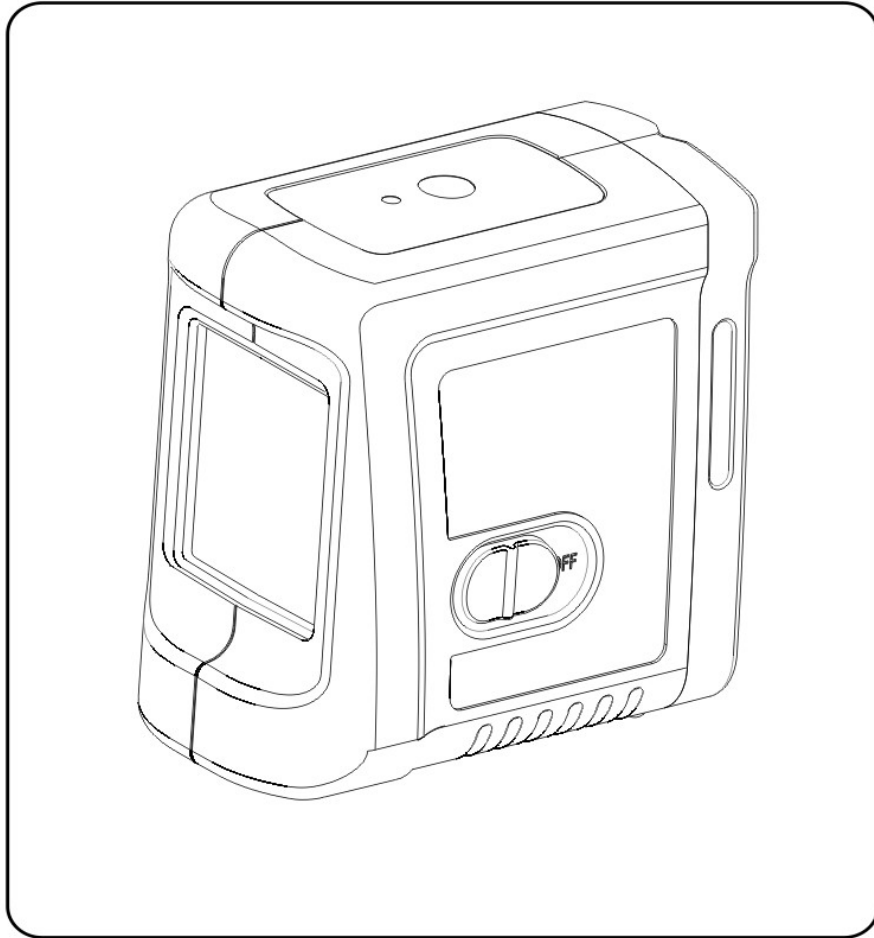


# 862 Laser level

## Maintenance manual



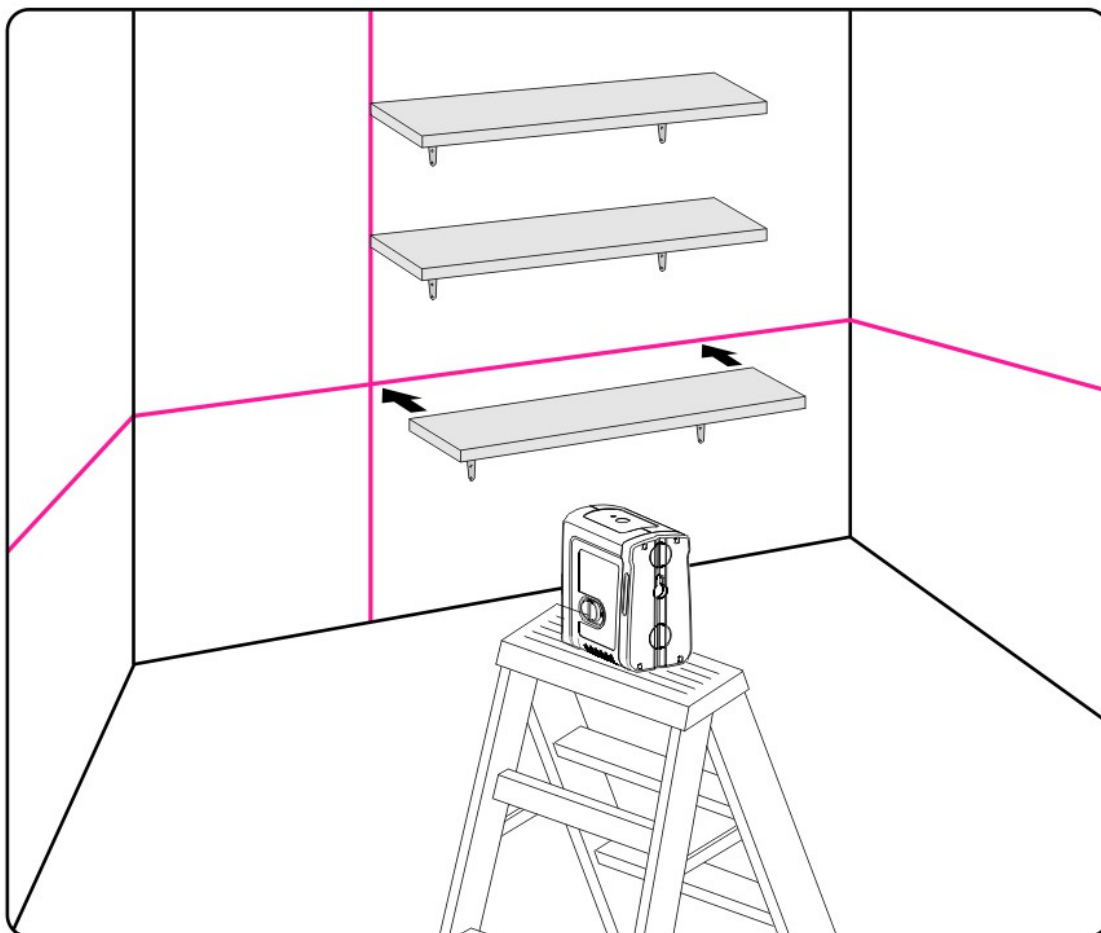
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# Catalogue

