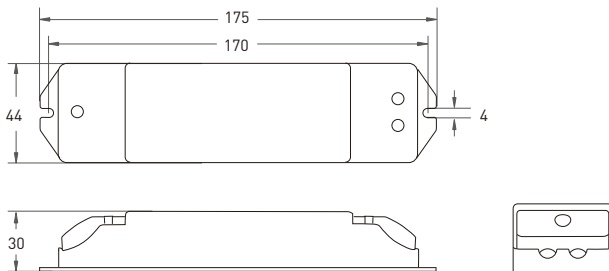
1. Product parameter:

DMX-SPI-202 V6.0

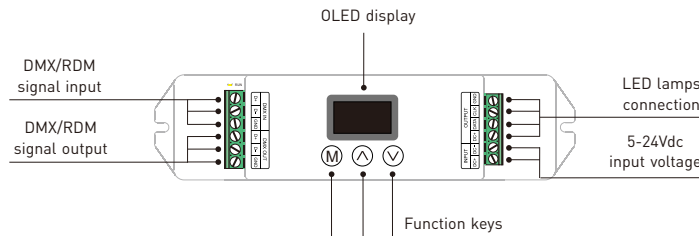
Input voltage:	5~24Vdc	Virtual pixel:	RGB 1-6 times, Max 1020 pixel
Power consumption:	1W		RGBW 1-8 times, Max 1024 pixel
Input signal:	DMX512/RDM	Working temp.:	-30°C~55°C
Output signal:	SPI(TTL)	Dimensions:	L175×W44×H30(mm)
Self-testing mode:	16	Package size:	L178×W48×H33(mm)
Control quantity:	RGB 170 pixels [510CH] RGBW 128 pixels [512CH]	Weight(G.W.):	140g

2. Dimension:

Unit: mm



3. Terminal description:



4. Display screen interface description:

Short press **M** to enter the DMX setting interface.
Long press **M** to enter self-testing interface.

DMX setting interface

Short press **M** : switch entries.
press **A** or **V** : adjust parameters.

DMX ADDRESS: 1
CHIP01: WS2811
ORDER: RGB
Pixel Mul: 1

DMX address setting (1-512)
Chip type choices
RGB sequence [the RGBW sequence cannot be changed]
Pixel multiple choices (RGB 1-6) (RGBW 1-8)

Self-testing interface

01 RED JUMP
SPEED: 12
Exit

01 RED JUMP
SPEED: 12
WHITE: 1
Exit

Mode (total 16)
Speed [16 levels]
Exit
3CH self-testing

Mode (total 16)
Speed [16 levels]
White light [16 levels]
Exit
4CH self-testing

Table of changing modes

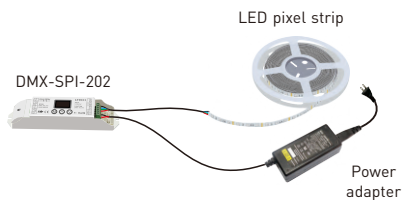
No.	Effect	No.	Effect	No.	Effect	No.	Effect
1	Red jumping	2	Green jumping	3	Blue jumping	4	White smooth
5	7 colors jumping	6	7 colors smooth	7	White meteor	8	7 colors meteor
9	7 colors flow	10	7 colors float	11	Red/White float	12	Green/White float
13	Blue/White float	14	Yellow/White float	15	Purple/White float	16	Cyan/White float

5. Wiring diagram:

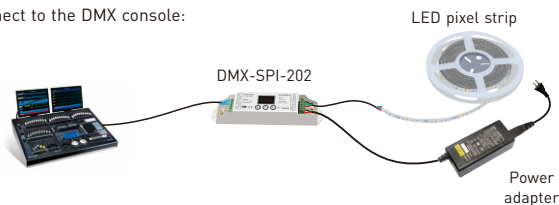
Wiring method	Signal cable	Compatible ICs
	Two cables DATA CLK	APA102, D705, GS8206, LPD1101, LPD6803, LPD8803, LPD8806, P9813, UCS6909, UCS6912, WS2801, WS2803
	Single cable DATA	APA104, KL592D, SK6812, SM16703, TLS3001, TLS3002, TM1803, TM1804, TM1809, TM1812, TM1814, TM1914, TM1914A, UCS1903, UCS1909, UCS1912, UCS2903, UCS2904B, UCS2909, UCS2912, UCS8904A, WS2811, WS2812

