

User Manual

FCC ID	2ADXEWMD410U04SR6A0
Product Name	BlueTooth Multi Color Lamp
Soft Ware Number	transparently Transmit V1.8_1119 MCU: 71AS Checksum(91DB)
Model Number	Main Type: WMD410U04SR6A0 Series Models: WLA417117SR6A0 - 1
Version	V1.0



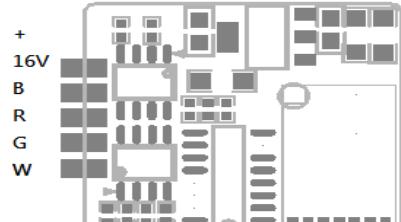
Specification:

(1). Configuration parameter			
Item	Description	Parameter	Remark
IC Type	FM8PC71AS	12bits PWM Software checksum: 91DB	
	TI CC2541	SoftWare:transparently Transmit V1.8_1119	QFN40
	SI 9926	Dual N-Channel MOSFET 2.5V(G-S)/ VDS max 20V/ ID (Steady State) 2.5A	
Others	PCB No	HY-254117 V1 + HY-254103 V2	
	PCB Material	FR4 1.0mm	
	X-Tal	32MHz and 32.768 KHz	
	Antenna Style	Wire Antenna	
	Communication Protocol	<input checked="" type="checkbox"/> IIC <input checked="" type="checkbox"/> UART <input type="checkbox"/> SPI <input type="checkbox"/> Optional	
	Device Mode	<input type="checkbox"/> Master <input checked="" type="checkbox"/> Slave <input type="checkbox"/> Master-Slave	
	Light Color	R G B W Multicolor LED Lamp	
Display Mode		(1). 4 dynamic color light mode ; Dimming level: 12 bits PWM control to Adjustable color hue and brightness (2). According to customer needs using their own, such as red, blue, green white four-color LED lamp.	
(2). BlueTooth Multi Color Lamp Control PCBA Electrical characteristics: (Measured on Ta=25°C, AC 100V~220V adapt to DC16V)			
1. Modulation mode: GFSK			
2. Frequency range: 2402~2480MHz (2.4G ISM band).			
3. Transmit out put power with PCB antenna: -20~0 dBm (Programmable)			
4. Operating ambient temperature range : -20°C ~ +65°C, Storage environment temperature range: -40°C ~ +80°C			
5. Power Supply Voltage: 16VDC (The practical application of voltage / current value according to the capacity of the power supply board)			
6. Receiver sensitivity: -94dBm typ.			
7. White LED lights maximum constant working current: 2.5A			
8. Red LED lights maximum constant working current: 2.5A.			
9. Green LED lights maximum constant working current: 2.5A			
10. Blue LED lights maximum constant working current: 2.5A			

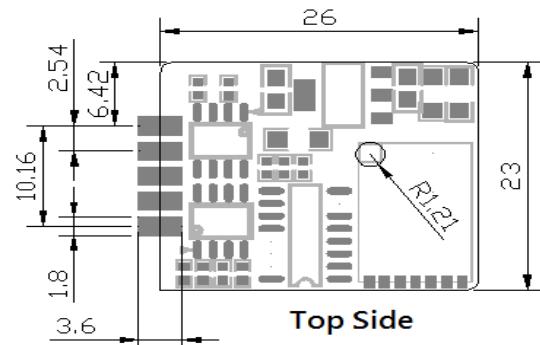
11. Effective receiving distance: 10Meter min
 (With the i-pad in an free open space, no_obstacle, Face to Face testing)