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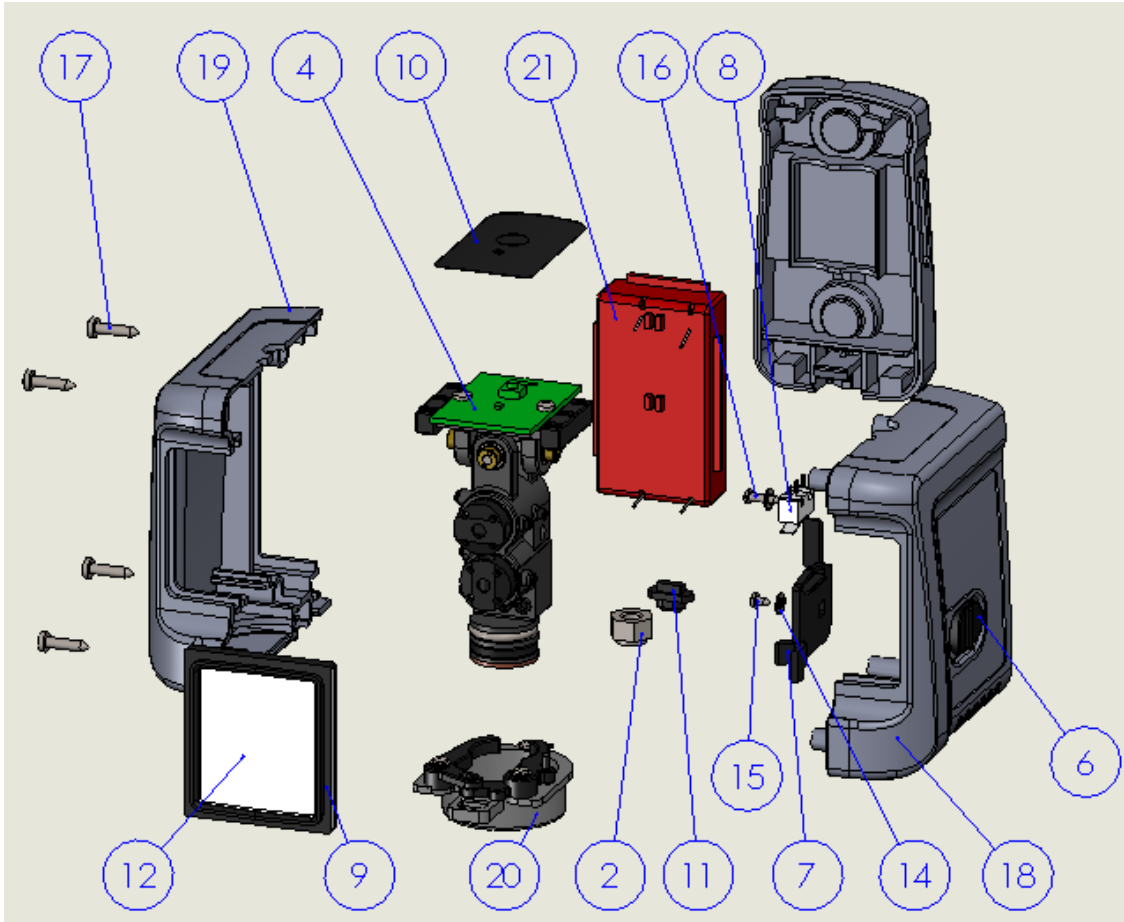
## 1. Basic function

The instrument can produce two mutually orthogonal laser sectors (a horizontal and a vertical plane). Laser sector projected on the walls, laser line creating two orthogonal. As shown in the figure below laser projection.



## 2、Instrument structure

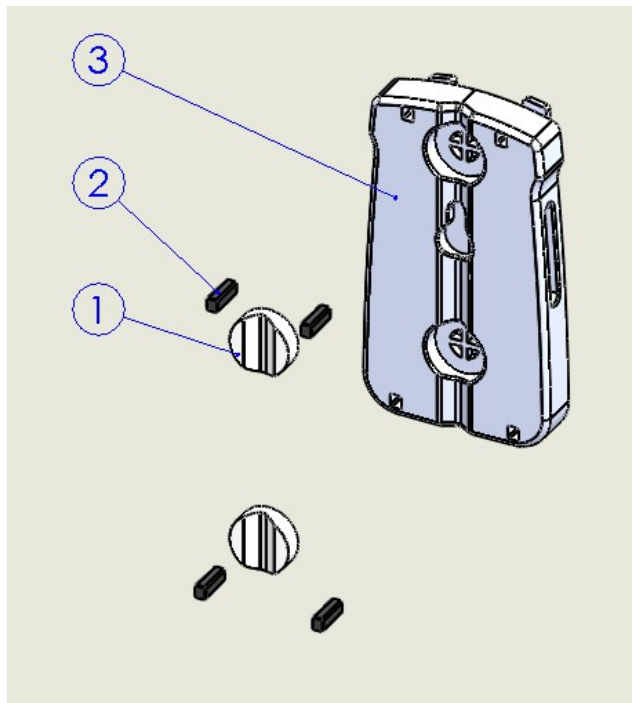
### 2.1 Final assembly



NO	NAME	Material	QTY
1	862 摆体组 Pendulum Assembly		1
2	862 1/4 "base screw	sus304	1
3	886-23 电池盖组 battery cover assembly		1
4	862 主板 main board	PCBA	1
5	GB_CROSS_SCREWS_TYPE1 M2.5X5-5 H type-N		2
6	862 开关钮 Switch button	PA6+30GF	1
7	862 开关卡座 Switch seat	POM	1

