



# BATTERY PROTECTOR

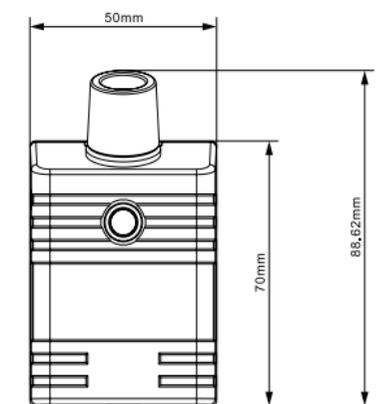
Lock energy and start at any time

Owner's Manual

The product is the perfect solution for restarting a breakdown vehicles caused by dead battery, such as when the vehicle has not been used for 3 months, you forgot to turn off the lights, or there is an electrical short. All you need to do is to press the button, and the battery will recover for one minute. You are then able to start your vehicle.

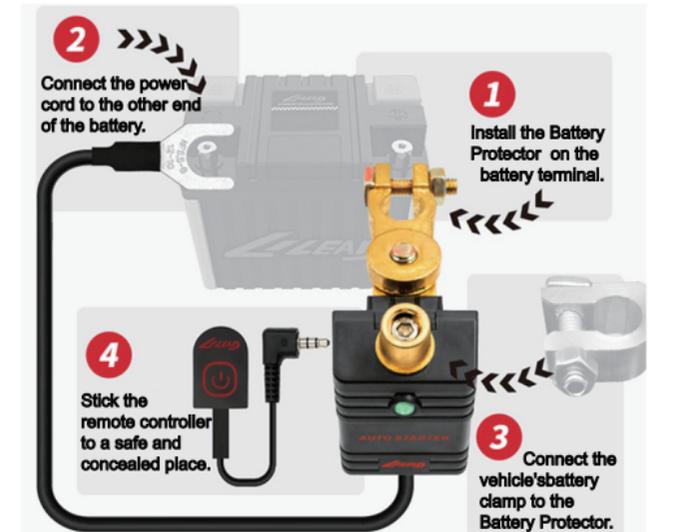
You can also press remote controller for 5 seconds, then the product will cut off the battery electrical circuit.

## TECH DATA & INSTALLATION INSTRUCTIONS:



Specifications	
Name	Auto Starter
Application	Only for use on 12V batteries
Working volt	7V-18V
Max current (10mS)	2400A
Max current (continuous)	100A
Max switch current	60A
Internal Resistance	1mΩ
Weight	0.67lb/ 300g
Dimensions(L*W*H)	1.96"*1.03"*2.76" 50*26*70mm
Working consumption(>12.3V)	3mA
Static consumption(>12.3V)	0.5mA
Battery discharge protection	Battery volt < 12.3V
Discharge protection time delay	3 Minute
Recover time	1 Minute

## INSTALLATION GUIDANCE:



Finally, insert the remote controller switch into the product, lead the switch out of the car, and stick it in a suitable position. Installed.

## INVENTORY:

Parts Name	Product body	Remote controller	User manual	Qualified certificate
Qty	1	1	1	1

## OPERATIONAL PRINCIPLE:

Normal battery voltage is more than 12.5V. If the voltage < 12.3V, and lasts for 3 minute, the product will cut off electrical output to ensure enough battery capacity to start vehicle.

You can press (A) remote control button or (B) button on the product or (C) use your cell phone bluetooth to connect the product. It can restore the battery in 3 minutes, allowing you to start the car within that time. Once vehicle starts, generator starts working and charges battery again. Battery voltage will keep increasing and return to normal.

## WARNING:

1. The product doesn't contain batteries. It is a battery controller. The product can prevent battery over-discharge, prevent vehicle breakdown due to flat battery and prolong battery life. The product cannot promote battery performance. If battery inner structure is broken or as battery ages and its performance declines, the product can't put life back into a battery.

For example:

Before install the product		Suggestion
Battery Served	Vehicle breakdown by weak battery	
< 2 years	No	Ready to install the product
	Yes	Change battery first, then install the product
> 2 years	No, battery is strong	Ready to install the product
	No, battery is weak	Change battery first, then install the product
	Yes	
After install the product		Suggestion
Battery Served	The product protection	
< 1 year	Protection ≥ 3 times	Please check battery status, or change battery, then keep using the product.
< 2 years	Protection ≥ 2 times	
> 2 years	Protection ≥ 1 time	

2. The product can endure 2400A (10mS) cranking current, 100A continuous current and it is suitable for regular vehicles. If vehicle needs to use heavy duty devices (such as a winch) and needs continuous current of 300A-500A, the product is not recommended.

