

PBOX™ P6

Solar Home Lighting System

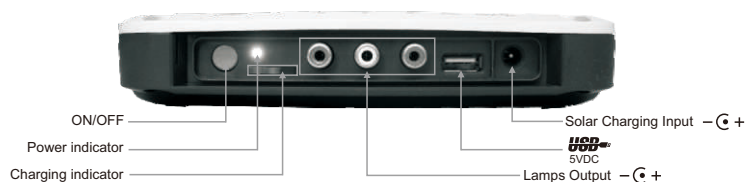
User Manual

Thank you for choosing PBOX P6 Solar home lighting system. In order to avoid any incorrect operation, please read this user manual carefully before installation.



In-line Switch

Schematic of interfaces on the controller:



Name of interface	Type	Definition and Limit
Solar Charging input	φ3.5DC socket	Operating voltage: 18VDC; Max power of solar panel: ≤25Wp
Lamps output	RCA socket	Working voltage: 12VDC; Max current: ≤2000mA
5VDC output	USB socket	Working voltage: 5VDC; Max current: ≤1000mA

WARNING: Do not use any equipment that goes beyond the limit of above statement, or the controller will be damaged.

Indicators	Color of LED	ON/OFF switch	LED Status	Description of Function
Power indicator	Blue LED	ON	●	Lamps and USB power on
		OFF	○	Lamps and USB power off. Can be charged only.
Charging indicator	Green LED	OFF	LED Flowing	Charging
		ON	■■■■	Battery capacity ≥80%
			■■■□	Battery capacity between 50%~80%
			■■□□	Battery capacity between 20%~50%
			3 LEDs flash	Battery capacity < 20%
□□□□	Battery capacity < 10%			

* Power ON Power OFF

Installation Guide:

- Please check if all parts that are listed in the attached packing list are included after opening the package.**
- Mount the solar module.**
Mount the solar module on your roof (or other place with sufficient sunshine) by attaching screws. Make the solar module face to direction with the strongest sunshine and set its obliquity equal to latitude of your city. Keep the solar module away from any shadow of trees, building, cable, etc.
WARNING:
⚠ The controller allows no more than 25W power of the solar module and the voltage must be no more than 18VDC. Otherwise the controller will be damaged. We do not suggest users to prepare the solar module by themselves.
- Clean the surface of solar module.**
Please clean the surface of solar module after finishing mounted. The more clean on the surface of solar module, the more energy will be obtained from sunshine.
- Lead the cable of solar module into your room.**
- Fix the controller.**
Place the controller at a dry and a proper place where allow you easy operation.
- Connect the cable of solar module to the Solar Charging Input socket of controller.**
- Hang up the lamp holders and connect the cables to the Lamps Output socket of controller.**
- Fix the lamps.**
WARNING:
⚠ Only 12VDC lamps are allowed. And the max power of lamp should be no more than 24W.
⚠ The output of the controller is DC voltage. Please pay attention to the electrodes when you fix the lamps.
⚠ Do not short circuit the lamps holder output.
- Turn on the controller (if the charging indicator is off or flashing, means the battery needs to be charged).**
TIPS: Turn off the controller while you don't use. This will help to save energy.
- Turn on the lamp switch.**

Troubleshooting:

Item	Fault	Fault Diagnosis	Solution
1	Charging indicator is OFF during charging in daytime.	Check if there is sunlight irradiation above the solar module.	Follow the step 2 and 3 of installation.
		Check if the solar module is connected to the controller correctly.	Follow the step 6 of installation.
		Check the ON/OFF switch of the controller. No charging indication if it's ON.	Turn off the controller and check if it's charging.
2	Can't turn on lamps	Turn on the switch of the controller. If charging indicator is flashing or off, means the battery needs to be charged.	Charging the battery.
		If the charging indicator is on, check if the lamps switch is on.	Turn on the lamps switches.
3	Can't charge mobile phone	If the charging indicator and lamp switch is on, check if the lamps and cables are well connected.	Follow the steps 7 and 8 of INSTALLATION GUIDE.
		Turn on the switch of the controller. If charging indicator is flashing or off, means the battery needs to be charged.	Charging the battery.
		If the charging indicator is on, check if the USB cable is well connected.	Re-connect USB cable or change a new one.
		Check if the mobile phone is well-known brand.	

