**电灯协议**

说明硬件：电灯的触摸板子与驱动板子合为一块板子，控制两个灯

硬件上电会发六次（次/秒）： Light\_Led\_Online

一、使用触摸开关说明：

电灯01开，硬件向外（后台）即刻发送：

{"first\_type":"AAKG","second\_type":"AADG","product\_number":"1","state":{"current\_status":"01\_00\_01"}}

电灯01关，硬件向外（后台）即刻发送：

{"first\_type":"AAKG","second\_type":"AADG","product\_number":"1","state":{"current\_status":"01\_00\_00"}}

电灯02开，硬件向外（后台）即刻发送：

{"first\_type":"AAKG","second\_type":"AADG","product\_number":"1","state":{"current\_status":"02\_00\_01"}}

电灯02关，硬件向外（后台）即刻发送：

{"first\_type":"AAKG","second\_type":"AADG","product\_number":"1","state":{"current\_status":"02\_00\_00"}}

1. 使用APP控制电灯说明：

使电灯01开，后台向硬件发送：#01\_00\_01$\*\*\*\*\*\*\*\*@ (“\*”表示随机八位数，类似窗帘)

使电灯01关，后台向硬件发送：#01\_00\_00$\*\*\*\*\*\*\*\*@ (“\*”表示随机八位数，类似窗帘)

使电灯02开，后台向硬件发送：#02\_00\_01$\*\*\*\*\*\*\*\*@ (“\*”表示随机八位数，类似窗帘)

使电灯02开，后台向硬件发送：#02\_00\_00$\*\*\*\*\*\*\*\*@ (“\*”表示随机八位数，类似窗帘)

三、心跳包说明：

由于有两个电灯，所以采用了两个心跳包隔行一起发送。上电之后没有任何动作指令的话，当发完六次 Light\_Led\_Online，心跳包会发送如下：

{"first\_type":"AAKG","second\_type":"AADG","device\_number":"1","current\_status":"01\_00\_00","request":""}

{"first\_type":"AAKG","second\_type":"AADG","device\_number":"1","current\_status":"02\_00\_00","request":""}

当有动作指令后：

情况①（只是通过触摸控制）：硬件设备上电之后一直没有通过APP控制，即后台没有向硬件设备发送指令，所以心跳包没有随机八位数返回，如下：

{"first\_type":"AAKG","second\_type":"AADG","device\_number":"1","current\_status":"01\_00\_01","request":""}

{"first\_type":"AAKG","second\_type":"AADG","device\_number":"1","current\_status":"02\_00\_00","request":""}

情况②（通过APP控制）：当通过APP控制电灯后，即硬件设备接收到了#02\_00\_00$\*\*\*\*\*\*\*\*@，包含了随机八位数，所以心跳包发送会带上随机八位数，如下：

{"first\_type":"AAKG","second\_type":"AADG","device\_number":"1","current\_status":"01\_00\_01","request":"12345667"}

{"first\_type":"AAKG","second\_type":"AADG","device\_number":"1","current\_status":"02\_00\_01","request":"12345667"}

师兄，你看一下哪里不明白，还有就是心跳包的格式是否ok