



360° PLUS VERTICAL LINE LASER LEVEL (super brightness)



ITEM NO. KLL-2360

COMBO

INSTRUCTION MANUAL

CE RoHS

INTRODUCTION

Thanks for selecting kenzax tools, congratulation, you have obtained one reliable, durable and professional laser-tool. The 360 cross line laser level adopts the latest glass tube technology and generates 360 degree of horizontal laser. With one vertical line, the tool can generate 360 horizontal laser and one cross line. It is the perfect tool for ceiling, fixture, backsplash and floors.

Due to super-brightness diode, contractors can use it for outdoor jobs like window tasks. However, with self-leveling technology, it is designed as DIY laser, which is light-weighted and extremely Easy to use. Therefore, whether you are doing professional construction job or home decoration, the 360 level can offer you optimal solution.

WARNING AND CAUTION

- The 360 level is ranked as class II laser. Be careful not to expose your eyes to the laser beam while the instrument is operating. Direct exposure to the laser beam for a long time may be hazardous to your eyes.
- Do not try to dismantle the instrument. Have it repaired by your dealer or supplier. Dismantling it by yourself may worsen the problem.
- When attaching the instrument to a tripod, make sure the instrument is securely fixed to the tripod and the tripod leg clamp should be securely fastened. If not securely fastened or tightened, the main unit could fall off or the tripod could fall over.
- When setting the tripod, beware of the tripod shoes which are sharp. These sharp points allow tripod to be securely positioned on the ground.
- Avoid using the instrument to target on vehicle drivers or pedestrians. Avoid putting the laser on a highly reflective material such as mirror. When disposing of this instrument, take a measure by removing the batteries so that the laser will not be emitted.

PRECAUTION

- The 3D cross line laser is a precision instrument and should be treated with care.
 - The instrument should not be store or used in extreme temperature or job on place subject to rapid change of temperature. The instrument may not function properly if used out of the ambient temperature range.
 - Store inside the carrying case and place in a dry area not subject to vibration, dust or high moisture.
 - When storage and usage temperature are widely different, leave the instrument in the case unit it can adjust to the surrounding temperature.
 - The instrument should be transported or carried carefully to avoid impact or vibration.
 - The instrument should be stored in the carrying case and packed with cushioning material.
- Always handle the item with care.
- Be sure to observe the items in the instruction manual for proper use of the instrument.

PROFESSIONAL LASER-SET

1. 360 Plus Laser Level

2. Laser Target

3. Alkaline Battery

4. Magnetic Bracket

5. Visibility Glass

6. Operating Manual

7. Hard Carry Case

8. Tripod (Optional)

9. Detector (Optional)


10. 360 Rotating Base (Optional)



OPERATION**I: Pendulum Lock**

This laser level is a precision instrument and should be treated with care. When not in use, the pendulum should always be in the Off position (Figure1). Locking the pendulum allows the cross line laser to better withstand vibration and trauma incurred during transportation or if the unit is dropped.

SLOPE MODE UNDER PENDULUM LOCK**Figure 1**

When the unit is power off and switch is on lock position (Figure 1) Keep the laser pendulum locked, by holding  for 3 seconds to activate the "slope function".

This mode cannot be used to perform horizontal or vertical leveling as the laser lines are no longer aligned automatically. The indicator will constantly red and the laser lines will keep flashing slowly.

II. AUTOMATIC LEVELING**Figure 2**

When the pendulum is unlocked (figure2), the pendulum is free to automatically level, In order for the cross line laser to automatically level, the base of the unit needs to be within 3.5° of level. when the pendulum is unlocked and the cross line laser is within 3.5° of level, the unit will be in automatic leveling range, in this situation the indicator will turn to green. Should the base of the unit be outside the 3.5° leveling range the laser beam will flash quickly.

UTILITY OF CONTROL PANEL

PULSE MODE

Under pulse mode, laser-lines will be empowered and can be adjusted to the outdoor circumstances. Furthermore, the instrument can be operated with detector.

LASER INDIVIDUAL SELECTION

Once the instrument is switched on, 360 degree of horizontal line will be on automatically. Then pressing line button will activate vertical laser (V1) whilst horizontal laser will cease working. Twice pressing will activate both horizontal and vertical laser to form one cross line.

The diagram illustrates the control panel of the laser instrument. It features a top view and a side view. The top view shows a 'PULSE MODE' button and a 'LASER' button. The side view shows a '360 HORIZONTAL LASER' button and a 'VERTICAL LASER' button. Red arrows point from the labels to the corresponding buttons on the instrument.

