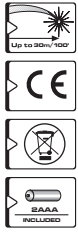**KAPRO** TOOLS WITH VISION

User Manual

Thank you for purchasing our laser distance measurer **KAPROMETER K-30.**
Please read carefully this user manual before you use the product for the first time. You are now the owner of one of our innovative state-of-the-art measuring tools. This tool incorporates new laser technology that will allow you to measure or calculate distances quickly, accurately and reliably.

NOTE

Keep this user manual for future reference.

CONTENTS

FEATURES

- Measuring distance up to 30m (100').
- Outdoor measuring distance of up to 10m (33')
- Measures area and volume.
- Measures the shortest distance to target with continuous measuring mode.
- Indirect measurement mode, using the Pythagorean Theorem to calculate inaccessible places
- Internal memory holds 20 measurements.
- Choice of 2 reference points.
- Choice of 5 measuring units.
- Backlit LCD display.
- Battery indicator
- Built-in red transparent flip cover to enhance the visibility of the laser red dot and protect the keypad from damage and accidental activation.

Inside the Package
1. Laser Distance Meter
2. 2 AAA batteries
3. Instruction Manual

SAFETY INSTRUCTIONS

⚠ WARNING

This product is emitting radiation that is classified As class II according to EN 60825 -1
The laser radiation can cause serious eye injury
- Do not stare into the laser beam
- Do not position the laser beam so that it unintentionally blinds you or others.
- Do not operate the laser level near children or let children operate the laser level.
- Do not look into a laser beam using magnifying optical devices such as binoculars or a telescope, as this will increase the level of eye injury.

⚠ **WARNING:** This product contains lead in solder and certain Electrical parts contain chemicals which are known to the State of California to cause cancer, birth defects or other Reproductive harm.
(California Health & Safety Code Section 25249.6- Proposition 65)

⚠ NOTE

The red flip cover is intended to enhance the visibility of the laser beam. Do not stare, or aim the laser to human eyes. Laser radiation can blind.

GENERAL INSTRUCTIONS

- Do not remove or deface warning labels.
- Do not disassemble the product; laser radiation can cause serious eye injury.
- Do not drop the unit.
- Do not use solvents to clean the unit.
- Do not use in temperatures below -10°C or above 40°C (14°F to 104°F)
- Do not operate the laser in explosive atmospheres such as flammable liquids, gases or dust. Sparks from the tool can cause ignition.
- To prevent batteries leaking and corrosion damage to the tool. Remove the batteries from the battery compartment, if you are not planning to use the device for a long period.

Note:
- The working range and the accuracy of the instrument depends on how well the energy of the laser is reflected from the target surface.
- Increasing the contrast between the laser dot and the reflective surface (e.g. to shade the target area) or using a white or mirror-like laser target, will increase the accuracy and the working range of the instrument.
- In favorable conditions, accuracy is ± 2 mm and a deviation influence of ±0.05mm/m should be taken into account.
- Bright sunlight, rough surfaces, very short distance, or a poor and extra-strong reflected signal may cause the deviation to reach or exceed ±10mm and also may bring an ambiguous cycle leading to unexpected results.

EN

MAINTENANCE

- Clean the aperture lens with a clean soft cloth only.
- Do not use solvents.
- If the laser measurer is exposed to water, dry it before storing.
- Remove the battery if the laser measurer will be unused for a long period of time.

Error Codes

Code	Description	Solution
Err01	The reflected laser signal is too strong.	Change the target or affix a piece of white paper to the target.
Err02	The distance to be measured is beyond the measuring range. The specified measuring range of this instrument is 0.05~30m.	Measure within the effective measuring range.
Err03	The target which the laser beam aims at is weak at reflecting the laser beam.	Change the target or affix a piece of white paper to the target.
Err06	Low Battery.	Install new batteries.

