LASER DISTANCE METER
CP40
Operation Manual

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CP40 Operation Manual   www.precaster.com.tw   **AAA x2 Batteries**

. Safety Information

1. This is a Class 2 laser tool, laser radiation is emitted from this product and is manufactured to comply IEC 60825-1: 2007, EN 60825-1:2007, EN 61326-1:2013 and CRF21, parts 1040.10 and 1040.11.
2. Use of controls, adjustment procedures other than those specified herein may result in laser radiation exposure.
3. Never stare directly into beam or aim the laser beams at others.
4. Product contains semiconductor laser diodes with wavelengths of 650 nanometers.
5. The total continuous output of the beams never exceeds 1.0 milli-watts.
6. Product complies with EMC Test according to EN61000-6-3:2001+A11:2004, EN61000-6-1:2001, EN61326-1:2013, IEC 61326:2012 and FCC Test according to PART 15.
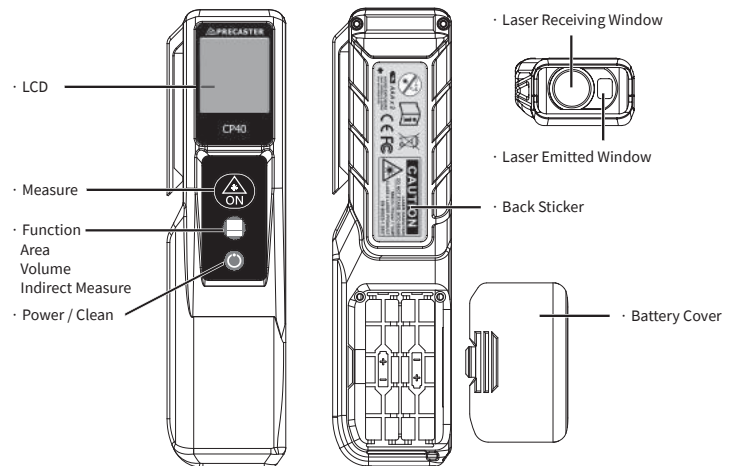
LASER RADIATION
DO NOT STARE INTO BEAM
650nm / POWER < 1mW
CLASS II LASER PRODUCT
EN 60825 1:2007

. Inside The Box

· CP40 Laser Distance Meter x1   · AAA Battery x2   · Operation Manual x1
· Carrying Case x1   · Safety Strap x1

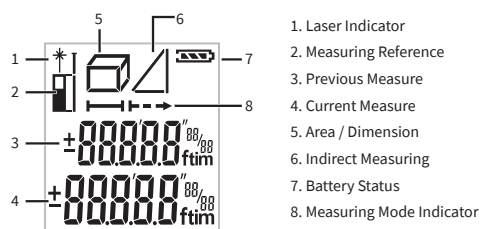## . Specification

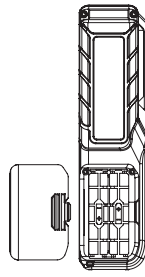|	
· Measuring Range	0.05m- 40m
· Resolution	0.001m
· Accuracy	±2mm
· Measuring Speed	0.5sec
· Laser Type	650nm, Class II, <1mW
· Beam Size	25mm@15m
· Battery	AAA Battery x2, Up to 10,000 measures
· Dimension	145 x35 x18 mm
· Operation Temperature	-5°C~40°C
· Storage Temperature	-20°C~60°C
· Automatic Power-Off	-Laser 30 Seconds -Device 180 Seconds

. Overview for CP40

· LCD

· Measure

· Function Area
  Volume
  Indirect Measure

· Power / Clean

· Laser Receiving Window

· Laser Emitted Window

· Back Sticker

· Battery Cover

. Overview for Screen

1. Laser Indicator
2. Measuring Reference
3. Previous Measure
4. Current Measure
5. Area / Dimension
6. Indirect Measuring
7. Battery Status
8. Measuring Mode Indicator

. Battery Installation & Power Status

1. This unit is powered by 2 x AAA Batteries.
2. Remove battery lid and observing correct polarity before install batteries.
3. Battery level is showed on screen with batty icon on screen.
4. When the icon appears, there are approximately 1000 times to measure.
5. Replace batteries when low battery icon flash on screen.
6. To change new batteries, when install new batteries, then close back lid.

