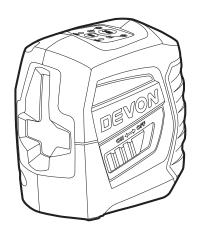
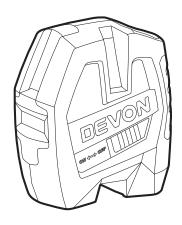
DEVON®大有

型号: LL2XG LL3XG





中国 专业绿光自平衡锂电激光 标线仪

GB Professional Lithium-ion **Self-Leveling Laser Level**

各产品外观之间存在差异,请以实物为准

专业电动工具

PROFESSIONAL TOOLS

大有工具"劲"在掌握

产品简介

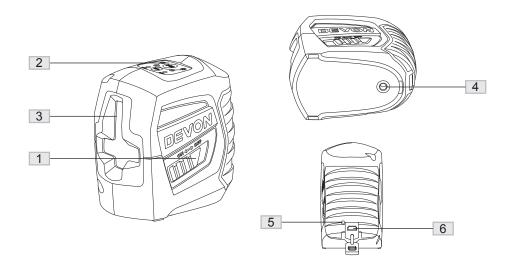


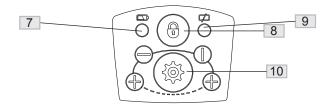
本产品具有高亮度绿色激光线、全软胶防护、IP54防尘防水溅设计,确保了可靠性和耐用性,适用于家庭、工装等领域的各类安装找平工作。

请您在使用前务必仔细阅读说明书,并严格按照说明指示使用产品!

1. 操作控制

图1

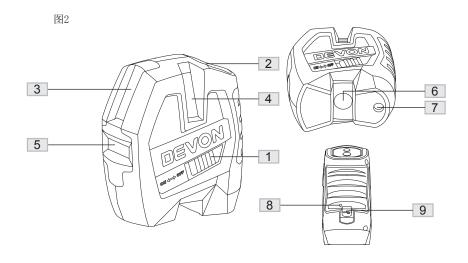


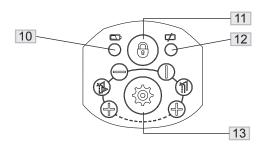


LL2XG(图1)

- 1. 开关拨钮
- 2. 薄膜按键
- 3. 激光出射窗口
- 4. 1/4"三脚架连接螺母
- 5. 充电指示LED灯

- 6. 充电接口
- 7. 电量指示灯
- 8. 锁定切换键
- 9. 倾斜指示灯
- 10. 模式选择键





LL3XG(图2)

- 1. 开关拨钮
- 2. 薄膜按键
- 3. 垂直激光出射窗口
- 4. 垂直激光出射窗口
- 5. 水平激光出射窗口
- 6. 下垂点激光出射窗口

- 7. 1/4"三脚架连接螺母
- 8. 充电指示LED灯
- 9. 充电接口
- 10. 电量指示灯
- 11. 锁定切换键
- 12. 倾斜指示灯
- 13. 模式选择键

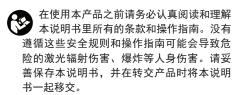
2. 工具规格

型 号	LL2XG	LL3XG
激光线配置	一条水平线; 一条垂直线	一条水平线;两条相互正交的垂直线; 一个下垂点
激光类型	激光线: 515nm, ≤1mW	激光线: 515nm, ≤1mW 激光点: 650nm, ≤1mW
激光等级	2类激光	2类激光
工作范围	20m*	20m*
自动安平范围	$\pm4^{\circ}$	$\pm 4^{\circ}$
自平衡时间	≤5s	≤5s
激光精度	± 0.2 mm/m	± 0.2 mm/m
电池	4.2V 1200mAh 锂电池	4.2V 2000mAh 锂电池
工作时间	约4小时**	约4小时**
工作温度	0°C − 40°C***	0°C - 40°C***
储存温度	-20°C - 70°C	-20°C - 70°C
三脚架螺母	1/4"	1/4"
防护等级	IP54	IP54

注:

- 1. 为求改进,本说明书所载规格可能不预先通告而给予更改。
- 2.*: 工作范围取决于环境亮度,在明亮的环境下工作范围会减小。
 - **: 电池寿命是在标准的测试环境下,将机器电量充满后打开全部激光测得的时间,关闭部分激光 线可以延长使用时间。
 - ***: 当机器温度接近0℃时,锂电池的充电时间和工作时间会受到低温的影响。

安全条款



- 1. 注意激光辐射。本产品投射的激光是符合 IEC 60825-1标准的2类激光。
- 2. 请不要对激光装置进行任何方式的改装。
- 3. 本产品配合其它光学仪器使用时,有可能会增加 激光辐射伤害,使用前请咨询专业人士。
- 本产品上贴着一张标贴,使用前请仔细阅读。请 勿撕掉或损毁仪器上的标贴,并且应保持标贴始 终清晰可读。







正常情况下本产品的激光不会造成光学 伤害,但是请勿将激光束指向人或动 物,请勿直视激光束,否则有可能扰乱 视力,造成事故或者伤害眼睛。

- 5. 请将本产品放在儿童不能拿到的地方。请勿在无人监护的儿童周围使用,或者让无人监护的儿童自行使用本产品。
- 6. 使用本产品请勿放置在容易被人有意或无意直 视激光束的地方。
- 7. 不要将激光束打到有高反光面的物体上,高反光 面上反射回来的激光束有可能会造成伤害。
- 8. 不要在易燃易爆环境使用本产品,如易燃液体、 气体或粉尘等。
- 9. 不要试图维修或者拆解本产品,非专业人员维修可能会导致严重的激光辐射伤害。任何的维修必须由专业的人员进行。
- 10. 请使用原厂的零配件,才能确保产品的正常性能。
- 11. 注意! 在使用配有蓝牙功能的产品时, 其他装置和设备、飞机、医疗设备(例如心脏起搏器、助听器)可能发生故障。请不要在医疗设备、加油站, 化工厂, 有爆炸危险的地区附近和爆破区内使用产品, 请不要在飞机上使用蓝牙功能, 请避免在身体附近较长时间使用。
- 12. 不使用该仪器时请将激光关闭。