PBOX™ P6

太阳能家庭照明系统

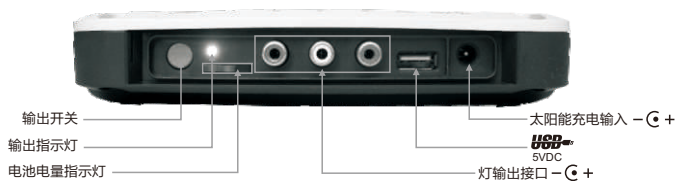
使用说明书

感谢您购买PBOX P6太阳能家庭照明系统。请在使用前仔细阅读本使用手册，这将有助于您正确使用本产品并充分发挥其优异性能。



在线开关

控制器接口功能说明：



接口名称	类型	应用限制
太阳能充电输入接口	φ3.5DC插座	输入电压：18VDC；太阳能板最大功率≤25Wp
灯输出接口	RCA插座	工作电压：12VDC；最大电流：≤2000mA
5VDC输出接口	USB插座	工作电压：5VDC；最大电流：≤1000mA

警告：使用超过本系统允许的输入/输出设备，将会损坏控制器。

指示灯	LED颜色	输出开关	显示状态	功能说明
输出指示灯	蓝色LED	开	●	灯和USB接口有输出
		关	○	灯和USB输出关，只能充电
电池电量指示灯	绿色LED	关	LED 流动	充电中
		开	■■■■	电池电量 ≥80%
			■■■□	电池电量在 50%~80%之间
			■■□□	电池电量在 20%~50%之间
			3 LED 闪烁	电池电量 <20%
□□□□	电池电量 <10%			

* 输出开关开=按下  关=松开 

安装指南：

① 打开包装，按装箱清单清点部件是否齐全。

② 安装太阳能电池板。

将太阳能板用附带的螺丝安装在屋顶（或其他日照充足的地方）。将太阳能板朝向日照最强的方向并使其倾斜角度与您所在的城市纬度保持一致。注意太阳能板要避免树木、建筑、电线或其他物品的阴影。

警告：

△ 本控制器允许的太阳能电池板输入功率不得大于25W，电压不可超过18VDC，否则会损坏控制器。不建议用户自行配置太阳能电池板。

③ 清洁太阳能电池板。

固定好太阳能电池板后，用干净的布抹清洁太阳能电池板表面。太阳能板表面越干净，吸收的太阳能就越多。

④ 将太阳能板连接线引入室内。

⑤ 固定控制器。

将控制器固定在干燥通风并便于操作的地方。

⑥ 将太阳能板连接线接入控制器的太阳能充电输入接口。

⑦ 将灯头悬挂妥当并连接到控制器的灯输出接口。

⑧ 安装灯泡。

警告：

△ 本控制器只允许使用工作电压为12VDC的灯泡，并且每只灯泡功率不得大于12W。系统总带载最大功率不大于24W。

△ 由于灯输出为直流电压，请使用系统配线。更换灯泡时请注意灯泡的正负极性，中心正，外负。

△ 灯输出接口不可短路。

⑨ 开启输出开关（如果电池电量指示灯不亮或闪烁，则需要对电池进行充电）。

使用窍门：当不使用负载时，请关闭控制器的输出开关，这样可以节省更多电能。

⑩ 打开灯头开关。

问题处理：

序号	不良现象	检查步骤	解决方案
1	白天充电时，充电指示灯不流动。	检查太阳能面板是否被太阳光照射到。	按安装步骤2、3进行
		检查太阳能连接线是否连接到控制器中。	按安装步骤6进行
		检查输出开关，如在打开状态下，不提示充电。	关上输出开关确认是否在充电
2	灯泡不亮	打开输出开关，如果电池电量指示灯闪烁或不亮，说明电池缺电。	需充电
		如果电池电量指示灯亮，检查灯头开关是否打开。	打开灯头开关
3	不能对手机进行充电	如果电池电量指示灯亮，打开灯头开关灯泡仍不亮，检查灯泡和电线是否连接正常。	按安装步骤7、8进行
		打开输出开关，如果电池电量指示灯闪烁或不亮，说明电池缺电。	需充电
		如果电池电量指示灯亮，检查USB线是否连接正确。	重复插入USB线或更换USB线
		检查手机是否是品牌手机*	

