

# LASER DISTANCE METER

## CX80

### Operation Manual



**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.



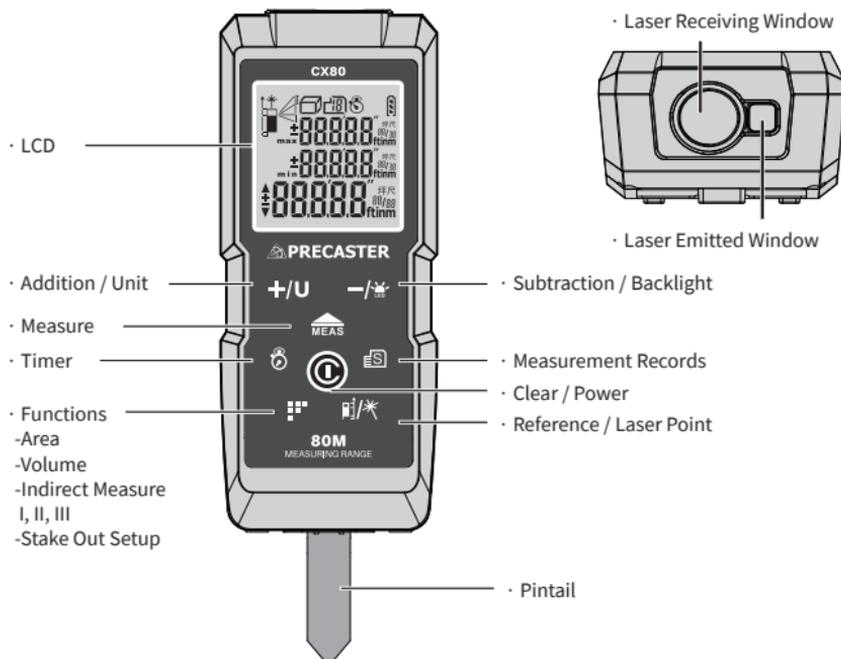
## . Inside The Box

- CX80 Laser Distance Meter x1
- AAA Battery x2
- Operation Manual x1
- Carrying Case x1
- Safety Strap x1

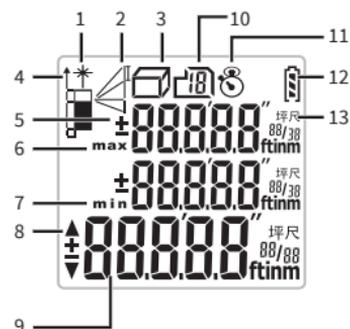
## . Specification

- |                         |  |
|-------------------------|--|
| · Measuring Range       | 0.05m- 80m                               |
| · Resolution            | 0.001m                                   |
| · Accuracy              | ±1.5mm                                   |
| · Measuring Speed       | 0.5sec                                   |
| · Laser Type            | 650nm, Class II, <1mW                    |
| · Beam Size             | 25mm@15m                                 |
| · Battery               | AAA Battery x2, Up to 10,000 measures    |
| · Dimension             | 116 x48 x31mm                            |
| · Operation Temperature | -5°C~40°C                                |
| · Storage Temperature   | -20°C~60°C                               |
| · Automatic Power-Off   | -Laser 30 Seconds    -Device 180 Seconds |

## . Overview for CX80



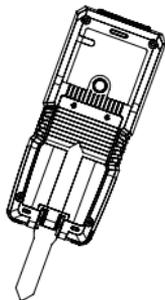
## . Overview for Screen



1. Laser Indicator
2. Indirect Measuring
3. Measuring Function
4. Measuring Reference
5. Add and Subtract
6. Maximum Display
7. Minimum Display
8. Stakes Direction Indicator
9. Main Screen and Units
10. Countdown Measuring
11. Memories
12. Battery Status
13. Sub-Screen and Units

## . 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.



## . Switch On and Off

1. Be sure to check battery status before start.
2. Click the  or  to turn on the device.
3. The device will process the initial procedure and get ready to measure by turn on the laser dot.
4. Tap and hold  for 2 seconds to turn off.
5. The device will turn off automatically after 180 seconds.