使用注意事项



本产品是高精度的仪器,请仔细阅读并按 照以下使用说明操作,以保证本产品的最 佳性能。

- 1. 避免在潮湿、沙尘等恶劣环境下长时间使用或 存放本产品。长时间处于恶劣环境下,有可能会 损坏产品的内部器件或导致产品故障。
- 2. 将本产品从一个环境带到另一个环境时,如 两个环境的温差很大,会影响产品的精度, 此时请等待产品与当前环境温度大体一致后 再使用。
- 3. 使用及存放时请避免本产品受到强烈撞击、 挤压、长时间振动或者从高处跌落。若发生

- 上述情况,使用前请先进行检查和校准,以确保产品精度正常。
- 4. 产品使用完毕后或者需要移动时,请先将产品关闭,并确保机器内部已被锁定。这样可以避免产品在强烈的震动下受损。
- 关闭不用的激光线/点,以减少电量损耗,延 长电池续航时间。

配备

- 激光标线仪
- 软包
- 充电线
- 电源适配器
- 产品说明书
- 旋转底座

在某些国家或某些特殊的机型,其所提供的配备,可能与以上所给的资料稍有出入。

操作说明

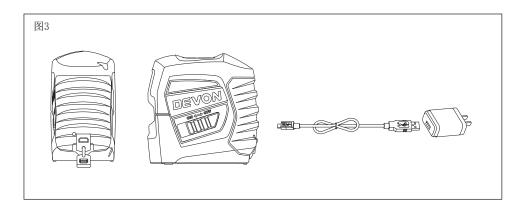
如何充电

本产品使用4.2伏锂电池工作。请使用原配的充电装置充电。

▲ 该仪器出货前部分充电,请在初次使用前将 电池充满。

↑ 每次使用后,不建议重复充电超过24小时。

- 将配套的充电线的USB接口插入电源适配器或 者移动电源,确保正确连接。
- 2. 打开机器充电接口的防尘盖,将配套充电线的Micro USB接口头插入仪器的充电接口,确保正确连接(图3)。
- 3. 将电源适配器与充电线的组合连接到电源插座。充电指示灯亮红色,开始充电。
- 4. 充满电后, 充电指示灯变为绿色。
- ★ 请勿在温度极高或极低的环境下充电。充电时, 仪器和电源适配器会轻微发热。



注意:

- 1. 长期不使用本产品,请定期循环充放电一次,以延长电池使用寿命。
- 本产品所配电池经过我司严格的内部质量管 控流程和检验标准,请勿私自拆装或者更换 其他品牌电池,以免造成触电、爆炸、烧伤 等可能的危险。本产品所配电池享受我司的 正常质保,遇到故障请交由专业维修人员或 者联系我司售后进行处理。
- 3. 锂电池在长期使用后,一般二年,存在一定的衰减,可能并不能达到购买时的性能,属于正常情况,若有疑问请及时与当地特约维修中心或者我司售后联系。

电量指示

机器使用过程中,薄膜按键上的电量指示灯会实 时反映电池的电量情况。

- 1. 绿色:表示机器电量>60%。
- 2. 黄色:表示机器电量<60%。
- 3. 红色闪烁:表示机器电量仅供工作<30分钟 (激光全开情况下)。当机器已无法开机, 且该灯红色闪烁时,表示电池电量已消耗 完,请立即充电。
- 4. 熄灭:表示机器处于关机状态。

工作中使用外接电源

- 1. 打开机器。
- 2. 将机器用配套的充电装置和外接电源连接, 方法同充电说明。
- 3. 此时机器可以继续正常工作,同时处于充电 状态,充电指示灯为红色。
- 4. 充满电后,充电指示灯变为绿色,请及时将 page 5

充电装置断开, 并妥善保存。



连接外部电源操作安全规范

连接外部电源如交流电源、移动电源时请 仔细阅读并按照以下安全规范操作,否则 可能会导致触电、爆炸、火灾和严重伤害 事故。

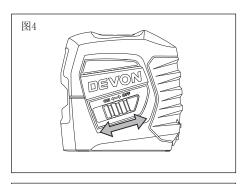
- 请使用原配的电源适配器和充电线,更换电源适配器时请选择原厂零件或从正规渠道购买输出电压5V输出电流1A并且符合当地法律认证的零件。
- 2. 连接交流电源时,请确保使用的适配器适用于该交流电源。
- 3. 连接移动电源时,请确保移动电源输出电压 5V输出电流1A并且符合当地法律认证要求。
- 4. 保持使用的电源适配器的清洁。每次使用前, 检查电源适配器、电线和插头。若发现有损 坏,请不要使用或自行维修,请及时更换或 交由专业人士处理,否则有触电的危险。
- 5. 不要在易燃表面(如纸张、纺织品等)或环境下使 用电源适配器连接交流电源。电源适配器在使 用过程中会发热,可能造成火灾事故。
- 6. 电源适配器请勿让儿童及有身体、感官、精神障碍或缺乏使用经验的人在无监护的情况下使用。

开/关机

- 1. 按动图中箭头方向将开关拨钮拨至"ON"的 位置(图4、图5):
- 2. 机器开机,进入自动安平工作模式。 LL2XG: 默认水平、垂直激光线同时点亮 LL3XG: 默认水平、正面垂直激光线和下垂点 同时点亮

