

VICTOR®
胜利仪器

VICTOR

手持式激光测距仪

Laser Distance Meter

用户手册

User's Manual



深圳市驿生胜利科技有限公司



产品执行标准: GB/T 14267-2009



Safety regulations

Before using the instrument for the first time, please read the safety terms and operating instructions carefully.

-  Please read all operating instructions and safety regulations in this manual carefully before using the instrument. Failure to use the instrument in accordance with the operating methods in this manual may cause damage to the instrument, affect measurement accuracy, and cause personal injury to the user or a third party.
-  Do not open or repair the instrument by yourself in any way. It is strictly forbidden to illegally modify or change the performance of the instrument's laser transmitter. Please keep the instrument properly, keep it out of the reach of children, and avoid use by unauthorized personnel.
-  It is strictly forbidden to use the instrument laser to irradiate your own or other people's eyes or other parts of the body, and it is strictly forbidden to irradiate the laser on the surface of highly reflective objects.
-  The electromagnetic radiation of the instrument may interfere with other equipment and devices. Please do not use the instrument near aircraft or medical equipment, and do not use the instrument in flammable or explosive environments.
-  Used batteries replaced by the instrument and scrapped instruments must not be disposed of together with domestic waste. Please dispose of used batteries and scrapped instruments in accordance with relevant national or local laws and regulations.
-  If the instrument has any quality problems or any questions about the use of the instrument, please contact your local dealer or the instrument manufacturer in time and we will solve it for you as soon as possible.

● Display

- Battery indicator
- Data storage instructions
- Length Area Volume
Triangulation mode

- Laser emission indicator

- Maximum value indication

- Auxiliary display area

- Minimum value indication

- Main display area

● keyboard

- Power on, measurement button

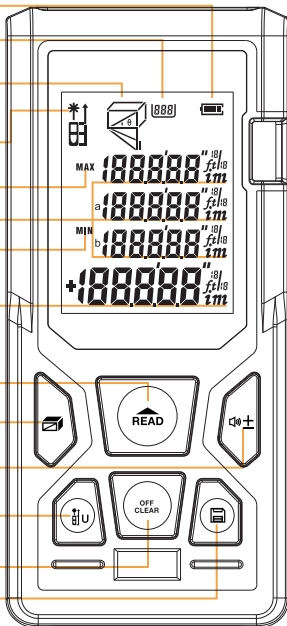
- Area/Volume/Triangle
Mode key

- Sound/add/subtract keys

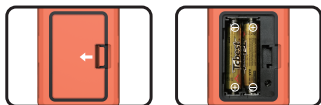
- Measurement reference/
Unit Selection

- Power off, clear key

- Storage Key



Installing the Replacement Battery



- Open the battery door on the back of the instrument and insert the battery correctly according to the polarity instructions. Insert the battery and close the battery door.
- The instrument can use 1.5V AAA alkaline batteries.
- When the instrument is not used for a long time, please remove the battery to avoid Pool corrosion instrument host.

Start the instrument and set the function

- Starting and shutting down the instrument

In shutdown mode, press  key, the instrument and laser start at the same time, The instrument enters the test mode.

Long press in power on state  Press the key for 3 seconds to turn off the instrument. If you perform any operation on the instrument, it will shut down automatically.

- Unit Settings

Long press  Press the key to enter the measurement unit adjustment state. The default unit of the current measurement is 0.000m. The instrument provides 6 units to choose from.

Units of measurement:

	length	area	volume
1	0.000 m	0.000 m ²	0.000 m ³
2	0.00 m	0.00 m ²	0.00 m ³
3	0.0 in	0.00 ft ²	0.00 ft ³
4	0 1/16 in	0.00 ft ²	0.00 ft ³
5	0'00" 1/16	0.00 ft ²	0.00 ft ³
6	0.00 ft	0.00 ft ²	0.00 ft ³

- Measurement reference setting

Short press  The reference key is used to set the front reference and the end reference.

When converting between them, the system defaults to the end reference.

- Backlight on/off

The backlight of this instrument turns on and off automatically.

After pressing the key, the backlight will remain on for 15 seconds. After 15 seconds, the instrument will automatically turn off the backlight if there is no operation to save power.

- Sound on/off

Long press  The key can turn the buzzer sound on or off.