(3).BlueTooth Multi Color Lamp Control PCBA

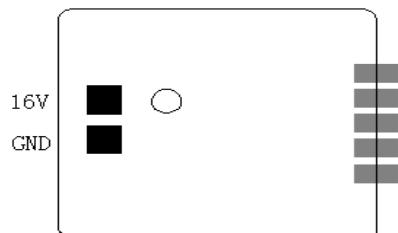
Top and Bottom diagram and dimensions



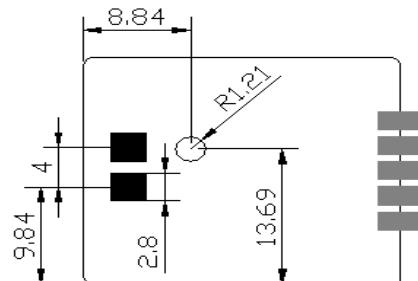
Top Side



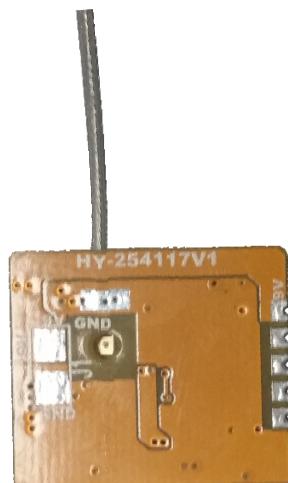
Top Side



Bottom Side

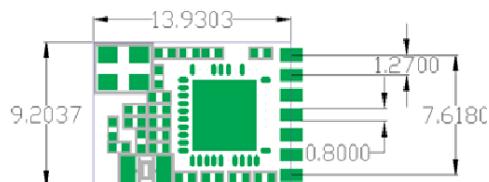


Bottom Side



Control Board PCBA dimension: L 26* W 23 * H 3.2mm

(4). BlueTooth Transceiver Module diagram and dimensions

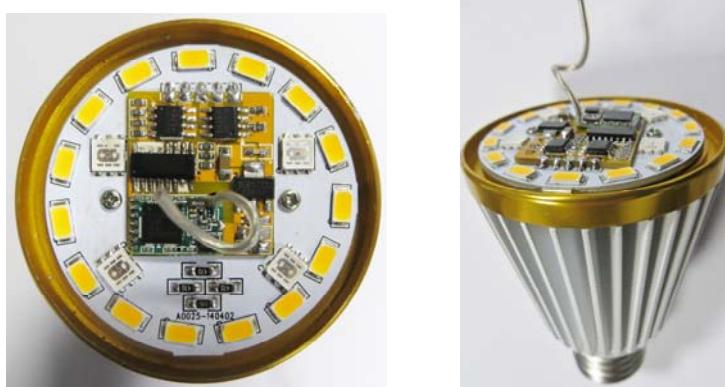


PCB SIZE:
9.2*14.0*1.0 mm
PCBA Thickness: 2.0mm
Pin Quantity: 7pin

(5). User operation APP Explanation:

Product descriptions and applications in the following: four-color ball lamp (red, green, blue and White) for example :
APP support mobile phone system (Mainly adapted resolution): android 4.3 firmware over, And the display screen: 1280x720 to illustrate the application .

(5-1). Product pictures



(5-2). The main interface module:



In this interface, the user can follow the illustration click into the corresponding function is operated, the software will perform relatively light exit feature set, Description: This interface is the main entrance.

(5-3). Lamp connection mode



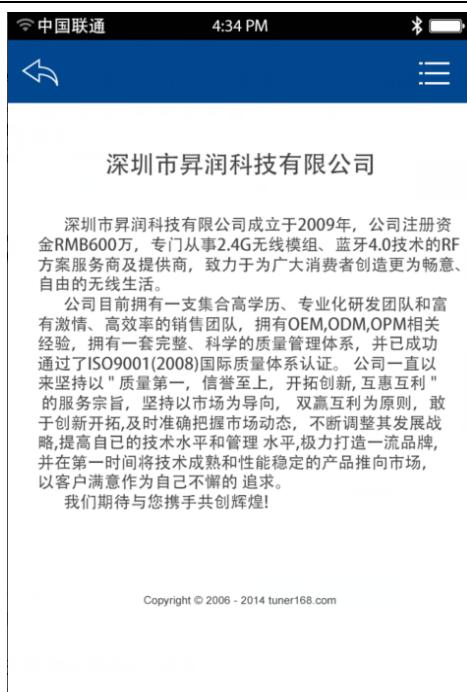
元素	说明
Text BLE4.0_TX	显示控制组的名称或者单个控制灯的名称。
灯泡连接按钮 +	点击进入灯列表，可以添加灯和分组。
关于按钮 !	点击进入产品功能介绍和公司介绍页面。
功能按钮	点击进入六个相应的功能界面。