Manual Revised V1.0

3. 按动图示箭头方向将开关拨钮拨至"OFF"的位置。激光关闭,机器关机。





自动安平模式

- 将本仪器自然放置,等待机器内部摆体完全 静止,完成自动安平后,倾斜指示灯亮绿 色。此时再利用机器射出的水平线或垂直线 进行下一步作业。
- 2. 当未达到安平状态时,倾斜指示灯红色闪烁,并且激光线闪烁报警。
- 3. 若始终无法达到安平状态,说明机器放置倾斜角度超过其自平衡范围4°,请调整机器,使其尽可能处于接近水平状态(4°以内)。

锁定斜线模式

此模式一般用来进行斜线的线性度校准或者标线 使用, 例如楼梯扶手的安装、 检验等。

该模式不可用于水平或垂直测量、标线,因为该模式下,仪器无论处于任意倾斜角度,即使超出自动安平范围,均不会触发报警。

- 1. 按压薄膜按键上的"**③**"键,仪器进入锁定 斜线模式。
- 2. 此时倾斜指示灯始终亮红色,以提示进入该

工作模式。

3. 将机器自然放置所需的角度,等待机器内部 摆体完全静止,利用机器射出的激光线进行 下一步作业。

注意:

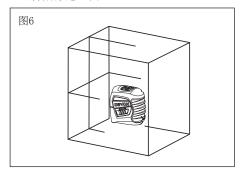
- 根据您实际的工作需求选择合适的工作模式。
- 2. 使用中,机器不得移动或者受到振动,否则 激光线的位置将可能发生变动。

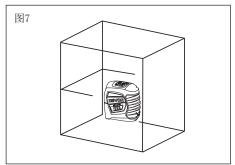
激光线的选择

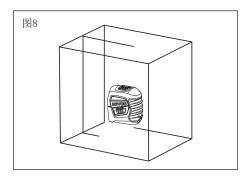
自动安平模式或者锁定斜线模式下,均可以通过按 压薄膜按键上的"**(**)"键,根据需要选择激光线。

112XG

- 1. 开机默认水平、垂直激光线同时点亮(图6)。
- 2. 按动1次,垂直激光线关闭,只点亮水平激光线(图7)。
- 3. 再按动1次,水平激光线关闭,只点亮垂直激 光线(图8)。
- 4. 再按动1次,水平、垂直激光线同时点亮,回 到初始状态(图6)。

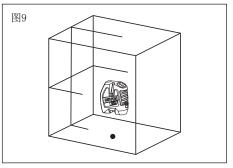


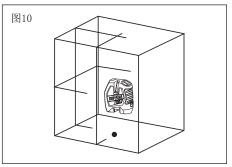


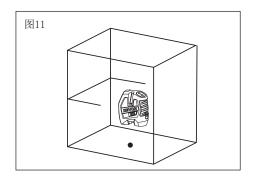


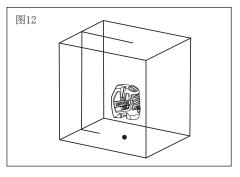
LL3XG

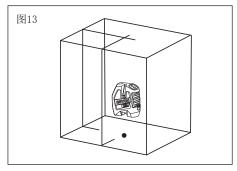
- 1. 开机默认水平、正面垂直激光线和下垂点同时点亮(图9)。
- 2. 按动1次,打开侧面垂直激光线(图10)。
- 3. 再按1次,2条垂直激光线关闭,只点亮水平 激光线(图11)。
- 4. 再按1次, 水平激光线关闭, 只点亮正面垂直 激光线(图12)。
- 5. 再按1次,水平激光线关闭,只点亮2条垂直 激光线(图13)。
- 6. 再按1次,侧面垂直线关闭,只点亮水平、正面垂直线,回到初始状态(图9)。







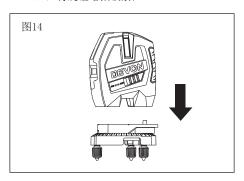




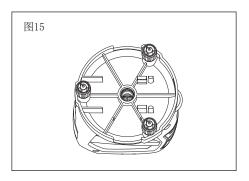
连接到三脚架使用 (需另购)

使用三脚架不仅稳定性高,而且使用者可以方便地调整标线的高度。安装时只须把机器底部的三脚架连接螺帽旋入一般的1/4英寸三脚架上即可。如果需要连接5/8英寸三脚架,需要借助底座。使用底座(以LL3XG为例):

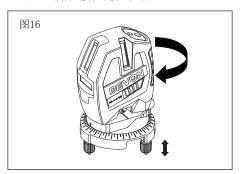
1. 将机器与底座上的1/4″螺杆连接(如图 14),将旋钥略微锁紧:

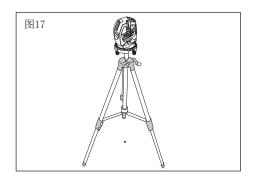


2. 调整机器位置,使得机器底部的激光点出射 孔与底座的激光点出射孔对齐(如图15);



3. 旋紧底座上的旋钮, 机器与底座完成连接, 此时机器可以通过底座自由旋转,通过调节 底座支撑腿调节机器所处角度(如图16)。 底座还可以通过激光点出射孔上的螺纹与 5/8″三脚架进行连接(如图17)。





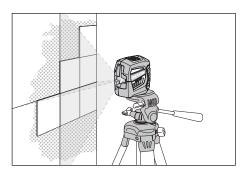
注意:

使用本产品时,若在激光点或激光线上进行标记或 读数时,请选取激光点或激光线的中间位置,以确 保精度准确。因为激光点的大小或激光线的宽度会 随着距离而改变,中间位置相比边缘更清晰明亮, 且易于判断。

