

一、工作原理(Principles)：

BYWB-01微波感应器是根据多普勒原理，采用平面天线对高频电磁波进行收发，然后探测到回折波有微小移动变化时，进而触发微处理器工作，最终控制AC COB的亮灯及熄灯。

本品广泛应用于安防系统；智能控制系统；照明用具（车库、楼道、马路等场所用途）。

BYWB-01是本公司最新研制的一款插板式微波感应器，本品特别适用于对现有灯具的智能化改进。也适用于电器、安防产品、照明产品等其它电子领域产品的技术升级。

BYWB-01 Microwave sensor is developed based on Doppler Principle by using a flat antenna with high-frequency electromagnetic waves to send and receive. The changed of wave detected by the antenna will then trigger the function of microprocessor and leads to the light turning on/off on the connected AC COB.

Microwave sensors are broadly applied on security system, intelligence control system and lighting systems such as garage, hallways, and roads. Moreover, BYWB-01 sensor is a newly developed microwave sensor by Paragon that provides an easy plug in installation feature. This sensor is especially suitable for upgrading current lighting system and could also be used on electronic appliances, security products, and other electronic related fields.

二、主要特点(Main features)：

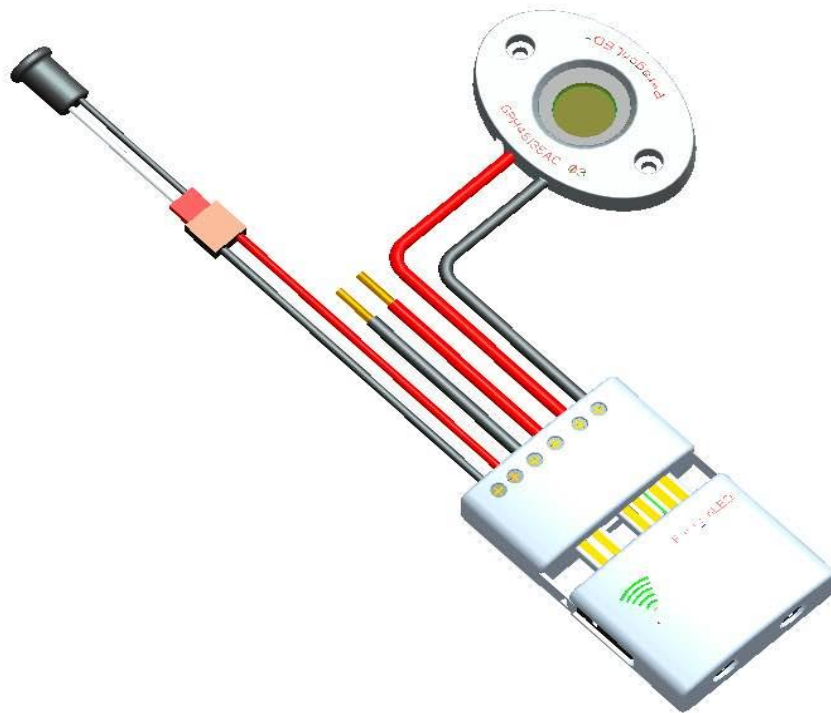
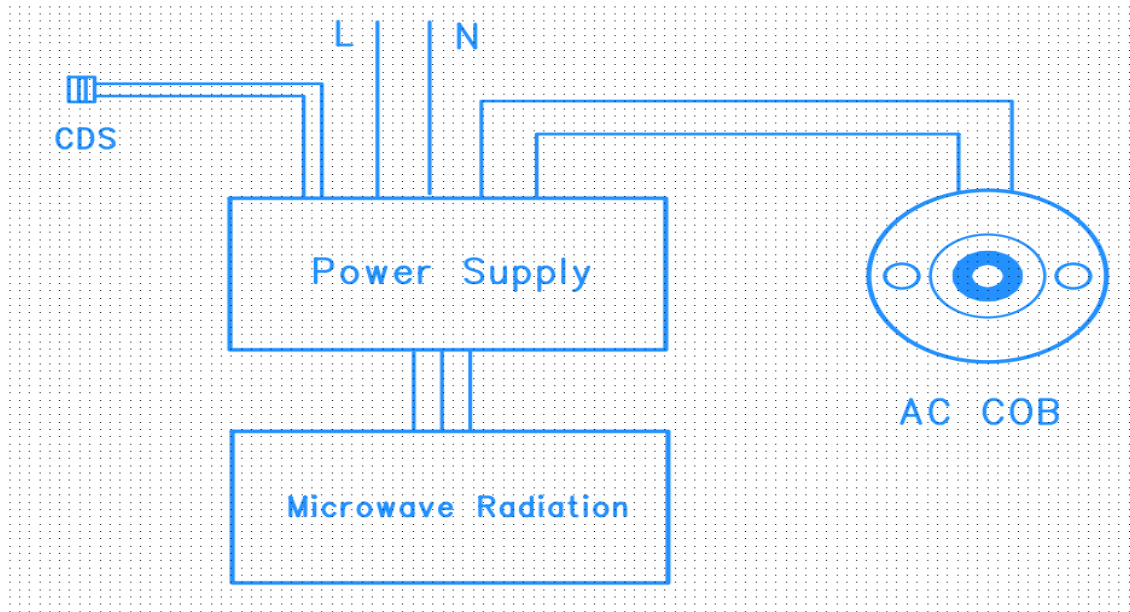
- 1、不受温度、湿度、气流、灰尘、噪声、亮暗等影响，抗干扰能力强；
- 2、微波感应器是一个场形收发信号，覆盖面广且无盲区；
- 3、微波在传输过程中感应效果相对较好；在户内使用时，效果更好；户外使用时，因受环境的影响而出现感应距离稍缩或灵敏度略弱的现象。此乃正常现象，用户不必疑虑。