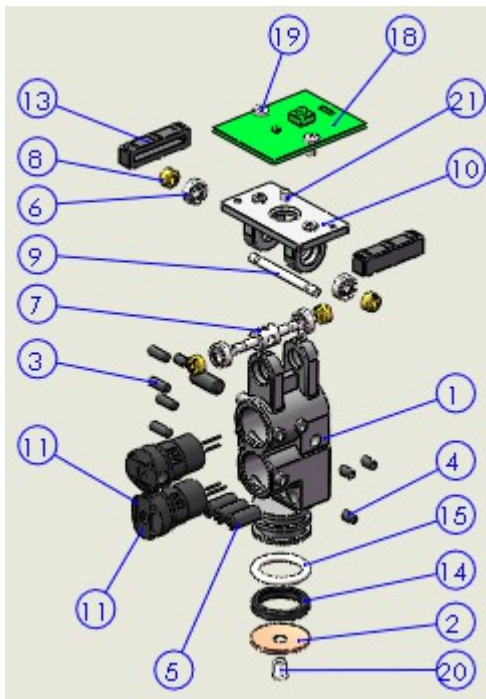
8	873 开关 switch		1
9	862 窗玻璃橡胶 window rubber	SI RUBBER	1
10	862 按键标贴 label	PC	1
11	862 电池按钮 battery cover button	PA6+30GF	1
12	862 窗玻璃 window	K9	1
13	873 紫铜片联接钉 Copper sheet screw	2AL12	1
14	GB_FASTENER_WASHER_SMW C 2.5	SUS304	2
15	GB_CROSS_SCREWS_TYPE128 ST2.2X4.5 H C-N	SUS304	1
16	GB_CROSS_SCREWS_TYPE128 ST2.2X9.5 H C-N	SUS304	1
17	GB_CROSS_SCREWS_TYPE128 ST2.9X13 H C-N	SUS304	4
18	862 右外壳 shell right	ABS	1
19	862 左外壳 left right	ABS	1
20	862 锁紧座组件 locking assembly		1
21	862 电池盒组件 battery box assembly		1

## 2.2. Battery cover assembly



NO.	NAME	Material	QTY
1	935 磁铁 Magnet	MAGNET	2
2	862 橡胶塞 rubber	SI RUBBER	4
3	862 电池盖 Battery cover	PA6+30GF	1