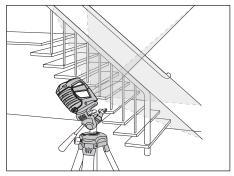
产品运用简介

本仪器适合室内及室外的安装找平作业,如下是一 些典型的运用场景

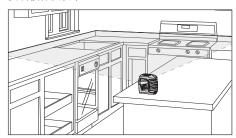
- 地砖、墙砖铺设
- 橱柜安装
- 天花板吊顶
- 房间隔断
- 门窗、楼梯安装
- 墙面开槽、铺设水管、线管
- 墙面油漆、铺设墙纸
- 室内挂画
- 室外桥梁管道铺设等



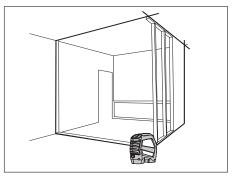
墙砖铺设



安装楼梯及扶手



安装橱柜



房间隔断

产品维护保养



为确保机器发挥良好性能,请按照如下 的几个简单说明,维护和使用本产品。

- 1. 请选择室内存放本产品,并且使用原配的包 装进行携带和存放。
- 2. 使用本产品时要尽量远离沙尘和潮湿环境, 清洁本产品时可以使用干净的软布沾清水挤 干后擦拭,不要使用清洁剂或溶剂,也不能 直接用水冲洗。
- 3. 请勿用手直接触碰或者擦拭本产品镜头。
- 4. 定期检查电池电量,若产品使用的是锂电池,长时间不使用产品时请定期进行一次充放电,以延长电池使用寿命;若产品使用的是干电池,不使用产品时请将电池取出。
- 5. 当产品提示电池电量不足时,请尽快更换电 池或充电。
- 6. 请勿自行调试、维修本产品。任何调试、维 修请交由专业人士进行。

环境保护



- 1. **DEVON**"的包装可以百分之百进行回收再生 处理。
- 2. 报废的产品和附件中含有大量有价值的原材料及合成材料,同样可以进行再生回收。
- 3. 废旧电池请勿随意丢弃,请尽可能的先让电 池放电后,再按照当地相关法令处理。

服务

- 1. 产品需要保修时,请自行送至当地特约维修 中心,并提供有效保修卡及购机发票原件, 遗失保修卡恕不补发。
- 2. 由于正常损耗或不当使用而导致的损坏,不 在保修范围内。

附:一般故障及排除方法

717.	14. 76634 126411474 18				
现象	原因分析	解决对策			
拨钮推至"ON"位置,但激光线	电池电量低	充满电后重新使用			
	拨钮没有拨到位	关闭后重新推到"ON"的位置			
不亮	机器超出工作温度范围	确保机器的工作温度 在0℃~40℃之间			
电量指示灯亮红灯并持续闪烁	电池电量低	尽快连接外接电源充电			
倾斜指示灯亮红灯且激光线闪烁	机器超出了工作范围	调整机器至大致水平状态(4°以内)			
	机器处于锁定工作模式	按动"锁定"切换键切换到自垂模			
		式,确保LED亮绿灯			
激光线精度超差	机器所处的环境温度发生骤变	放置一段时间使机器温度和环境温度			
		一致			
	机器受到了强烈的碰撞或跌落	联系当地特约维修中心或售后处理			
激光线变粗、或模糊	出光口玻璃表面有灰尘	用软布沾水清洁干净			
激光线可见度变差	环境光太亮	降低环境光亮度			
	电池电量低	请尽快充电			

DESCRIPTION OF THE TOOL

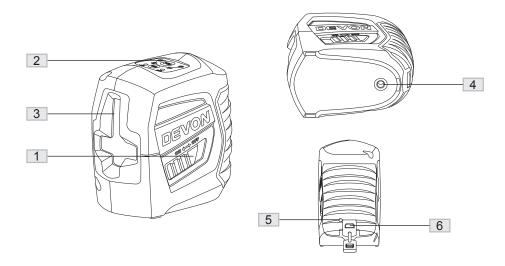


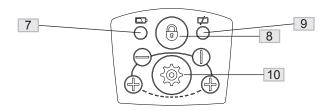
This product is equipped with high light green laser modules, a safety feature and integrated rubber that protect it from damage. This product is easy to use for a variety of applications whether indoor or outdoor.

Read, understand and follow all safety rules and instructions before using this tool.

1. MAIN PARTS

Fig. 1



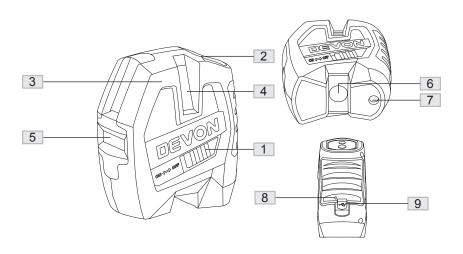


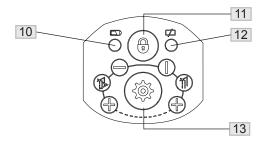
LL2XG (Fig. 1)

- 1. On/off switch
- 2. Function panel
- 3. Laser light aperture
- 4. 1/4" threaded tripod hole
- 5. LED charging light

- 6. Charging port
- 7. Electricity indicator light
- 8. Lock mode switch button
- 9. Tilted indicator light
- 10.Laser mode button

Fig. 2





LL3XG (Fig. 2)

- 1. On/off switch
- 2. Function panel
- 3. Vertical laser light aperture
- 4. Vertical laser light aperture
- 5. Horizontal laser light aperture
- 6. Bottom laser dot aperture

- 7. 1/4" threaded tripod hole
- 8. LED charging light
- 9. Charging port
- 10. Electricity indicator light
- 11. Lock mode switch button
- 12. Tilted indicator light
- 13. Laser mode button