OVERVIEW

❶ ❷ ❸ ❹

#1 ON/measurement key: Press and Hold to turn ON
Press again to turn the laser on
Press & release for single measurement
Press & hold for continuous measurement

#2 Function/Memory Key: Press to choose the relevant mode : Area, Volume or Indirect measurement
Press & hold to enter the memory reading mode
NOTE – While in reading mode Press #3 to scroll through stored records, Press #4 to delete current record, Press & Hold #4 to delete all records, press#1 to exit memory reading mode

#3 Reference / unit key: Press to choose the reference point: front and rear of the device (the tail is a default choice). Press & hold to choose the measurement unit: m, in (decimal), in 1/16, ft (decimal), imperial (', ", 1/16)

#4 On/Off /Clear key: Press to exit the current mode or clear the screen, press & hold to switch the device off.

a. LCD
b. On / measurement key
c. Function / memory key
d. Reference / unit key
e. On/Off /Clear key
f. Red flip cover/ beam finder
g. Laser Receiver Window
h. Laser Emission Window

LCD ICONS

🔋	Battery level indicator
🔋	Low battery indicator.
	Measuring datum from the tail
	Measuring datum from the front

	Laser-on indicator		View stored Data
	Single measurement		Continuous measurement
	Area measurement		Volume measurement
	Indirect (Pythagorean) measurement		

BATTERY INSTALLATION

1. This unit is powered by 2 AAA Batteries.
2. Open the lid of the battery compartment.
3. Insert 2 new AAA batteries of the same brand according to the polarity diagram on the inside of the battery compartment.
4. Close the lid.
5. The battery charge level is indicated on the screen with the battery icon 🔋
6. Replace batteries when low battery icon 🔋 flashes on the screen.

⚠ **WARNING:** Batteries can deteriorate, leak or explode, and can cause injury or fire.
1. Do not shorten the battery terminals.
2. Do not charge Alkaline batteries.
3. Do not mix old and new batteries.
4. Do not dispose of batteries into household waste.
5. Do not dispose of batteries in fire.
6. Defective or dead batteries must be disposed of according to local regulations.
7. Keep the batteries out of children reach.

OPERATING INSTRUCTIONS

ON/OFF Switch.
1. Press and hold #1 button or #4 button to turn the instrument **ON**. The device enters into single measurement mode and the laser will automatically turn on.
2. Press and hold #4 button about 4 seconds to turn the instrument **OFF**.
3. If the instrument is idle for 5 minutes, the device will turn itself **OFF** automatically to save battery power.

Distance Measurement Mode.
Place the device on the starting point, and aim towards the target. Press #1 key to take a measurement.
Note: If idle for 20 seconds, the laser will automatically turn **OFF**. In this case press #1 key once to turn on the laser for the next measurement.

Continuous Distance Measurement Mode.
Continuous measurement or tracking measurement is recommended to determine the desired distance.
1. Direct the laser beam onto the target.
2. Press and hold the #1 button to start continuous measurement. The device will take measurements approximately twice a second and the last result will be displayed on the LCD screen.

3. Move the device to find the desired distance.
4. Press the #1 button to pause the continuous measurement.
5. Press the #4 button to exit the continuous measurement mode.

Measuring Reference Point
The device has two reference points in relation to the unit: front and rear. By default, the reference point is set at the rear. Press the #3 button to choose different reference points of measurements.

Unit Setting
This device provides 5 options of unit measurement – see table below. Press and hold the #3 button to change the unit measurement .

	Meter	Inch decimal	Inch 1/16	Feet decimal	0'0" 1/16
Length	m	in	in	ft	0'0" 1/16
Area	m²	ft²	ft²	ft²	ft²
Volume	m³	ft³	ft³	ft³	ft³

Measuring Functions
This device provides various functions to meet your measurement demands. Follow the flow diagram below to operate your laser distance meter.
Press button #1.
Pressing the #2 button repeatedly will activate the measuring functions according to the following loop:
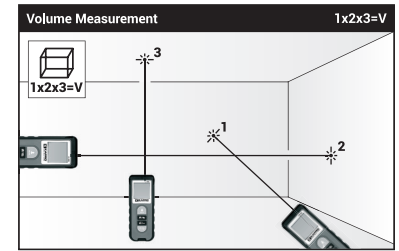Area ⟶ Volume ⟶ Indirect measurement.

