User Guide
Laser Distance Finder

## Cataloge

Change of battery

➢ LASER DISTANCE FINDER is powered by 2×AA Batteries
➢ Battery status will be showed in initial screen.
➢ In case if battery icon display continuously ,
  It shows battery is about 1,000 measure times left.
➢ Low power indicator will be twinkling when battery is low.
➢ To change new batteries, re back lid and observing correct Polarity when
  install new batteries, then close back lid.
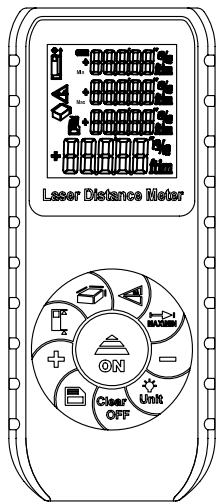
Overview for LASER DISTANCE FINDER

A. LCD
B. Area/volume buttons
C. Reference Switch/laser pointer
D. Addition buttons
E. Storage buttons
F. On/measuring buttons
G. Clear/off buttons
H. Indirect measuring button
I. Continuous measuring buttons
J. Subtraction buttons
K. Lighting/unit conversion button
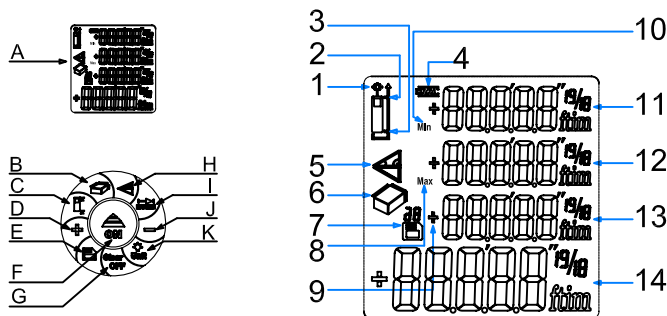
Overview for Screen

1. Laser Indicator
2. Measuring Reference(frontier)
3. Measuring Reference(along)
4. Battery Status
5. Indirect Measuring
  ◁ Single Pythagoras
  ◀ Summary of tow Pythagoras
  — Length measurement
6. Area Measuring
  ◇ Area Volume Measuring
  ⬡ Volume Measuring
7. Historical records, can view the data
8. Maximum display
9. Add and Subtract
10. Minimum display
11. The first display the line, and the minimum display the line
12 The second display the line, and the maximum display the line
13 The third display the line
14 The main display line, finally the measuring and calculating results are shown

Specification All Accessories

Measure Rang*	0.3~40M
Resolution	0.001
Accuracy*	±1.5mm
Measure Speed*	0.5sec.
Laser Type	635~650nm,Class2,<1mW
Battery	2×AAA Batteries
Battery Life	Up to 5,000 Measures
Dimension	121mm×51mm×27mm
Operation Temperature	-5℃~40℃
Storage Temperature	-10℃~50℃
Automatic switch-off	
-laser	30 seconds
-Device	180 seconds

* working range and accuracy depends on the energy of laser reflectivity (most come from the scattered light), brightness of laser will be affected by ambient light, plates can be used to increase the stability of the working range and measurement accuracy.

* under the condition of bad measurement, such as sunlight, measuring the surface of the target reflection is very weak, or cases, Can produce the maximum error of ±1.5 mm . Within 10 to 30 meters distance, the error may increase to ±0.025 mm/m, more than 30 meters for ±0.15 mm/m.

* be measured object surface, when the measured object is a colorless liquid (such as: water), clean glass, such as the characteristics of surface has a transparent object, may produce error of measurement. When the measured object has a very strong reflective, laser can be reflected off, thus leads to errors of measurement. Measuring surface without reflection or very dark, can increase the measuring time. Best collocation reflection paper use over a long distance.
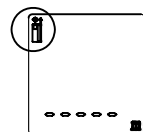
Turn on your Laser Distance Finder

➢ Before starting, please make sure battery is installed properly.
➢ Press ⊜ measuring to activate Laser Distance Finder.
➢ Initial screen will flash seconds for checking status.
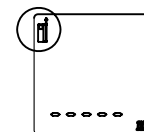➢ After checking, standby screen will be displayed.
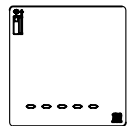
Srandby screeen

Measuring Distance

➢ CAUTION!
  Laser will be enitted upon when youturn LASER DISTANCE FINDER on.
 Check icon on the upper-left corner to check if laser is emitted.

Laser Aricated   Laser inactive state

➢ If the laser is not activated,press ⊜ to enable laser.
➢ Then,move the laser dot of LASER DISTANCE FINDER onto your target
  and try to keep the dot on the target.
➢ Press ⊜ to activate measure.
➢ The whole measure will be finished until a beep is heard or measured result
  is appeared on the main screen.
➢ Laser will be turnned off after measuring.
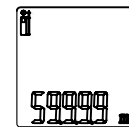
Finished Measuring

Add your measures

➢ Calculating the summary of measures are simple only with few buttons.
➢ Once you got your firsrt measure, press ⊕ to save into
  memory(temporary saced)
➢ Then find your next desired distance, once you find it, press ⊜ again
➢ The summary will be displayed in main screen and you could see what
 you had added.
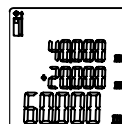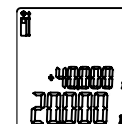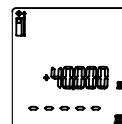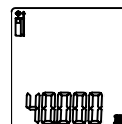
Subtract your measure