DMX-SPI-202 V6.0 version compatible with above ICs and supports firmware upgrade. Please note that some ICs are not supported before V6.0 versions.

5.1 DMX-SPI-202 V6.0 work as a master console:

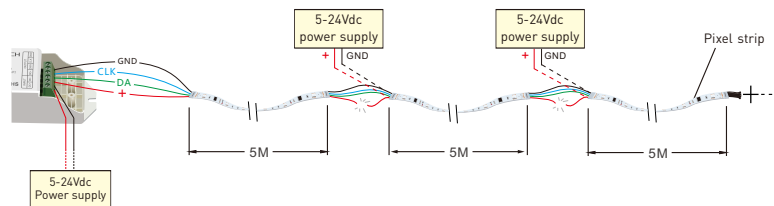


5.2 Connect to the DMX console:

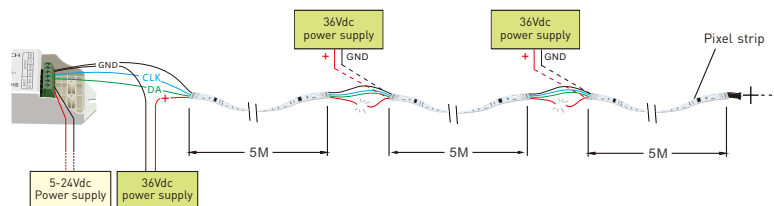


5.3 LED pixel strip wiring diagram:

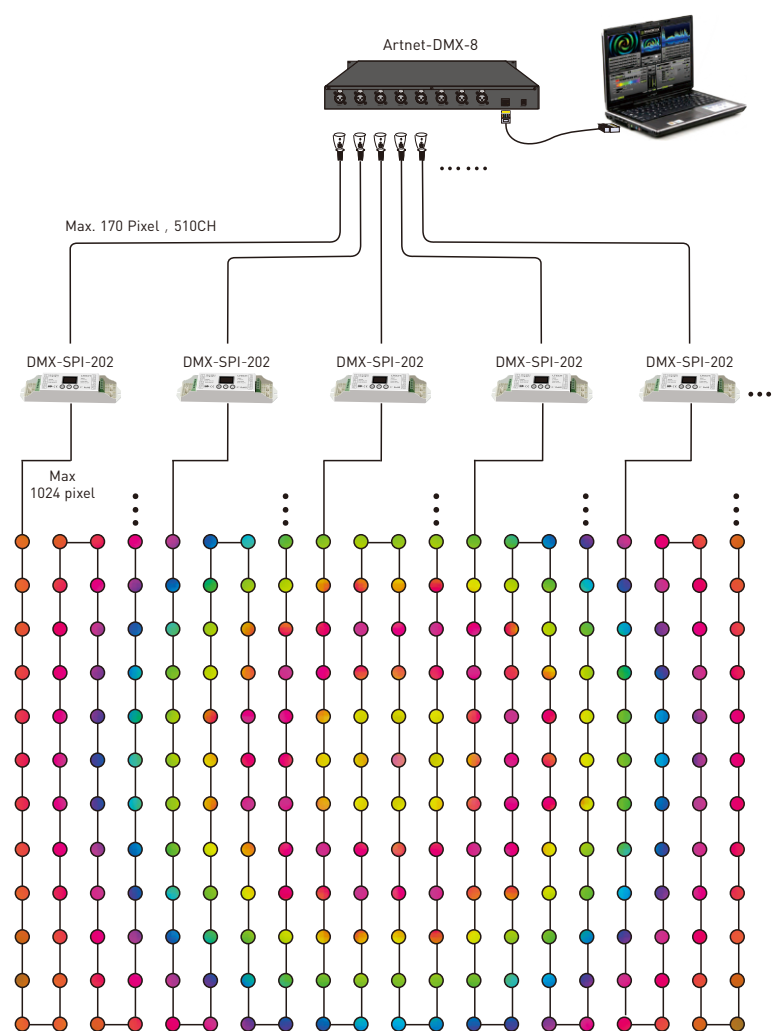
A. Same operating voltage connection.