. Power On and Off

When device is off
1. Press to turn on.
2. Screen will be filled out by icons during internally checking.
3. Device will get into standby screen and ready for measuring.

When device is on
1. Hold for 3 seconds at any screen to turn off device.

. Distance Measurement

Single Measurement Mode
1. Press to turn on laser then aim at proper target.
2. Hold steady and press to measure.
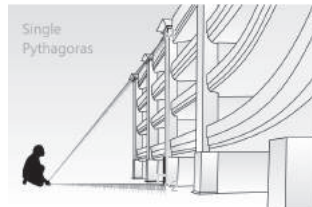3. Result will be displayed on the screen with a beep.

Continuous Measurement Mode
1. Hold to active continuous measuring.
2. Measuring results will be vary upon movement and showed on the main screen.
   The Maximun and minimum distance will be displayed on Sub screen.
3. Press to stop.
4. Press to quit this mode.

. Addition of your measurements

1. To add first measurment with later on, press to make first number as summand.
2. Then take another measurement and the sum will be displayed on the screen.

. Subtraction of your measurements

1. To subtract first measure with later one, press twice to make first number as minuned.
2. Then take another measurement the subtraction will be displayed on the screen.
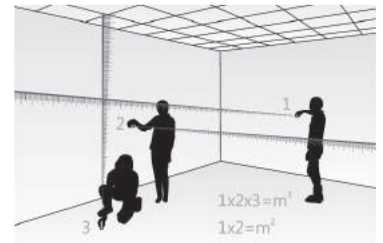
. Measuring Function Selection

1. CP40 has three commonly used functions for measuring, you could make select by pressing .
2. By pressing and holding , functions will be popped up in loop from
   AREA -> DIMENSION -> INDIRECT MEASURING
3. Relaease button to stop looping and the selection of functions.

a. Area Measurment
1. Follow the instructions to measure width and length.
2. Area will be calculated and showed on the screen.

b. Volume Measurement
1. Follow the instructions on the main screen to measure width, length and height.
2. Dimension will be calculated and displayed on the screen.

c. Indirect Measurement

1. All the calculations are bases on Pyhtagorean theorem ($a^2+b^2=c^2$) for height.
2. Press for 3 times to enable indirect measuring.
   Follow the instructions on the screen to measure slang lengths and leveling length.
3. Measured Results will be displayed on the screen.

Single
Pythagoras

. Settings

1. CP40 has two settings in outer menu.
2. When device is off, hold than press to enter setting menu.
3. The two settings are **"Unit"** and **"Reference".**

a. Unit Switch Reference
1. CP40 has universal units and auto converting functions.
2. Press to select units.
3. Once you select, press to reference setting. Or press to restart.

b. Measuring Reference
1. There are two reference for CP40 : rear / front
2. In outer setting mode
3. Press twice to enter reference setting.
4. Press to switch among FRONT -> REAR in loop.
5. Ince you selected, press to reference setting.
   Or press to restart.

. Error Code

Code	Description	Solution
Err01	Out of measuring range	Measuring in a proper range
Err02	Reflected signal is too weak	Select a better surface
Err03	Out of display range (Max Value: 99999), e.g: result of area or dimension is out of display range.	Divide caculation into intermediate steps
Err04	Pythagorean calculation error	Check and verify values and steps are correct
Err05	Low Battery	Install a new battery
Err06	Out of working temperature	Measure in an environment within specified working temperature
Err07	Ambient light is too strong	Measure in a darker place (shadow target)

. Service Support

Please contact your local dealer or contact us through servise email :
[reps@precaster.com.tw] for further assistance.