2. TOOL SPECIFICATIONS

Model	LL2XG	LL3XG
Laser	One horizontal laser line ;	One horizontal line; two vertical laser line;
	One vertical laser line	one bottom laser dot.
Laser type	Laser line: 515nm, P≤1mW	Laser line: 515nm, P≤1mW
	Laser line. 3 ISIIII, F = IIIIV	Laser dot: 650nm, P≤1mW
Laser class	Class 2	Class 2
Working range	20m *	20m *
Auto-leveling range	±4°	±4°
Self regulation time	≤5s	≤5s
Laser accuracy	±0.2mm/m	±0.2mm/m
Battery	4.2V 1200mAh lithium battery	4.2V 2000mAh lithium battery
Working time	About 4h**	About 4h**
Working temperature	0°C – 40°C***	0°C – 40°C***
Storage temperature	-20°C – 70°C	-20°C – 70°C
Tripod nut	1/4"	1/4"
IP class	IP54	IP54

NOTE

- Due to **DEVON**'s continuing program of development, the specifications herein are subject of change without prior notice.
- 2. *: The working range will be reduced in bright condition.
 - **: The battery life is tested in standard condition with all lasers being turned on. To extend the battery life, shut off the laser line not used, e, g. shut off the plumb line when performing a level measurement.
 - ***: when the temperature of the tool is close to 0 °C the charging time and working time of the lithium battery will be influenced.

SAFETY RULES



BE SURE to read and understand all instructions in this manual before using this product. Failure to follow all

instructions may result in hazardous radiation exposure, explosion, and/or bodily injury.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE AND INCLUDE THEM WITH THE PRODUCT WHEN GIVING IT TO A THIRD PARTY.

- LASER RADIATION. Class II laser product complies with IEC 60825-1.
- 2. Do not attempt to modify the performance of this laser device in any way.
- The use of optical instruments such as, but not limited to, telescopes or transits to view the laser beam will increase hazardous radiation exposure.
- 4. The product is provided with a warning label. Be sure to read the warning label before

using the product. Do not remove or deface the warning label. Make sure the warning label on the product always recognizable.







Normally the laser does not present an optical hazard. However, do not direct the laser at persons or animals and

do not stare into the direct or reflected laser, not even from a distance. The laser may blind somebody, cause accidents or damage eyes.

- Always keep it out of the reach of children. Do not use the product around children without supervision or allow children to operate the product without supervision.
- Do not place the product in a position that may cause anyone to stare at the laser beam, whether intentionally or unintentionally.
- Do not point the laser on high shiny and reflective surfaces such as sheet steel. The laser reflected back from the high reflective surface could present an optical hazard.
- Do not operate the product in combustible areas, such as in the presence of flammable liquids, gases, or dust.
- Do not attempt to repair or disassemble the product. Any repair or disassemble required on this product should be performed only by authorized service personnel, otherwise serious injury may occur.
- 10. Only use original spare parts to ensure that the product performance is maintained.
- 11. Caution! When operating the product with blue tooth, interference with other devices and systems, airplanes and medical devices (e.g., cardiac pacemakers, hearing aids) may occur. Do not operate the product in the vicinity of medical devices, petrol stations, chemical plants, areas where there is danger of explosion, and areas subject to blasting. Do not operate the product with blue tooth in airplanes. Avoid operation in direct vicinity of the body over longer periods.
- 12. Always switch off the laser when not in use.

OPERATION NOTES



This product is a highly accurate measuring tool. Read and follow all instructions below before operate

the product to ensure that the best product performance is maintained.

- Do not operate and store the product in wet, dusty, sandy, or other adverse environments for a long time. Be in such conditions for a long time may damage inner components and affect the accuracy.
- When the product is brought into a warm environment from very cold conditions, or vice versa, let the product approach to the surrounding temperature before operation.
- Avoid heavy impact, long time intense movement or falling when operate and store the product. After these situations happened, please do an accuracy check before continuing to work to ensure the product performance is alright.
- Switch off the product and make sure the inner leveling unit locked after operation or during transport. So that to avoid the damage of leveling unit in case of intense movement.
- 5. Switch off the laser when not in use to extend battery life.

STANDARD ACCESSORIES

- Self-leveling laser level
- Soft bag
- · Charging wire
- · Charging adapter
- · Operator's manual
- Base part

Be sure to check the accessories as it is subject to change by areas and models.

OPERATION

Charging Description

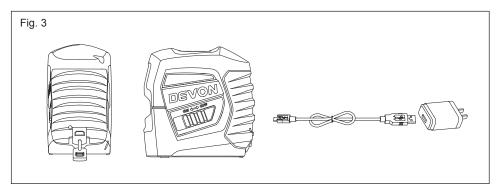
The product is equipped with 4.2V Li-ion battery, charge the battery with original charging equipment.

The product is shipped partially charged. Charge the battery before first use.

It is not recommended to recharge the tool for more than 24 hours after each use.

- Connect the USB interface charging cable into the power adapter or portable source to ensure proper connection:
- Open the dust cover charging port on the tool, connect the Micro USB interface into the charging port to ensure proper connection (Fig. 3);
- 3. Connect with a power outlet. Charge indicator

- light will light red, and the charging begins;
- 4. After fully charged, the indicator light lights green.
- ⚠ Do not charge at very high or very low temperatures. While charging, the power adapter and the instrument will be a slight fever.



Caution:

- Please charge and discharge the battery to extend the service life of the battery, while it has not been used for long time.
- The battery equipped has experience in strict internal quality control process and inspection standards, do not disassemble the battery or replace with other brands, so as to avoid electric shock, explosion, burn and other possible dangers. The battery equipped enjoys the quality assurance. Any repair or disassemble required on battery should be performed only by authorized service personnel or after-sales department.
- Some normally attenuation will happen in the Li-ion battery after long time working such as two years. Any questions, contact with local qualified service center or after-sales department.

Battery capacity indication:

During using, the electricity indicator light on the function panel will reflect the real condition of the battery.