1. High anti-interference ability, free from temperature, humidity, airflow, dust, noise, bright and dark and other effects.
2. Microwave sensor has a broad field pattern with no blind spots upon transmitting and receiving electromagnetic waves.
3. The induction of the microwave is relatively better during transmission. However, when applied on outdoor products, it is very common that the effect of environmental components will slightly reduce the sensitivity on the distance detection function.

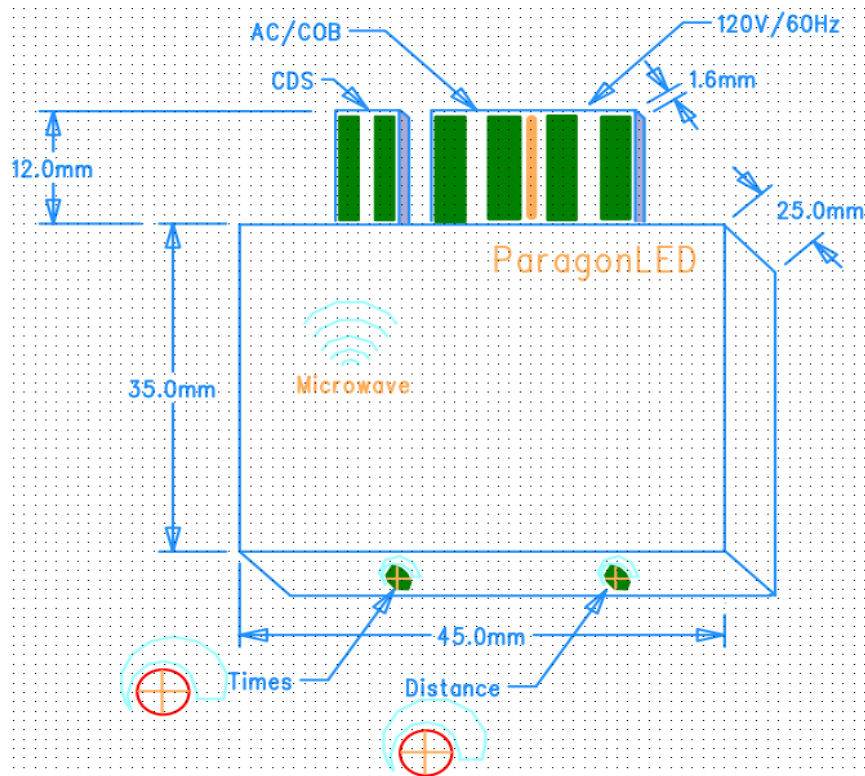
三、产品规格(Product Spec)