Self-calibration function

To ensure the accuracy of the instrument, a self-calibration function is provided.

Calibration method: When the device is powered off, press and hold the  key, then press

 Press the key to turn on the device, release the key until the following screen appears

The number on the end of the monitor flashes, and the system enters the self-calibration mode.

According to the error of the instrument   key to adjust this value.

Adjustment range:-9~9mm.

For example: The actual distance is 3.780m

If the measured value of this machine is 3.778m, which is smaller than the actual value 2mm, you can

enter the calibration mode and use the key to  the calibration value based on the existing

Upward adjustment 2mm.

If the measured value of this machine is 3.783m, which is larger than the actual value 3mm, you can

enter the calibration mode and use  key to calibrate the value based on the existing

Adjust up and down 3mm.

After adjustment, press  key to save the calibration result.

Distance measurement, area, volume, Pythagorean indirect measurement

Accumulation and subtraction measurement

Single measurement:

In the test mode, press  key, the instrument laser emits and the measuring point is locked.

Press the  again to measure the single distance data. The measurement result is displayed.

In the main display area.

Continuous measurement:

Long press in test mode  key to enter the continuous measurement state.

The upper auxiliary display area will show the maximum value of the continuous measurement.

value and minimum measurement value.

The main display area will show the current measured value.

key to exit the continuous measurement mode.



key or



Area measurement:

Press the key once, the screen will display , one edge of the rectangle flashes.

Complete the following steps according to the prompts:

Press to measure the first side (length)

Press to measure the second side (width)

The instrument will automatically perform area calculations and the results will be displayed in the main display area.

The auxiliary display area shows the measured values of the length and width of the rectangle.

During the measurement process, you can also type  Clear the current measurement results

Remeasure.

When there is no data in the display area, press  key to exit the area measurement state.

Enter length measurement mode.

Volume measurement:

Press the key twice, the system enters the volume measurement state, and the instrument enters

Enter the volume state, a cube will flash on the screen , root

Complete the following operations as prompted:

Press to measure the first side (length)

Press to measure the second side (width)

Press key to measure the third side (height)

The instrument will automatically perform volume calculations and the results will be displayed in the main display area.

The auxiliary display area shows the measured values of the length, width and height of the cube.

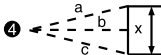
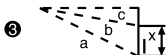
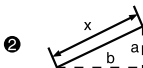
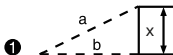
During the measurement process, you can also type  Clear the measurement results.

Remeasure.

When there is no data in the display area, press  key to exit the volume measurement state.

Enter length measurement mode.

- Indirect measurement using the Pythagorean theorem:



The instrument has four preset methods for measuring the distance of a single side of a triangle using the Pythagorean theorem. The instrument has a Pythagorean theorem mode, which is convenient for users to perform indirect measurements in specific complex environments.

- 1) Measure the bevel and bottom to indirectly measure the height



Instrument short press  Press the key three times to enter the triangulation indirect measurement mode:

according to  Follow the on-screen instructions to first measure the length of the hypotenuse of the dotted line (a).

according to  Use the key to measure the length of the dotted right angle side (base) (b)

The instrument automatically calculates the length (x) of the solid line right angle side (height)

- 2) Measure the two right-angled sides of a right triangle and indirectly measure the length of the hypotenuse



Click  key four times, the screen displays:  Right angle edge flashing

according to  Measure the length of a dotted line according to the on-screen prompts (a)

according to  Use the key to measure the length of the other dotted right angle side (b)

The instrument automatically calculates the length of the hypotenuse of the solid line (x)

3》 Click



key five times, the screen displays:



Bevel edge flicker

according to  Press the key to measure the length of a dotted line according to the on-screen instructions (a)

according to  Use the key to measure the length of the middle dotted line (b)

according to  Use the key to measure the length of the other dotted line side (c)

The instrument automatically calculates the length of one side of the solid triangle (x)

4》 Click



key six times, the screen displays:



Bevel edge flicker

according to  Use the key to measure the length of a dotted line according to the on-screen prompts ((a)

according to  Measure the length of the dotted line as shown in the figure (b)

according to  Use the key to measure the length of the other dotted line hypotenuse (c)

The instrument automatically calculates the length of the right angle side of the solid line (x)

In Pythagorean measurement mode, the right angle side must be shorter than the hypotenuse.