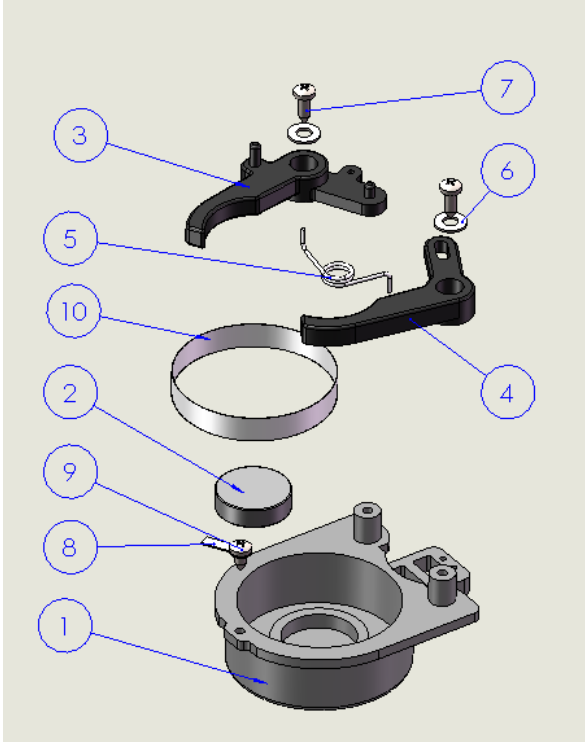
### 2.3. Pendulum assembly



NO	NAME	Material	QTY
1	862 摆体 Pendulum	AC43A	1
2	862 紫铜片 Red copper sheet	T2	1
3	hex socket set screws with flat point GB ,M3*8	45#	4
4	GB FASTENER SCREWS HSFP M3X5-N	45#	4
5	hex socket set screws with flat point gb,M5*12	SUS304	4
6	872 轴承 deep groove ball bearings gb		4
7	872 中心轴1 center shaft-1	SUS304	1
8	872 压圈 /pressure ring	HPb59-1	4
9	872 中心轴2center shaft-2	SUS304	1
10	862 顶板 roof	ADC-12	1
11	hexagon socket set screws with cup point GB		8
11	862 线激光器 line laser		2

13	862 减震垫 rubber shock pad	SI rubber	2
14	872 导电橡胶圈 conductive aprons		1
15	o-rings series a GB	Rubber	1
16	875 连线板 On-line plate		1
17	GB CROSS SCREWS TYPE1 M2.5X6	SUS304	1
18	862 主板 main board	PCBA	1
19	GB CROSS SCREWS TYPE1 M2.5X5	SUS304	2
20	873 紫铜片联接钉 Copper sheet screw	2AL12	1
21	GB FASTENER SCREWS HSFP M2.5X4-N	SUS304	1

