



360° H PLUS 2 V LINES

LASER LEVEL



ITEM NO. KLL-1720

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. 4 AA Alkaline Battery
4. Magnetic Bracket
5. Visibility Glass
6. Operating Manual
7. Hard Carry Case
8. Clamp (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 control switch located on Top of unit 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.

To activate pulse mode when the unit is powered on hold the control key on top for 3 seconds and to deactivate it do the same.

LASER INDIVIDUAL SELECTION

Once the instrument is switched on, 360 degree of horizontal line will be on automatically. Then pressing the control key will switch to front vertical line, by double press the side vertical and base point will be on, by 3rd press the horizontal line will be on and you can use all lines in same time. to switch off use the same control key to reach reliable use full line.



Over-All Accuracy $\pm$	H: 2.5mm/10m V: 2 mm/10m
Leveling Range	$\pm 3.5^{\circ}$
Working Range	20m/50m With Detector
Tripod Thread	1.4"
Laser Type	Class II @635-660nm
Operating Temperature	-10°C to 45°C
Storage Temperature	-20°C to 50°C
Dimension	115x77x120mm
Continuous Working Time	8 Hrs (W/All Diodes On)
Protection Class	IP 54
Battery Type	Alkaline X 4
Net Weight	0.5 KG

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

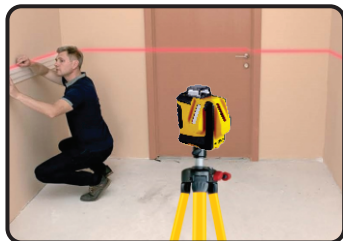
Press the pulse button on the control panel on top of the laser to enter into pulse mode.

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



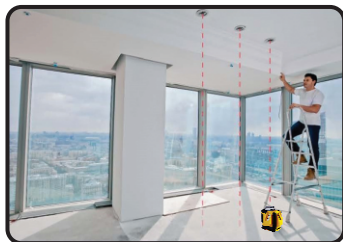
FLOOR POURING



WIRING, SOCKETS PLANNING



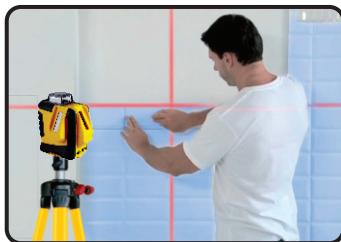
SPOTLIGHT INSTALLATION



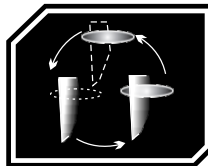
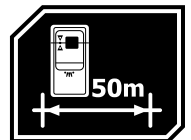
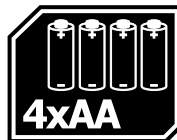
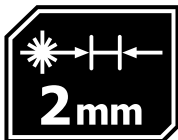
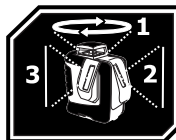
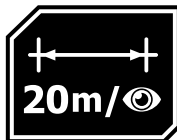
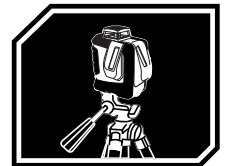
CEILING INSTALLATION



CERAMIC TILE INSTALLATION



اطلاعات فنی تراز لیزری

مدل دستگاه: **KLL-1720**میزان دقت خطوط افقی: **$\pm 2.5\text{MM}$** در هر **10** مترمیزان دقت خطوط عمودی: **$\pm 2\text{MM}$** در هر **10** متردامنه خود تراز دستگاه: **$\pm 3.5^\circ$** برد دستگاه: **20** متر / با گیرنده دستی **50** متررزوه سه پایه: **1/4 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: **115 x 77 x 120 mm**حداکثر زمان کار مداوم (دیودها): **8** ساعت**AUTO
SELF-LEVELLING****SINGLE
PLANE ON/OFF****TRIPOD MOUNT
THREAD 1/4"**

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 در بالای دستگاه را بفشاریم، در این حالت پاندول دستگاه قفل می باشد و با توجه به نیاز به خط لیزر می توان با استفاده از کلید تغییر حالت خطوط مورد نیاز دستگاه را روشن و یا خاموش نمود.

سپس با تنظیم زاویه دلخواه روی سه پایه به یک خط مورب دست میابیم.

تجهیزات جانبی موجود

- چهار عدد باتری سایز AA از نوع آلکالاین
- گیره و پایه آهنربایی
- عینک مخصوص
- نشانگر هدف آهنربایی
- دستورالعمل کاربر
- کیف حمل ضدضربه

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 (لواستر و ...)
- پروژه های عمرانی

کاربردهای کلید کنترل

۱- تغییر حالت خروجی لیزر

پس از روشن کردن دستگاه، لیزر افقی فعال می شود. با فشردن کلید کنترل خط عمودی مقابل به همراه نقطه تحتانی جهت مرکز محوریت نمایان می شوند و پس از دوباره فشردن این کلید خط عمودی جانبی روشن می شود و شما در این حالت می توانید دو خط عمودی که با هم زاویه ۹۰ درجه دارند که در کف سازی و اجرای سقف کاربرد خاص دارد را در اختیار داشته باشید، با فشردن دوباره کلید کنترل خط افقی ۰ ۳۶ درجه نیز روشن می شود که می توانید از تمامی خطوط در آن واحد استفاده نمایید.

۲- حالت کم مصرف

در محیط هایی که نور کمی دارند جهت ذخیره انرژی باتری شما می توانید با نگه داشتن کلید کنترل برای ۳ ثانیه نور خروجی دستگاه را کم نمایید تا در طول عمر باتری مصرفه جویی کنید برای غیر فعال کردن می توانید این عمل را مجدداً تکرار کنید.



تراز لیزری ۳۶۰ درجه افقی ۲ خط عمودی



ITEM NO. KLL-1720

دفترچه راهنمای فارسی