3. Most vehicles cannot be affected when the power turns off. There are some possible phenomena and solutions when some vehicles are powered off as follows:

Category	Phenomenon	Solutions
Loss of memory	Loss of radio information	No additional operation required: the auto can automatically search for radio stations during the driving process.
	Inaccuracy of the clock	The mid- and high-end autos can automatically adjusted without additional operation, while economical autos may need to be set manually.
	Idle wobbling	No additional operation required: the vehicle ECU can automatically learn and adjust the ignition timing during the driving process.
Resetting	Failure of automatic window lifter of the Vehicle	When the window is closed, button up the rise key for 5 seconds, and then the automatic lifting function is reset.
Error code	Error code	Keep on driving normally until the destination, then restart the auto and the error code will disappear.

4. After installing the product, the external power can still be used to jump start the vehicle: Please use a healthy battery (voltage > 12V) to jump start the vehicle; Please do not connect the positive and negative electrode reversely; The jumper cable should be clamped on the battery terminal of the vehicle (not on the battery post) or on the designated location of the vehicle.

## INSTALLATION:

- Please choose proper product model: Positive model or Negative model.
- Vehicle current is high; make sure all connections are firmly attached.
- When installing the product to the positive terminal of the battery, please note that the metal connected to the positive electrode of the battery must be apart from the metal of body. Because the metal of the body is connected to the negative electrode of the battery. If positive electrode and the negative electrode are in direct connection, a short circuit will occur, which will damage the battery and cause safety accidents like fire.
- Position remote control button in a safe, reachable and sheltered place. DO NOT interfere with camera, or the windscreen wiper's operations etc.

- Make sure the switch cable is attached firmly to a stable position.

## WARRANTY:

The product is guaranteed to be free from defects in material and workmanship under normal use and conditions as follows:  
7-day unconditional return,  
30-day free replacement,  
1 years warranty.

The warranty does not cover the following situations:

- No after-sales service card.
  - Damage appearance or malfunction due to collision.
  - Unauthorized modification or any attempt to disassemble or interfere with the product in any way.
  - Exceeding the product technical data.
- If the product is damaged beyond the warranty period, our company will not perform after-sales maintenance on the product.

For post sales service, please contact local distributor.

Please fill in below information, or your warranty will be refused.

User's name: \_\_\_\_\_  
 User's Phone No.: \_\_\_\_\_  
 User's vehicle: \_\_\_\_\_  
 Purchasing date: \_\_\_\_\_



# 无忧启动

锁着能量 启动无忧

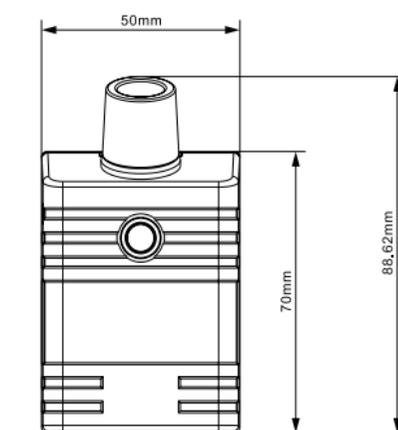
产品使用说明书&质保卡

发明专利号: ZL 2019 1 0316783.7  
深圳市锐创新科技有限公司  
广东省深圳市龙岗区龙城街道黄阁坑社区  
龙城工业园留学人员(龙岗)创业园423

当爱车因漏电,长时间停放或忘记关掉车载电器造成的亏电时,无忧启动会自动断开电瓶电路,避免电瓶亏电损坏以及因此引起的车辆无法启动。无忧启动既有自动又有手动保护模式,可以长按外置按钮开关3秒断开电瓶电路,也可以通过微信小程序进行手动断开电瓶电路。恢复通电操作四种方式:1.按机身绿灯;2.外置按钮;3.微信小程序 4.手机蓝牙范围内,自动通电