型号 MODEL	输入 INPUT		输出电压 Oper.Vi	频率范围 Fc.range	感应距离 Sens.Dist.	输出方式 Out-mode	输出延时 Out-D.tim	外观及尺寸 Outline zise
	电压 voltage	频率 frequency						
BYWB-01	120V	60Hz	110V DC	2.8—5.8GHz	5-10m	H=110V L=0	3-900S	
备注 (Remark)	<p>1、BYWB-01为"可重复触发"方式。</p> <p>2、BYWB-01内置电源是特别定义的，不可更改输入电压。</p> <p>3、BYWB-01的输入及输出采用PCB做为端子，只能与我司配套的插座配套使用。</p> <p>4、BYWB-01置于金属壳内将不能正常使用。</p> <p>5、不能将多个微波感应器放置在相互探测的重叠区域使用，否则可能引发相互间干扰。</p> <p>6、与BYWB-01配套插座上有定义通过引线连接的光敏电阻（CDS），光敏电阻的安装位置要避开光源的照射区域（杜绝直射），否则会引发光源不间断闪灯。</p> <p>1. BYWB-01 could be retriggerable</p> <p>2. The power built into BYWB-01 is customized, and the input voltage cannot be changed.</p> <p>3. The input and output terminal for BYWB-01 is PCB and could only be applied via Paragon's special socket.</p> <p>4. BYWB-01 cannot be placed inside/behind metal materials.</p> <p>5. Multipal BYWB-01 could not be placed together or within a short distance as they may interfere with each other</p> <p>6. A programmed photoresistor(CdS) is connect on the supporting socket of BYWB-01, and the photoresistor should be placed away from the light source. The light source may keep flickering when photoresistor got mis-placed and detects its' light. Current design is set at turning on the light source when lux is below 10 and turn off the light source when lux is over 200.</p>							

四、电路方框图(Layout)



五、产品外形图(Sensor Dimension)



六、注意事项 (Cautions)

●关于误报 False Function

- 1、确保电源的合格性，
- 2、测试时，确保待测产品的周边没有移动物体（感应范围内）；
- 3、通电后大约有 10s-30s 初始化时间，在此期间的属于非正常感应，可能造成误报假像；
- 4、在户内测试时，感应相对比较灵敏，周边需保持静态，并保证第一个感应信号周期结束后再进行下一步的测试；户外测试时，务必留意周边环境的动态情况，如飞鸟、行人、往来的车辆等。

1. Ensure the suitability of the power source
2. Avoid moving objects within the detect range of the motion sensor while testing.
3. Around 10~30 seconds is needed for the sensor to initialize when turning on the power. During initialization the sensor may not function properly and may cause false detection.
4. The sensor is more sensitive when testing indoor. Therefore, the surrounding should remain static in order for the motion sensor to work when testing. As for outdoor testing, moving objects (animals, pedestrian, cars...etc.) should be avoided within the detected area of the sensor.

●本产品与灯具的装配(Installing inconjunction with lighting products)

金属灯具外壳不易被微波穿透，故本产品应避免安装在金属外壳内使用。但如塑胶、陶瓷、木质土质的障碍物，穿透效果比较好。具体情况，请以测试为准。

As microwave is unable to penetrate metal material, the location of the sensor should avoid having metal components in front of it. However, there's no penetrating issues with materials like plastic, wood and cement.

●本品的互谐性(Compatibility)

本产品具有相互谐振干扰性，故在有效的感应范围内，避免安装两个或者更多的微波感应器，否则其相互间的干扰可能会影响您的使用效果。

As the high frequency electromagnetic wave may interfere with each other within its detection range. It is crucial to avoid installing 2 or more sensors within 1 detection area in order to ensure the function of the sensor.