➢ Calculating the different of measures are simple only with few buttons.
➢ Once you got your firsrt measure, press ⊝ to save into
  memory(temporary saced)
➢ The find your desired distance,once you find it,press ⊜ again.
➢ The result will be displayed in main screen and you could see what you
  had subtract.
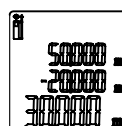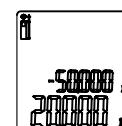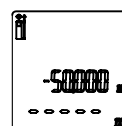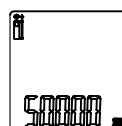
## Dyna-Measuring (Continuous Measuring)
- To activate Dyna Measuring (Continuous Measuring),hold [icon] then it will jump to Dyna Measuring mode.
- When entering Dyna Measuring mode,laser beam will be also activated
- To pause,please press [icon] or [Clear Off]
- Maximtm and Minimum value will be displayed on screen
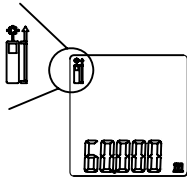- To quit Dyna Measuring and back to normal mode,press [Clear Off]
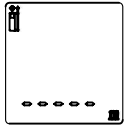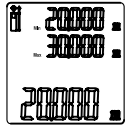

Standby Screen   Dyna-Measuring Screen
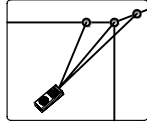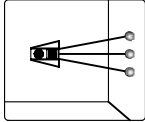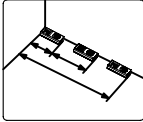
Measuring reference
- By default, reference is set at rear.
- LASER DISTANCE FINDERhas three reference:rear,front and pintail.
- To change reference,press [icon] ,each press will take effect. Changing sequence is front ➡ rear ➡ pintail.


Unit Switch Reference
- To change until of measuring, hold [icon] Unit will be switched by each hold.
- Click the button longer change the next type of unit, m, ft. in, ft+/in then to continue click the button for the next unit selection.
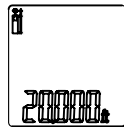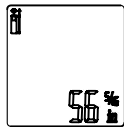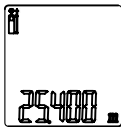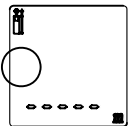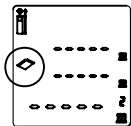

Measuring Function
a.Area Measurement
- Please press [icon] once for enabling Area measuring.
- Laser will be activated when entering Area measuring .
- Follow the instructions on main screen to measure width, length and height.
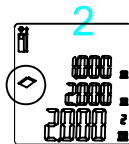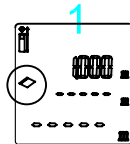- Once you finish all instructions, volume is showed on screen .
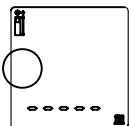- To change display unit, hold [icon]
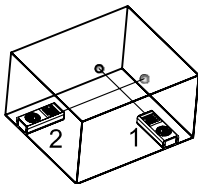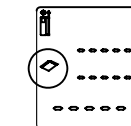

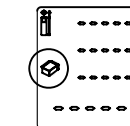Standby Screen   Area Measuring Screen

b. Volume Measurement
- Press [icon] twice to enter volume measuring.
- Laser will be activated when entering Volume measuring.
- Follow the instructions on main screen to measure width, length and height.
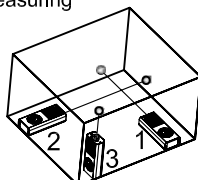- Once you finish all instructions ,volume is showed on screen.
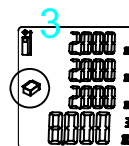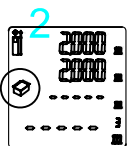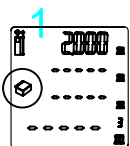- To change display unit, hold [icon]
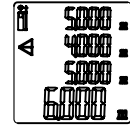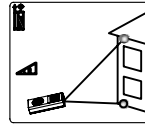

Standby Screen   Area Measuring Screen   Volume Measuring Screen


Indirect Measurement
- press [icon] to enter Indirect measuring.
- All the calculation is based on Pythagorean theorem($a^2+b^2=c^2$)to measure height indirectly.
- Laser will be activated when entering Indirect measuring. Follow the instructions
- on screen to get slang range, horizon range then the height will be displayed on screen.
- For Pythagorean II (summary of two height)and III(different of tow height) are advanced calculating based on Pythagorean I
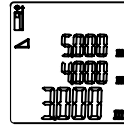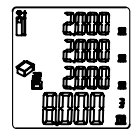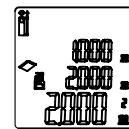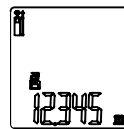

First press for singie pythagoras   Second press for Double Pythagoras (Summary)
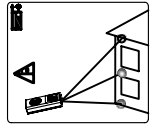
Memory Recall
- Laser Distance Finder provide a well design memory recall functions , you could recall memory by hold [icon]
- The last 20measures will be displayed on screen, To look up records press [icon] to move up, for move down [icon]

Back-Light switch & Laser pointer switch
- To Enable and Disable back-light for LASER DISTANCE FINDER ,press [icon]

Error Code

Code	Description	Solution
204	Calculation error	Refer to user menu, repeat the procedures
208	Temperature too high	Cool down instrument, make it working in stable temperature environment
253	Temperature too low	Warm up instrument
255	Receiver signal too weak, measurement time too long.	Use target plate or change a good refection
256	Received signal too strong	Target too reflective， use target plate or do not aim at strong light objective
Error	Hardware error and uncertainty error	Switch on/off the device several times. If the symbol still appears, then your instrument is defective. Please call your dealer for assistance.