(5-4). User Interface



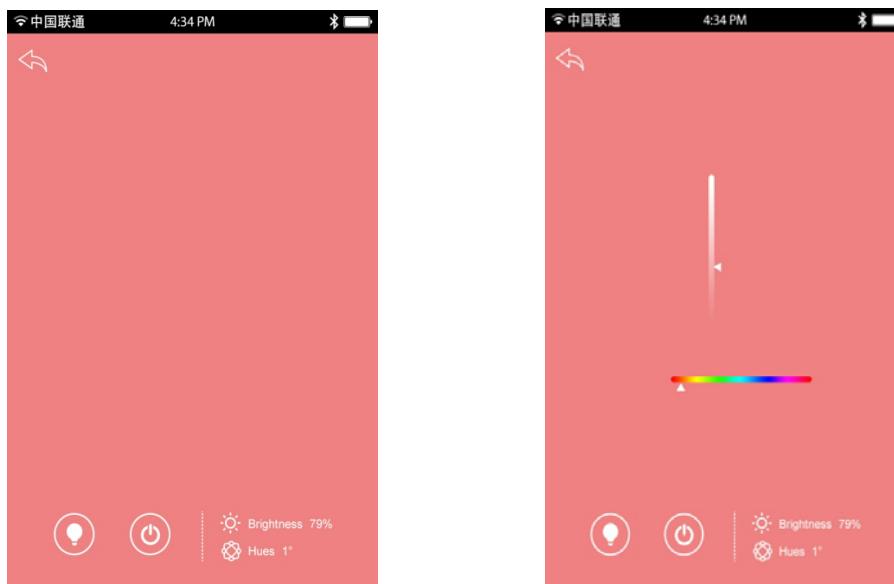
元素	说明
添加按钮 !	点击此处进入添加灯和组的界面，可以重新命名。
刷新按钮 ⟳	刷新可连接的设备。
列表菜单	显示所有的灯和组名称，选中代表连接。

(5-5). Regarding the company, click the icon **!**



元素	说明
返回按钮	点击此处返回主界面
关于按钮	点击更改当前界面内容
Text 窗口	显示具体内容

(5-6). Hue and brightness control mode user interface



Manual control Lamp or select group(brightness , color), and can switch the Lamp

元素	说明
返回按钮	点击此处返回主界面。
开关按钮	点击控制灯泡的开和关状态。
白色灯按钮	点击直接把灯的颜色改为白色。
调节颜色和亮度	点击界面出现颜色和亮度提示，移开提示消失，上下滑动界面调节亮度，左右滑动界面调节颜色，背景显示相应的颜色和亮度。

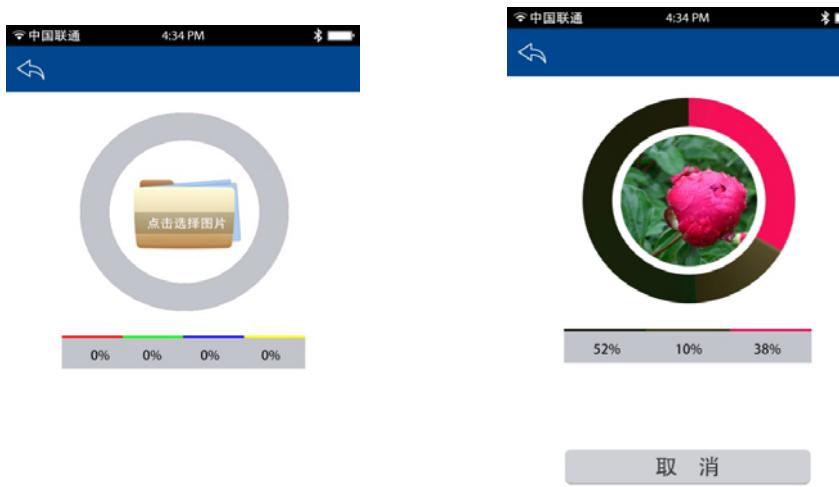
(5-7). Timer setting mode

Users turn on and off the set time of the lamp, in accordance with the set time to turn on and off the lamp