B. Light fixtures and controller using different operating voltages.

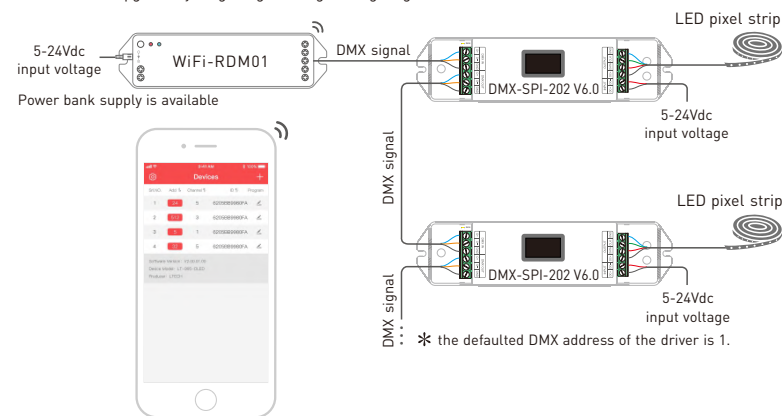


5.4 Connect to DMX PC console to realize decoder function:



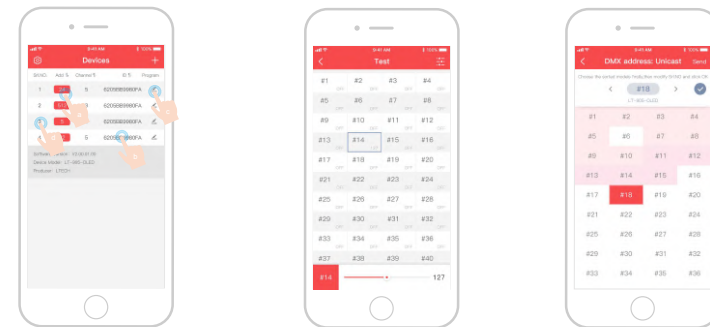
6. Work with RDM editor

DMX-SPI-202 V6.0 can work with LTECH RDM editor (Model: WiFi-RDM01) to realize changing the parameters and firmware upgrade by long-range setting. Wiring diagram as below:



RDM editor App interface instruction

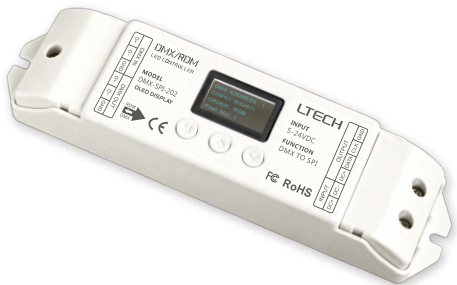
Download the App, setting the parameters after well connecting the RDM editor, please check the manual of WiFi-RDM01 for more details.



- a: Click "Add", edited the address in corresponding box.
- b: Click "ID", get more product details.
- c: Click "⚙️", enter edited interface
- d: Click "No.", issue the recognizing command.

* No further notice if any changes in the manual. Product function depends on the goods. Please feel free to contact your supplier if any question.