- 1. Green: battery electricity > 60%;
- 2. Yellow: battery electricity $\!<\!60\%;$

- Red flashing: the remaining working time < 30min (all laser lights are turned on); If the tool can not be turned on with the electricity indicator light red flashing, the battery is empty, charge the battery right now.
- 4. Die out: The tool is shutdown.

Connect the external power supply in working

- Turn on the tool.
- Connect the assorted charging equipment with external power source, the same as charging instruction.
- The machine can continue to operate normally while it is charging, charging indicator light is red.
- When fully charged, the charge indicator turns green, please disconnect the charger, and store the charger properly.



Safety rules of connecting external power supply

Read and follow all instructions below before connect with external power supply such as AC supply and DC mobile power. Failure to follow all

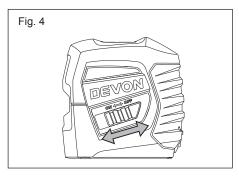
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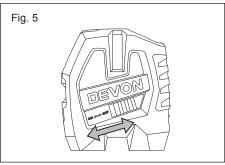
instructions below may result in electric shock, explosion, fire and/or serious personal injury.

- Only choose the original adapter and charger wire. If change the adapter, please choose the qualified and legal one which output voltage is 5V and output electricity is 1A.
- 2. Confirm the adapter suits the AC supply before do connecting.
- Confirm the mobile power is qualified and legal, the output voltage is 5V and the output electricity is 1A before do connecting.
- 4. Keep the adapter clean. Check the adapter, cable and plug before do connecting. If damage is detected, do not use or repair by yourself, change the damaged one or get repairs performed by authorized service personnel, otherwise electric shock may occur.
- Do not do connecting with AC supply on easily inflammable surfaces (e.g., paper, textiles, etc.) or surroundings. The heating of the adapter during using may pose a fire hazard.
- Children or persons with physical, sensory or mental limitations or lack of experience and knowledge are not capable of securely operating the adapter unless they are being given supervision or having been instructed by a responsible person.

Turn on/off

- Push the on/off switch to the "ON" position according to the arrow in the figure (Fig. 4, Fig. 5).
- 2. The tool is turned on and get into automatic balance mode.
- LL2XG: Default the vertical and horizontal laser light are turned on at the same time
- LL3XG: Default the horizontal and frontal vertical laser light and bottom laser dot are turned on at the same time
- 3. Push the on/off switch to the "OFF" position to turn off the tool





Auto-leveling mode

- Place the tool naturally, until the inner leveling unit stops swinging. The tilted indicator light will be green when the tool finish autoleveling. Then go on working with the laser.
- The laser will keep flashing and the tilted indicator will be red flashing, while the tool cannot finish auto-leveling.
- If auto-leveling is always not possible, it
 means the surface on which the tool stands
 deviates by more than auto-leveling range 4°
 from the horizontal plane. Please place the
 tool in a position closed to level (≤4° from
 the horizontal plane).

Work without auto-leveling mode (Lock mode)

This mode always be used as adjust or mark the line exceeds 4° from the horizontal plane. For example, set up the stair rail.

A Pay attention that the tool will not show any warning in this mode even it exceeds the auto-leveling range 4°. This mode cannot be used to perform horizontal or vertical leveling.

- 1. Press the key (1) to go into lock mode;
- The tilted indicator light will always be red to caution the function mode;
- Place the tool, until the inner leveling unit stops swinging. Then go on working with the laser.

Caution:

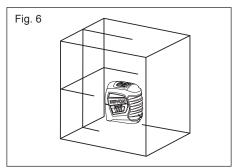
- Select the appropriate mode before using the tool.
- The position of laser maybe changes if move or vibrate the tool while it is being used.

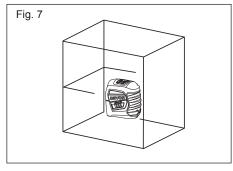
Select the laser mode

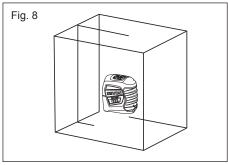
Press the key (**) to select a specific laser projection mode whether in auto-leveling mode or lock mode.

LL2XG

- Default the vertical and horizontal laser light are turned on at the same time when the tool is turned on(Fig.6);
- Press the key to close the vertical laser(Fig.7);
- Press the key again to close the horizontal laser. Meanwhile the vertical laser will be turned on(Fig.8);
- 4. Press the key again to return to the default mode(Fig 6).

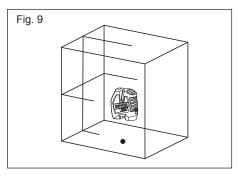


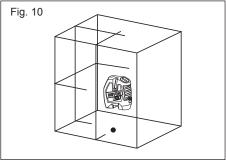


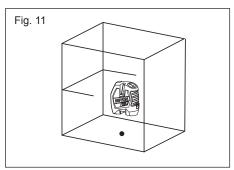


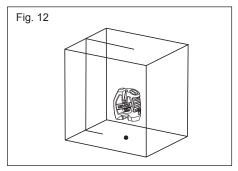
LL3XG

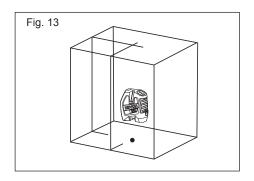
- Default the horizontal and frontal vertical laser light and bottom laser dot are turned on at the same time when the tool is turned on (Fig.9);
- Press the key to turn on the side vertical laser (Fig.10);
- Press the key again to close the two vertical lasers (Fig.11);
- Press the key again to turn off the horizontal laser and turn on the frontal vertical laser (Fig.12);
- Press the key again to turn on the side vertical laser(Fig.13);
- 6. Press the key again to return to the default mode (Fig.9).