产品指示灯有三种模式:慢闪未断电,快闪断电以及快闪5分钟后自动熄灭。

## 规格参数



规格参数	
名称	无忧启动
应用	适用于所有的12V汽车电池
电压范围	7V-18V
最大电流(10毫秒)	2400A
最大持续电流	100A
蓝牙规格	BLE 5.0
内阻	1mΩ
重量	< 300g
尺寸(长*宽*高)	50*26*70mm
工作消耗电流(>12.3V)	3mA
休眠电流(>12.3V)	0.5mA
电池放电保护	电池电压 < 12.3V
放电保护延时	3分钟
放电保护解除	按一下按钮,或手机蓝牙连接产品,恢复供电3分钟

## 产品清单

中文名称	产品主体	线控开关	产品说明书	产品合格证
数量	1	1	1	1

## 安装方法



最后,将线控开关插在产品上,并将开关引出车外,贴在合适的位置。安装完毕。

## 微信小程序

打开微信,搜索<lilead启动无忧>小程序或者扫码右边二维码



## 蓝牙连接及功能介绍

产品断开电瓶电路5分钟后,用户可以通过手机蓝牙连接产品,即可让产品恢复电路连接。第一次使用需要蓝牙配对,配对后,只要进入蓝牙连接范围,产品可自动通电。

点击此处可以收藏方便随时打开微信可用

出现LILEAD信号时点击连接即可

点击增加新设备搜索LILEAD蓝牙



点击LILEAD两次打开高级功能

实时查看电压点击三次可触发电压选择

恢复通电断电后会出现立即通电开关

修改蓝牙名称长按此处可修改蓝牙名称

修改断电电压满足更多个性需求

## 产品使用注意事项:

- 产品内部不含电池,是电池控制系统。它可以防止电池过度放电,避免车辆抛锚,延长电池寿命。安装此产品不能使电瓶起死回生,如果电瓶已经损坏,请更换电瓶后再安装此产品方可起到保护效果。
- 无忧启动可承受2400A瞬间启动电流,持续电流100A,适用于所有的日常用车。如果车辆需要使用重型纹盘,持续电流300A-500A,不建议直接安装无忧启动,需要改装方可使用,具体安装方式请联系客服协助。

## 3.大部分车辆断电后对车辆没有影响。部分车辆断电后可能出现的反应及对应方法如下表:

类别	现象	解决方案
记忆缺失	电台信息缺失	无需额外操作:行车过程,车辆会自动搜索电台。
	时钟不准确	中高端车型会自动调整,无需操作。经济车型可能要手动设置。
	怠速抖动	无需额外操作:行车过程,车辆ECU会自动学习并自动调整相关参数设置,抖动会自行消失。
复位	车窗自动玻璃升降失灵	车窗关闭状态,扣住上升键5秒钟,自动升降功能重置完毕
错误代码	不明错误代码	车辆正常行驶,到达目的地后,重启车辆,错误代码消失。

4.安装产品后,依然可以用外接电源给车辆搭电。给车辆搭电请选用健康的电瓶(电压>12V);搭电时正负极请勿接反;搭电时请夹在原车夹头(不是夹在电瓶极柱上)或者车辆指定的搭电位置。

## 售后:

售后请联系对应购买的经销商。

## 安装注意事项:

- 请确定产品的正负极版本。汽车启动电流巨大,安装产品时,各部件必须拧紧。
- 线控开关请黏贴在安全,隐蔽并且可以手触碰的位置。不要阻挡雨刮器,摄像头等车辆设备工作。
- 线控开关内走线可以用扎带将导线与其他线束或固定部位捆绑,避免导线在车内严重移位,干扰到其他部件工作。
- 将产品安装在电池正极时,请注意,与电池正极接通的金属不可触碰到车身金属,因为车身金属是负极。正极与负极直接接触发生短路,会产生火花,损坏蓄电池,引发火灾等安全事故。

## 质保条款:

- 无忧启动承诺7天无理由退换货、非人为的质量保修12个月
- 质保只包括材料和工艺方面的缺陷,由于以下非常规及错误的使用方式(包括但不限于以下方式)导致产品出现问题,不在质保范围内:
- 没有售后服务卡或产品超过保修期限。
  - 挤压变形、碰撞造成产品无法使用。
  - 产品外观破裂,损坏等。
  - 泡水等造成的故障
- 产品在质保期外如果损坏,我司不对产品进行售后检修工作。

用户姓名	
车型及公里数	
联系方式	
购买日期	

注:苹果手机第一次使用会在打开蓝牙后小程序依旧提示打开蓝牙的了,请在设置下拉找到微信,打开微信读取蓝牙权限即可解决