Otherwise, the instrument will display an error signal prompt.

In the measurement mode, to ensure the measurement accuracy, you must ensure that

Measure from the starting point and measure in the order of hypotenuse and right-angle side.

● Addition and subtraction measurement functions:

Single-segment distance measurement can be accumulated or subtracted through addition/subtraction operations

After the user measures a single distance and obtains a measurement result,

Then use the key  for the cumulative addition and subtraction function selection, short pre: 

Press the key, a "+" will appear in the main display area of the screen, and the cumulative measurement will begin.

In measurement mode, the screen displays the last measured value and the cumulative value of the current measurement.

Added value.

Type it again  key, a "-" appears in the main display area of the measurement screen.

Enter the cumulative measurement mode, the screen displays the last measured value and the current measured value.

The difference in measured values.

Accumulate and subtract by  key to cycle through the selections.

Not only distance can be accumulated, but also area and volume can be accumulated.

The following example illustrates the area addition and subtraction functions.

The addition and subtraction of is similar.

Area accumulation: Measure the first area and get the result as shown in Figure 1

Then press the  and measure the second area.

The result is as shown in Figure 2 below, with a plus sign displayed in the lower left corner.

Finally, press the  to get the result of the two area sums,

The results are shown in Figure 3.



图1



图2



图3

Measurement record storage function

In measurement mode, if the current data is valid, long press



Press key for 3 seconds, current

The measured data is automatically stored in the instrument's memory.

In the area, volume, and triangle indirect measurement modes, after all tests are completed, they can also be stored. At this time, the instrument will save the complete record of the measurement in this measurement mode.

● View/Delete Records:

Short press  key to query the stored measurement data.  Key forward

Turn the record, use  key to scroll back through the records. While viewing the records,

Short press  key to delete the current record, and long press the key to clear all records.

Pressable  key or  key to exit this state.

Tips

During use, the following prompt information may appear in the main display area:

Information	reason	Workaround
Err	Out of distance measurement range	Use the instrument within its measuring range
Err1	Signal is too weak	Measuring highly reflective targets
Err2	Signal too strong	Measuring weakly reflective targets
Err3	Battery voltage is too low	Replacement battery
Err4	Out of operating temperature range	Use the instrument in the specified environment
Err5	Pythagorean measurement violations	Remeasure to make sure the hypotenuse is larger than the right angle.

project	842A	842B	842C	842D
Measuring distance	50m	70m	100m	120m
Distance measurement accuracy	$\pm(1.5\text{mm}+d*0.5\% (100,000)^*$			
Continuous measurement function	✓			
Area and volume measurement	✓			
Pythagorean measurement function	✓			
Addition and subtraction measurement function	✓			
Add and subtract area and volume	✓			
Maximum/Minimum Value	✓			
Self-calibration function	✓			
Laser Class	II			
Laser Type	2class635nm, <1mW			
Number of stored records	99 pens			
Automatic laser cut-off	20 seconds			
Automatic shutdown	150 seconds			
Maximum battery life	8000 times			
Sound prompt (can be turned off)	✓			
Storage temperature range	- 20°C~60°C			
Operating temperature range	0°C~40°C			
Storage humidity	20%~80%RH			
Battery Specifications	2x1.5V AAABattery			
Dimensions	112x50x25mm			

* "d" indicates the actual distance

** In harsh environments such as: too strong sunlight, large fluctuations in ambient temperature, weak reflective surface, and insufficient battery power, the measurement results will have large errors. In this case, it is better to use a target reflector.

Daily maintenance of the instrument

- It is forbidden to store the instrument in a high temperature and high humidity environment for a long time.

When the instrument is not used for a long time, please place it in the

Store in a cool, dry place inside the case.

- Please keep the instrument surface clean. You can wipe the dust off the surface with a damp soft cloth.

Dust, do not use corrosive detergent to clean the instrument.

Wipe the laser window and focusing mirror in the same way as the optical device surface.

Packing List

When purchasing the instrument, please carefully check all the accessories of the instrument according to the following

Is it complete?

project	name	unit	quantity	Remark
1	Host	tower	1	
2	Instrument carrying bag	individual	1	
3	Lanyard	strip	1	
4	1.5V AAABattery	Festival	2	
5	manual	Book	1	
6	Warranty certificate	open	1	
7	Color Box	individual	1	



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