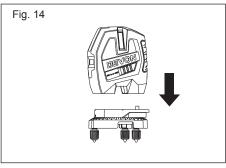
Working with the tripod (not included)

This tool can be mounted on a general 1/4" tripod directly (sold separately). By the tripod the tool can easily be adjusted to a proper height and orientation.

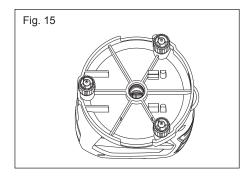
By the attached base part, the tool can also be mounted on a 5/8" tripod and allow the laser dot go through the tripod pole and projected on the floor.

Use the base part (LL3XG, for example)

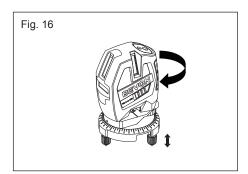
 Mount the tool on the base part with the 1/4" knob of the base part(Fig.14), tighten the 1/4" knob a little.

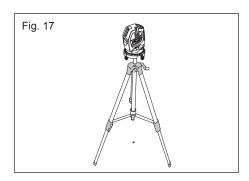


Move the tool back and forth on the base part, make sure the laser aperture located on the bottom of the tool is aligned with the 5/8" thread hole of the base part (Fig.15).



3. Lock the tool with the base part by tightening the 1/4" knob in position. The tool can be rotated freely with the base part and the surface on which the tool stands from the horizontal plane can be adjusted by the legs of the base part (Fig. 16). The base part can be mounted on a general 5/8" tripod directly (Fig. 17).





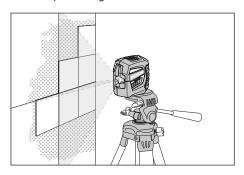
Tips:

For marking, always use only the centre of the laser point or the laser line. The size of the laser point as well as the laser line will change with distance.

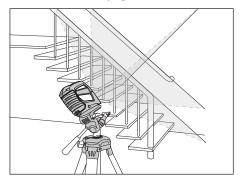
Application

This Auto Leveling Laser Level is easy to use for a variety of applications, it is ideal for the following applications:

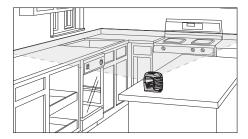
- Laying tile and flooring
- Installing closets
- Installing a drop ceiling
- Framing doors and windows
- Installing electrical wiring and pipes
- Installing banister
- Wallpapering and stencil work
- Painting
- Wall hanging of pictures, photos, artwork
- Room partitioning



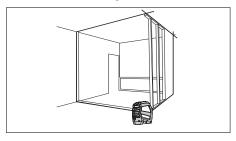
Laying tiles



Installing stairs and banisters



Installing cabinet



Room partitioning

MAINTENANCE



In order to maintain the product performance, you should always follow these simple directions below.

- Always store the product indoors. Always handle or store the product with original packaging parts.
- Always keep the product free of dust and liquids as much as possible. Use only a clean, soft cloth for cleaning. If necessary, slightly moisten the cloth with pure alcohol or a little water. Do not use any cleaning agents or solvents. Do not Wash with water directly.
- 3. **Do not** touch the lens with your fingers.
- 4. While the product not been in use for long time, do regular inspection on the batteries.

- Take off the batteries or charge and discharge the Li-ion battery to extend the service life.
- Charge the Li-ion battery or change the batteries when the low battery capacity warning occurs.
- Do not attempt to repair or disassemble the product. Any repair or disassemble required on this product should be performed only by authorized service personnel, otherwise serious injury may occur.

ENVIRONMENT PROTECTION



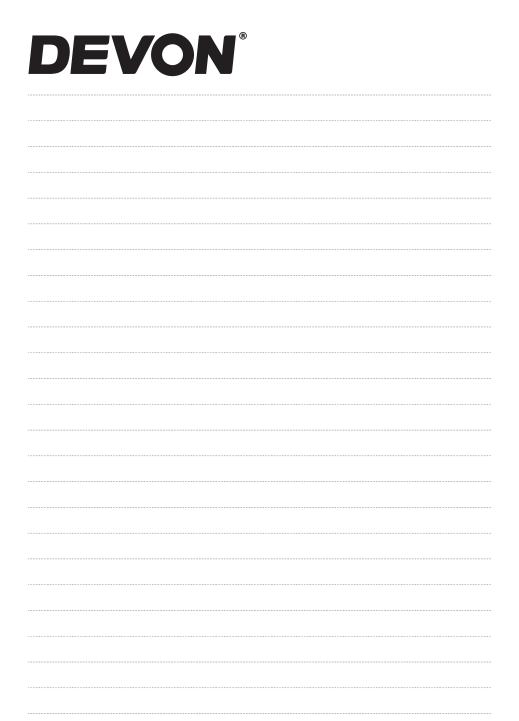
- DEVON Packaging should be sorted for environment-friendly recycling.
- Product and accessories at the end of their service life still contain large amounts of valuable raw materials and plastics which can likewise be fed back into a recycling process.
- Batteries should, if possible, be discharged first, then disposed of In accordance with local regulations and laws.