## . Distance Measurement

### Single Measurement Mode

1. Move the laser dot onto the target.
2. Keep your position stable and click  .
3. The measurement will be displayed on LCD Screen and laser will be turn off.
4. Click  again to enable the laser dot for next measurement.



### Continuous Measurement Mode

1. Continuous Measurement is also called tracking measurement and is recommend to use for seeking proper distance.
2. Move the laser dot onto the target.
3. Keep your position stable and tap and hold  , the laser distance meter will enter continuous measurement mode.
4. Move the device back and forward to proper distance.
5. Click  to pause the measurement.
6. Click  again to leave the continuously measurement mode.

## . Measurement Reference

1. There are four reference positions for measurement .  
They are back of the unit, front of the unit, tripod thread and the spike
2. Click  to select the proper position.

## . Measurement Addition & Subtraction

1. To make summary or difference between two measurements is easy
2. Finish your first measurement, than click  to save as Addend or  to save as Minuend.
3. Take the second measurement, than click  to add from addend or  to subtract minuend.



## . Unit Setting

1. There are 8 units inside the laser distance meter.
2. Click and hold  to select preferred unit.
3. Unit Switch Reference



	meter	feet	inch	0'0"1/32	inch	inch	inch	尺
<b>Length</b>	m	ft	in	0'0"1/32	1/32in	1/16in	1/8in	10/33
<b>Area</b>	m <sup>2</sup>	ft <sup>2</sup>	p					
<b>Volume</b>	m <sup>3</sup>	ft <sup>3</sup>	m <sup>3</sup>					

## . Measuring Functions

### Area Measurement

1. Click  to enable Area measurement.
2. Laser will be activated when entering area measurement mode.
3. Follow the instructions on main screen to measure WIDTH and LENGTH.
4. After finish all the instructions, the result [AREA] will be showed on screen.



## 2. Volume Measurement

1. Click  twice to enable Volume measurement.
2. Laser will be activated when entering volume measurement mode.
3. Follow the instructions on main screen to measure WIDTH, LENGTH and HEIGHT.
4. After finish all the instructions, the result [VOLUME] will be showed on screen.



## 3. Indirectly Height I, II & III Measurement (base on Pythagorean)

1. Click  thrice, four and five times to enable Indirectly Measurement.
2. Laser will be activated when entering indirectly measurement mode.
3. Follow the instructions on main screen to measure the LENGTH OF HYPOTENUSE(S) and BASE.
4. After finish all the instructions, the result [HEIGHT] will be showed on screen.

 Indirect  
Measure I

 Indirect  
Measure II

 Indirect  
Measure III


## 4. Stack Out Measurement

Stack out measurement help users to split a long distance into several piece equally.  
The function need to be used in Continuous Measurement Mode with preset distance.

### Setup Stake-out distance:

1. Click  six time to enter setup of stake-out distance.
2. Click  to increase the value.
3. Click  to decrease your value.
4. Click  to shift between numbers.
5. Click  to save the value and exit the setup mode.
6. Click  to restore zero.



### Use of Stack-Out with Preset Distance

1. Enable "Continuous Mode" by tap and hold .
2. Forward and backward arrow will be showed next to the measurements.
3. Follow the arrow to desired distance, Device beeps to notify you when reach the preset distance and its multiplies.

## . Backlight & Laser Pointer Mode

1. Click and hold  to turn on or off the backlight.
2. To enable Laser Pointer Mode, click and hold .

The laser indicator will display continuously until the mode is turned off.



## . Store Measurement to Memory and Lookup

1. When you want to add the measurements on the screen, press  to add to memory. You could find the location in memory on the top of screen.
2. To lookup stored measurements, press and hold  to enter the lookup mode.
3. Press  to move the index up and Press  to move index down.
4. To clear all stored measurements, press and hold  again in lookup mode to clear all memory.



## . Countdown Measure

1. For a more stable measurement or you could use countdown measure function to trigger measuring in setting times.
2. Click  to set your preferred self-trigger time.
3. Timer could set from 3 seconds to 15 seconds.
4. After the time is set, press  to activate measuring.
5. After a beep, the measured result appears on main screen.



## . 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 calculation 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 service email :

[ [reps@precaster.com.tw](mailto:reps@precaster.com.tw) ] for further assistance.