Area Measurements and Calculations
1. Press the #2 button once to enable Area measurement.
2. Follow the instructions on the screen to measure Width (1) and Length (2).
3. After finishing all the measurements, the calculated value of the area will appear on the screen.
4. Pressing the #4 button will lead you back through the steps of the area measurement and then to single measurement mode.

Area Measurement
1x2=A
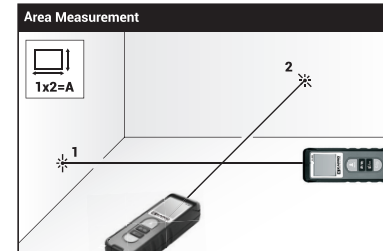
Volume Measurements and Calculations
1. Press #2 button twice to enable Volume measurement.
2. Follow the instructions on the screen and measure Width (1), Length (2) and Height (3) .
3. After finishing all the measurements, the calculated value of the volume will appear on the screen.
4. Pressing the #4 button will lead you back through the steps of the volume measurement and then to single measurement mode.

Volume Measurement   1x2x3=V
1x2x3=V

Indirect Measurement
This device can calculate distances based on the Pythagorean Theorem. You can use the indirect measurement mode to measure and calculate distances in places which are inaccessible or inconvenient for regular measurements.
1. Press the #2 button to enable indirect measurement.
2. Follow the instructions on the screen and measure the sides of the triangle (1 and 2) .
3. After finishing all the measurements, the calculated value of the opposite side (X) will appear on the screen.
4. Pressing the #4 button will lead you back through the steps of the indirect measurement and then to single measurement mode.

Indirectly Measurement I
Pyth. I
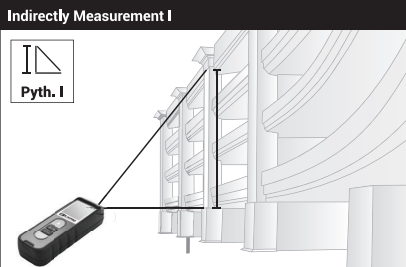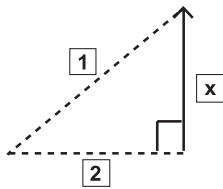
Memory Storing Results and Memory Recall
The device will automatically store the last 20 results of the measurements / calculations.
1. To view the stored measurements, press and hold #2 button to enter the memory reading mode.
2. While in this mode, scroll between the memory cells by pressing #3 button. The index of the used memory cell appears on the top of the screen.
3. Press #4 button to delete the current record.
4. Press and hold #4 button to erase all the stored records.
5. Press #1 button to return to single measurement mode.

Flip cover / Beam finder
The unique red tinted flip cover provides unique features:
1. Enhancing the visibility of the red laser dot, especially in bright light conditions.
2. Protecting the keypad from damage and accidental activation.

SPECIFICATIONS

Measuring Range	0.05m ~ 30m
Resolution	1mm
Accuracy	± 2 mm
Measuring Speed	0.5 Sec
Memory capacity	20
Laser Type	630 – 660 nm, Class II, <1mW
Beam Size	25mm@30m
Battery	2 AAA Batteries
Battery Life	More than 5,000 measurements
Operation Temperature	-10°C ~ 45°C
Storage Temperature	-20°C ~ 60°C
Device Power-Off	After 5 minutes
Laser Power-Off	20 Seconds
Weight	110gr with batteries
Dimensions	113 (L) * 42 (W) * 26 (H) mm

WARRANTY

This product is covered by a two-year limited warranty against defects in materials and workmanship. It does not cover products that are used improperly, altered or repaired without Kapro approval.
In the event of a problem with the laser level you have purchased, please return the product to the place of purchase with proof of purchase.

Model no. 363
Serial number sticker is positioned in the battery compartment.

CE CONFORMITY CERTIFICATE
This product meets the standards of the Electromagnetic Compatibility (EMC) established by the European Directive 2014/30/EU and the Low Voltage Directive (LVD) 2014/35/EU

EC DECLARATION OF CONFORMITY
We declare under our responsibility that the product 363 is in accordance with the requirements of the Community Directives and Regulations:
2014/30/EU
2011/65/EU
EN60825-1: 2014
EN61326-1: 2013