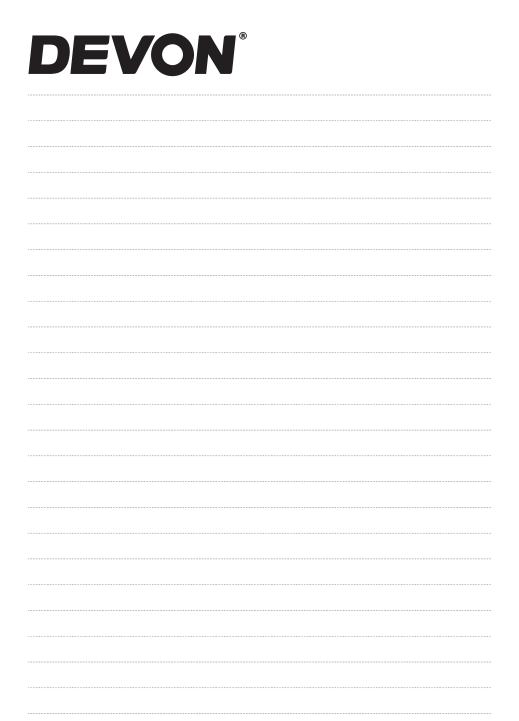
SERVICE

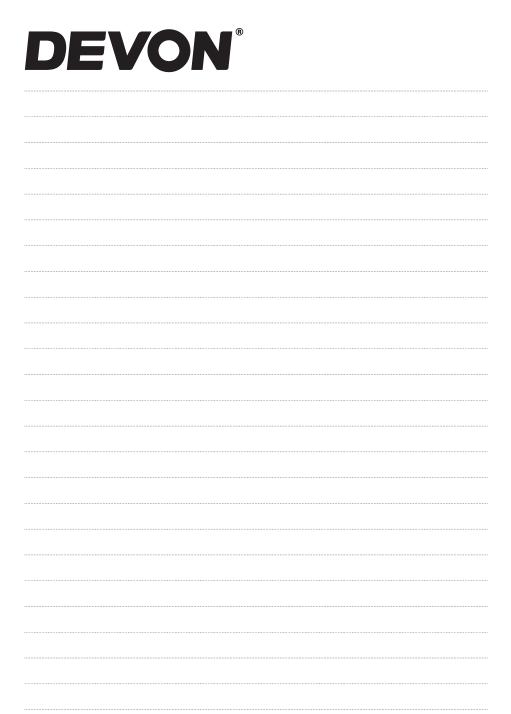
- In case of guarantee, repair or purchase of replacement parts, always contact the qualified service center and supplied with the efficient service card and invoice.
- It is out of the scope of guarantee when the product was normal wear or improper use of damage.

TROUBLE SHOOTING

Problem	Cause	Solution
	Low battery	Charge the battery
The laser cannot be turned on	The ON/OFF button is not pushed to the position	Slide the button once again
turned on	The tool is out of operating temperature range	Make sure the operating temperature within the range of 0°C~40°C
Electricity indicator light blinks in red continuously	Low battery	Charge the battery
Tilted indicator light lights in red and the laser line blinks	The tool is over its maximum working range	Place the tool on a more level surface, closer to horizontal (within 4°)
	The projection mode is in lock mode	Switch to other Auto Leveling modes, make sure LED lights in green
The laser line is not level or plumb	Big change of the operating temperature	Wait until the temperature of the tool is close to the room temperature
	The tool suffers a strong impact or drop	Send the tool to the authorized service personnel for repair
The laser line gets thicker or blurry	Dirt on the glass of the laser aperture	Clean it with soft cloths
The laser line is hard to	The surrounding is too bright	Reduce the room brightness
identify	Low battery	Charge the battery







保修卡 **Warranty Card**

合格证

PRODUCT CERTIFICATION

制造商: 南京德朔实业有限公司 地址: 江苏南京江宁经济技术开发区将军大道159号 销售商: 泉峰(中国)工具销售有限公司

检验员



全国统一售后服务电话

重要提示

机身铭牌上的9位编码是厂家判断机器真伪及提供售后服 务的重要凭证,如您购买了编码无法辨识的机器,可能 无法得到厂家正常的保修服务

保修服务说明:

- 工具需要维修时,请送至当地大有授权维修中心或寄至泉峰售后服务部,产品保修期以购机发票/收据原 件上的日期起算。
- 仅对存在质量缺陷的产品给与免费维修或免费换新,其前提是经大有授权维修中心证明其故障是由于材料或制造缺陷所造成的,并处于保修期内。
- 保修期及保修条款根据工具的类别而定:
 - 1. 交流工具:
 - 1.1. 整机保修6个月或者转子换向器直径磨损量在0.2毫米以内,以先到为准。
- 2. 直流工具:
 - 2.1. 12V产品:机身保修12个月,电池、充电器为12个月内包换。
 - 2.2. 14V以上产品: 机身保修6个月, 电池、充电器为6个月内包换。
- 3. 光电工具:
 - 3.1. 激光测距仪: 保修24个月。
 - 3.2. 其他光电产品: 保修12个月。
- · 保修不包括:
 - 1. 任何自然磨损以及正常使用时所发生损耗,如气缸、齿轮、O形圈、转子换向器直径磨损量超过0.2毫
 - 米、碳刷、轴承、开关、电子线路板、电源线等。 2. 由于不遵守操作说明、不正确使用、异常的环境条件、不适当的操作条件、过载或缺乏足够的维护和 保养所导致的工具故障。
 - 3. 自行或非大有授权维修点拆修的所导致的工具故障。
 - 4. 由于使用非原装大有配件而引起的缺陷。
 - 5. 经过改装或增加部件的工具。
 - 6. 随机附送的配件或者附件。
- · Quark 系列产品定位于家庭DIY用户,不能用于任何商业目的场合。如有违反,厂家将不提供保修服务。
- · 具体保修明细可查询大有官网: www.devon.com.cn

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如有 **DEVON** 大有 牌电动工具产品需要维修、保养和咨询服务,请您与 **DEVON** 大有 特约维修中心联系。

售后服务官方QQ: 3051884030

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本资料内容如有变更, 恕不另行通知。 版次: 13 发行日期: 2017-4-10

DEVON°大有

中国南京江宁经济技术开发区将军大道159号制造商: (外商独资)南京德朔实业有限公司No.159 Jiang-Jun Rd., Nanjing Jiangning Economic & Technical Development Zone.
Nanjing 211106, P.R. China Tei.+88-25-52127140
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