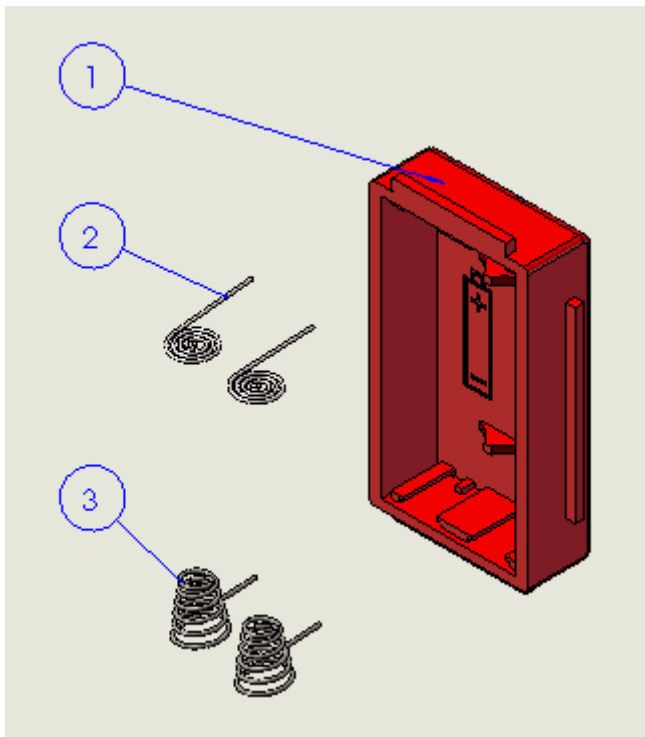
2.4 .Lock seat assembly





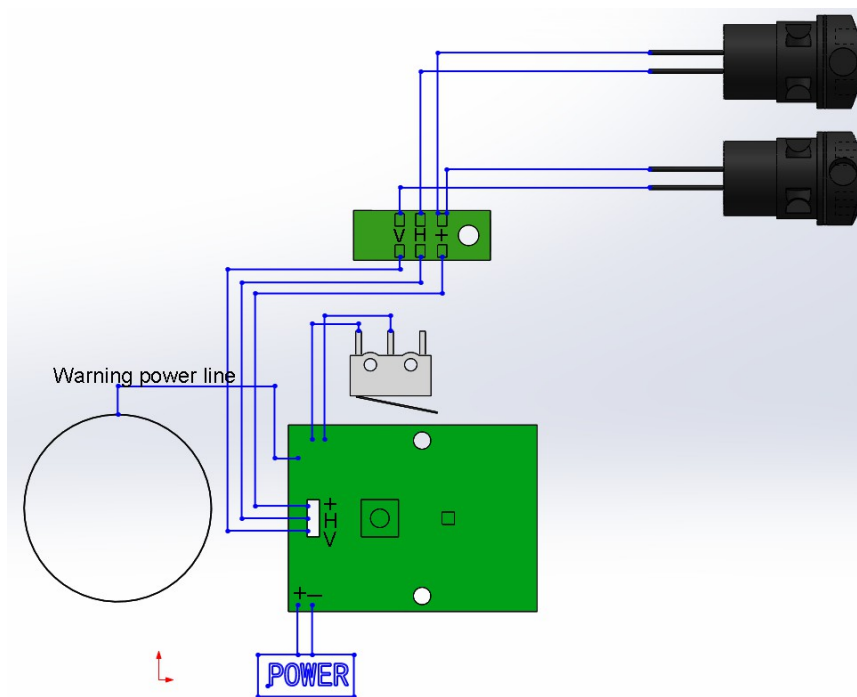
NO	NAME	Material	QTY
1	862 锁紧座 Lock seat	ABS	1
2	892 磁铁 Magnet	Magnet	1
3	862 右爪 right claw	PA6+30GF	1
4	862 左爪 left claw	PA6+30GF	1
5	862 扭簧 Torsional spring	65Mn	1
6	GB FASTENER WASHER SMWC 2.5	sus304	2
7	GB_CROSS_SCREWS_TYPE128 ST2.2X6.5 H C-N	sus304	2
8	873 接地端子 terminal	q235	1
9	GB_CROSS_SCREWS_TYPE128 ST2.2X4.5 H C-N	sus304	1
10	862 导电胶布 Conductive TapesB5		1

2.5. Battery box assembly



NO	NAME	Material	QTY
1	862 电池盒 Battery box	ABS	1
2	872 正极端子 /positive terminal	65Mn	2
3	872 弹簧端子 spring terminal	65Mn	2

## 2.6 Electrical jobs chart



### 3、 Common fault and eliminating methods

#### 3.1、 Don't start up

Cause  
 (1) Three dry cells working voltage is lower than 3 V analysis:  
 (2)The power plug contact with the motherboard  
 (3) The travel switch contact undesirable

Troubleshooting:

- (1) Replace the battery in time
- (2)Open the shell, reinstall the power plug
- (3) Open the shell to adjust the position of the switch chip

Note: keyboard or motherboard damage can also cause cannot boot (less likely), and to change the contact.

#### 3.2、 After startup without laser line

Cause  
 (1) Instrument tilt is too large, beyond the scope of work is the police analysis:  