LED DMX512/RDM解码器
DMX-SPI-202
V6.0



DMX-SPI信号解码器是将DMX512/RDM转换为SPI（TTL）数字信号，可控制市面上大多数的LED像素灯具，加入标准的RDM远程设备管理协议，DMX数字控台可以控制到LED灯具的每一通道，实现0-100%调光或编辑各种变化效果。

DMX-SPI-202 V6.0解码器配有人性化的显示屏设计，可以很容易的选择控制的灯具IC类型、RGB顺序等。自带16种变化模式，也可以当做一款简易的SPI控制器单独使用。

DMX-SPI-202 V6.0加入令人震撼的功能：同样一台512通道的DMX主控，连接本产品，通过虚拟像素选择功能，可增加6（8）倍的控制灯具数量，最大可控制1024像素/台。按照以往需要6（8）台DMX主控和6（8）台DMX-SPI解码器才能实现的功能，现在只需要一台即可达到类似效果。

DMX-SPI-202 V6.0与我司RDM编辑器配合使用，可实现手机远程设置及固件升级功能，方便用户当前使用及以后版本升级。

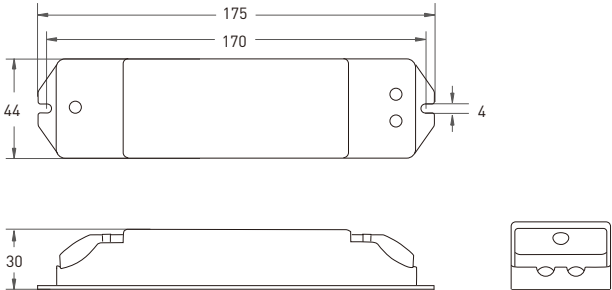
1. 产品参数:

DMX-SPI-202 V6.0

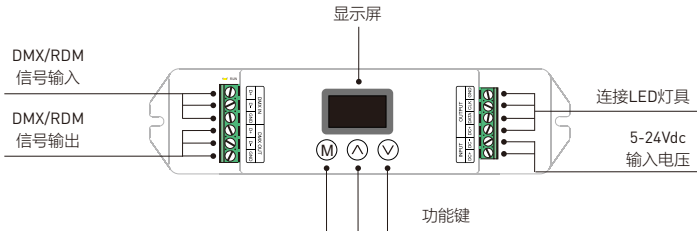
输入电压：	5~24Vdc	控制数量：	RGB 170个像素(510通道)
消耗功率：	1W		RGBW 128个像素(512通道)
输入信号：	DMX512/RDM	虚拟像素：	RGB 1-6倍，最大1020像素
输出信号：	SPI(TTL)		RGBW 1-8倍，最大1024像素
自测模式：	16种	工作温度：	-30°C~55°C
		产品尺寸：	L175×W44×H30(mm)
		重量（毛重）：	140g

2. 产品尺寸:

单位：mm

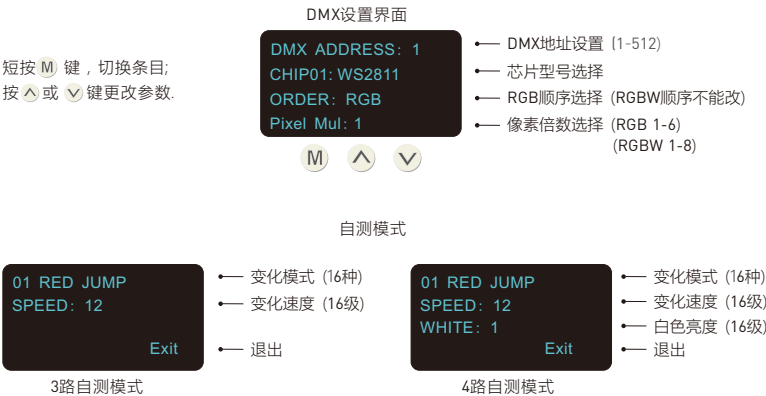


3. 端子说明:



4. 显示屏界面说明:

短按 **M** 键，进入DMX设置界面；长按 **M** 键，进入自测模式。



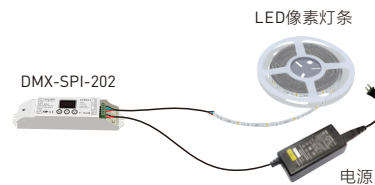
变化模式列表							
序号	变化效果	序号	变化效果	序号	变化效果	序号	变化效果
1	红色跳变	2	绿色跳变	3	蓝色跳变	4	白色渐变
5	七彩跳变	6	七彩渐变	7	白色拖尾	8	七彩拖尾
9	七彩流水	10	七彩渐变追	11	红白渐变追	12	绿白渐变追
13	蓝白渐变追	14	黄白渐变追	15	紫白渐变追	16	青白渐变追

5. 接线图:

接线方式	信号线	支持芯片型号
	2线 DATA CLK	APA102、D705、GS8206、LPD1101、LPD6803、LPD8803、LPD8806、P9813、UCS6909、UCS6912、WS2801、WS2803
	单线 DATA	APA104、KL592D、SK6812、SM16703、TLS3001、TLS3002、TM1803、TM1804、TM1809、TM1812、TM1814、TM1914、TM1914A、UCS1903、UCS1909、UCS1912、UCS2903、UCS2904B、UCS2909、UCS2912、UCS8904A、WS2811、WS2812