元素	说明
新增按钮	点击设置时间（最多可以添加 4 个定时设置）
选择按钮	点击开启定时设置
删除按钮	点击删除设置好的内容
返回按钮	点击返回上一层界面
时间设置指针	内圈设置分钟，外圈设置时钟
打开关闭按钮	选择设定定时打开和关闭灯
情景模式按钮	选择开启和关闭情景模式，开启时进入情景模式选择
周期按钮	点击选择相应的周期（一次、每天、周一至周日）

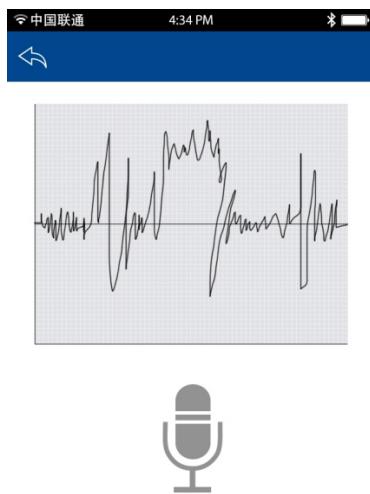
(5-8). Month-Year-old Time mode : Adding a picture to control the color change of the lamp by 1-4 kinds main color pictures



元素	说明
添加图片按钮	点击选择相册中的图片，并且显示出图片来。
Text	显示图片的几种主颜色所占的百分比。
滚动条	滚动显示图片的几种主颜色，灯会按照当前颜色显示。
取消按钮	取消加载的图片。
返回按钮	返回到主界面。

(5-9). Live interactive mode

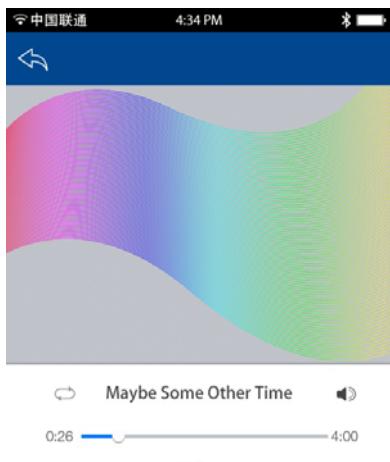
By the value of the detected ambient sound controls the lamp, the lamp in accordance with the detected change show different colors.



元素	说明
麦克风图片	进入界面直接检测外部声音，用来控制灯。
显示动画	显示外界声音大小的波形。
返回按钮	点击返回主界面。
语音控制	通过语音，指令为：开灯、关灯、睡觉、音乐

(5-10). Fantasy Rainbow Mode

Load songs, songs by playing to control the lights change, according to the rhythm of the music , like the rainbow show.



元素	说明
加载音乐按钮	从文件中选择音乐。
播放按钮	开始播放音乐, 灯按照音乐进行变化。
列表按钮	点击进入添加歌曲的列表
外放按钮	点击打开和关闭外放功能
循环按钮	点击切换歌曲的循环模式 (随机、单曲、全部)
Text	显示当前歌曲名称
进度表	显示当前歌曲的播放进度
返回按钮	点击返回主界面

(5-11). Scene mode :

The default setting several common patterns, just click pattern to control the lights, you can add self custom scene patterns .



元素	说明
图片功能控件	点击几种模式的图标, 直接用来控制灯
返回按钮	点击返回到主界面
添加按钮	添加自定义的情景模式
删除按钮	删除自定义添加的情景模式

四.11 Android Supported Media Formats:

Type	Audio		Image		Video	
Format	.3gp		JPEG		.3gp	
	.mp4		GIF		.mp4	
	.mp3		PNG			
	.ogg		BMP			
	.wav					

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.