 (2) laser tube main board attachment poor contact or broken

Troubleshooting:

- (1)Adjust the Angle of screw adjust equipment to work within the scope of returned to normal
- (2) To open the shell welding laser tube connection

Note: the main board or damage to the laser tube can also be caused no laser line (less likely), and to

change the contact.

### 3.3、 After startup cannot level

- Cause analysis:
- (1) The bearing surface is oxidation corrosion
- (2) The alarm ring contact surface oxidation by pollution or lead to poor contact
- Troubleshooting:
- (1) Open the shell, with rusty spot bearing replacement
- (2) Open the shell, after the alarm ring with anhydrous ethanol removal of contamination or oxidation

## 4、 SPEC

Laser class:	class 2
Laser beam output pattern:	vertical, horizontal, horizontal and vertical
Effective range:	98'/30m
Accuracy:	0.5mm/1m(0.02"/40")
Beam angle:	120°±5°
Self-leveling time:	4sec±1sec
Self-leveling range:	±5°
Wavelength:	630-650nm
Power supply:	2 AA batteries(not included)
Battery life:	20 hours of continuous use
Operating temperature:	14°F–113°F(-10°C – 45°C)
Storage temperature:	-4°F–131°F(-20°C–55°C)
Water&dust proof:	IP54
Dimensions:	3.5"x2.2x3.6"(90mmx55mmx92mm)
Weight including batteries:	500g