DMX-SPI-202 V6.0之后的版本兼容以上IC，同时支持固件升级，V6.0之前的版本有部分IC不支持，敬请留意。

5.1 DMX-SPI-202 V6.0为主控连接灯条：

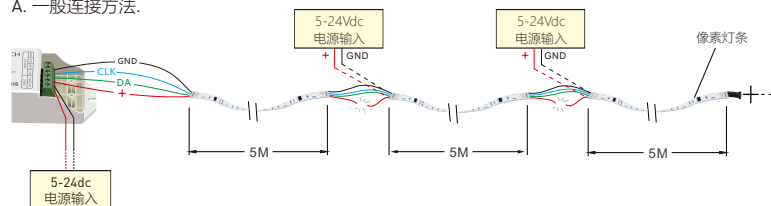


5.2 与DMX控台连接图：

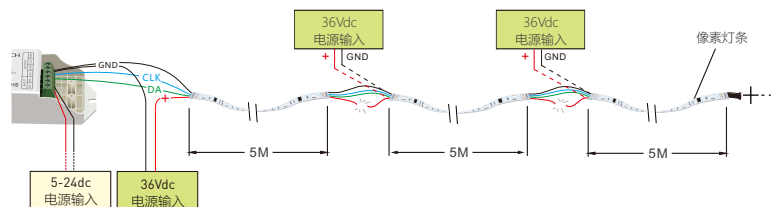


5.3 像素灯条连接示意图：

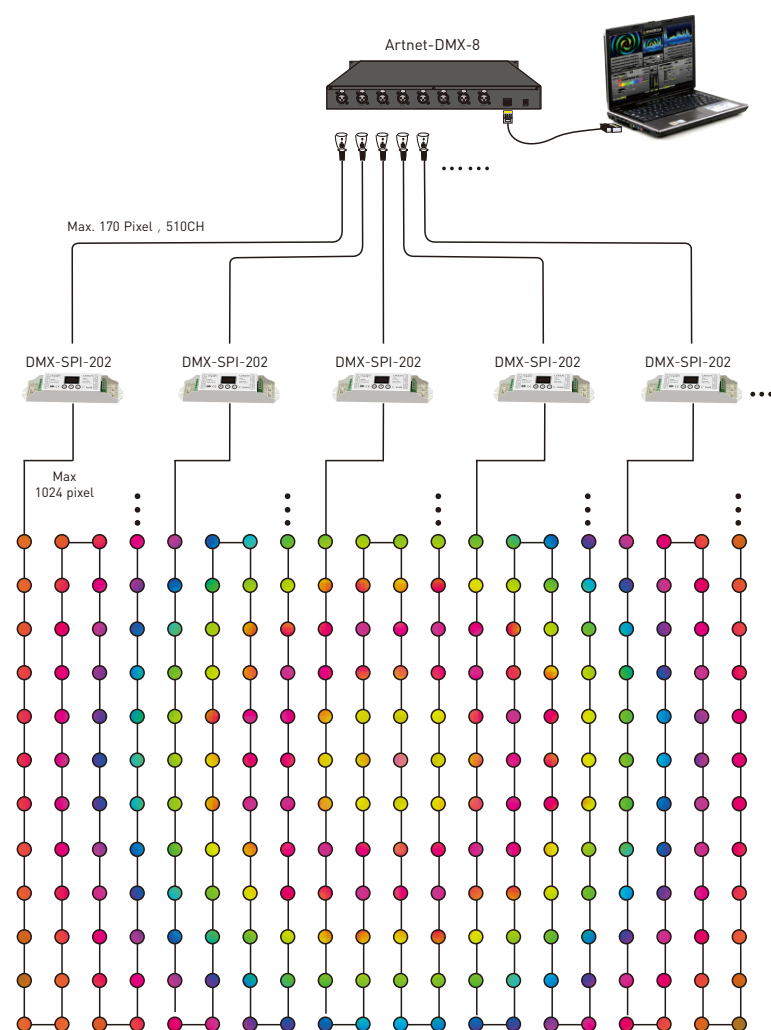
A. 一般连接方法.



B. 特殊连接方法 - 灯具和控制器使用不同的工作电压.

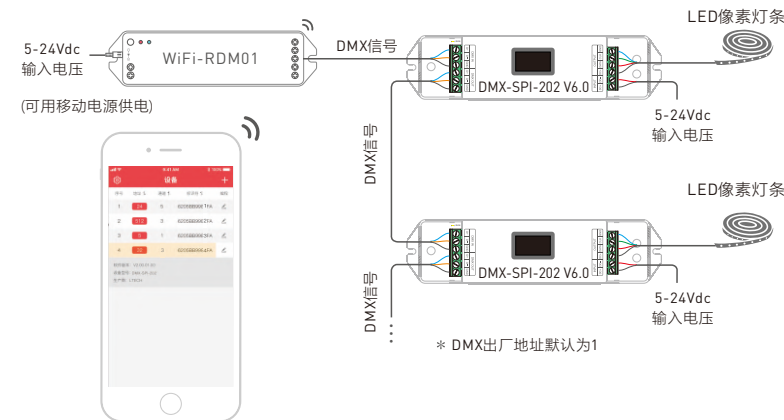


5.4 与DMX512电脑台连接，实现DMX解码器功能：



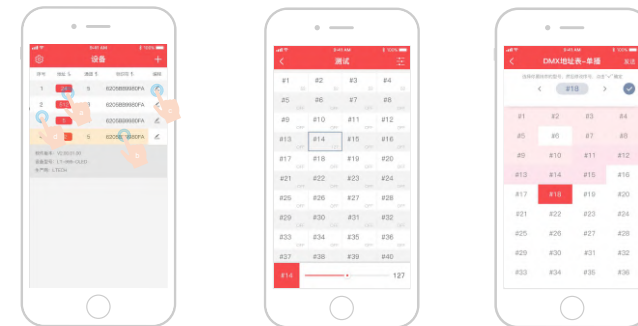
6. 与RDM编辑器配合使用

DMX-SPI-202 V6.0可以与我司RDM编辑器（型号WiFi-RDM01）配合使用，以实现手机远程浏览、设置参数及固件升级等功能，连接图如下：



RDM编辑器APP界面介绍

手机下载APP，与RDM编辑器连接成功后，即可通过APP设置参数，具体请参看WiFi-RDM01的使用说明书。



- a: 点击“地址”对应方框可编辑地址；
- b: 点击“标识符”出现产品详细信息；
- c: 点击编程按钮“”则进入编辑界面；
- d: 点击序号发出识别命令。

测试

DMX地址设置

* 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，请与供应商联系。