LASER SWITCH

PULSE MODE

360 HORIZONTAL LASER

VERTICAL LASER

SPECIFICATION	
Over-All Accuracy	$\pm 2\text{mm}/10\text{m}$
Leveling range	$\pm 3.5^\circ$
Working Range/ Detector	15m/60m With Detector
Tripod Thread	5/8" & 1/4"
Laser Type	Class II @635-660nm
Operating Temperature	-10°C to 45°C
Storage Temperature	-20°C to 50°C
Dimension	120x60x122
Continuous Working Time	15Hs(W/ALL Diodes On)
Protection Class	IP 54

ALARM FUNCTION

LEVELING ALARM

Once the pendulum is in unlocked condition, the instrument will be self-leveling within 3.5° . When the unit is used out of the leveling range, laser lines and the main indicator will keep flashing and the unit will make an alarm sound.

LOW-BATTERY ALARM

If the battery indicator keeps flashing, it illustrates that the voltage level is below 3V and batteries need to be replaced soon in order for continuous use.

USING YOUR DETECTOR

Press the pulse button on the control panel on top of the laser to enter into pulse mode.

Switch the detector on and move it into the path of the laser beam.

Hold the detector upright for horizontal beams. Rotate the detector 90° for vertical beams. The direction arrows will indicate the position of the laser beam. The center LED will indicate alignment with the beam.

USAGE OF LASER LEVEL

**PANELS AND DECORATIVE
BORDERS INSTALLATION**



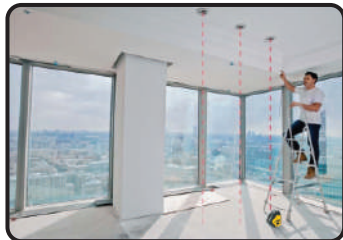
FLOOR POURING



WIRING, SOCKETS PLANNING



SPOTLIGHT INSTALLATION



CEILING INSTALLATION



CERAMIC TILE INSTALLATION



۵ اطلاعات فنی تراز لیزری

مدل دستگاه: KLL-2360

میزان دقت خطوط افقی: $\pm 2\text{MM}$ در هر 10 متر

میزان دقت خطوط عمودی: $\pm 2\text{MM}$ در هر 10 متر

دامنه خود تراز دستگاه: $\pm 3.5^\circ$

برد دستگاه: 15 متر / با استفاده از گیرنده دستی 60 متر

رزوه سه پایه: 1/4 و 5/8 اینچ

نوع دیود لیزری: کلاس لیزر 2 (635 نانومتر)

درجه حرارت کارکرد: -10°C to 45°C

درجه حرارت محل نگهداری: -20° to 50°

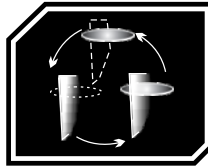
ابعاد: 120x60x122 mm

حداکثر زمان کار مداوم (دیودها): 15 ساعت

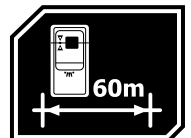
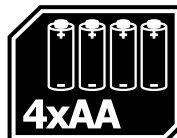
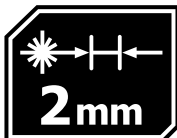
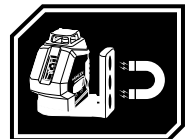
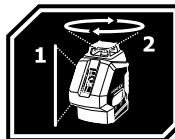
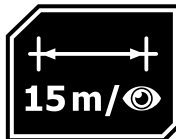
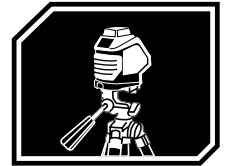
AUTO SELF-LEVELLING



SINGLE PLANE ON/OFF



TRIPOD MOUNT THREAD 1/4" & 5/8"



❷ قفل کن پاندول تراز لیزری

از جمله مشخصه های دستگاه قفل پاندول است. زمانی که نیاز به خط مورب روی سطح مقابل (جهت خط پله یا اجرای دکوراسیون) داشته باشیم، هنگامی که دستگاه خاموش و در حالت OFF می باشد



شکل ۱

می بایستی به مدت ۳ ثانیه کلید تغییر حالت  را بفشاریم، در این حالت پاندول دستگاه قفل می شود و دو تراز لیزر عمودی و افقی ظاهر می گردد. سپس با تنظیم زاویه دلخواه روی سه پایه به یک خط مورب دست میابیم.

❸ کاربرد تراز لیزری

نصب کاشی و سرامیک در کف و دیوار

انواع دکوراسیون داخلی (پارتیشن بندی - کاغذ دیواری - سقف و دیوار کاذب و ...)

نصب **Drywall**، پارتیشن و دیوارهای کاذب

نصب درب و پنجره

نصب اتصالات برقی (لستر و ...)

پروژه های عمرانی

❹ تجهیزات جانبی موجود

چهار عدد باتری سایز **AA**

پایه آهنربایی، عینک مخصوص، نشانگر هدف

دستوالعمل کاربر

کیف حمل ضد ضربه

۱ لیست قطعات دستگاه



پایه آهن ربایی



تراز لیزری ۳۶°



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دفترچه راهنمای فارسی

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