Laser Distance/Speed Meter Telescope

User Manual

Safety Regulations

Please read the safety regulations and operation guide carefully before operating.

⚠ Please read all of the operational guide and safety regulations in this manual before operation . Improper operations without complying with this manual may cause damage to the device, influence on measurement result or cause personal injury to the user or a third party.

⚠ The instrument is not allowed to disassemble or repair in any ways. It is forbidden to do any illegal modification or performance change for laser emitter. Please keep it out of reach of children and avoid being used by any irrelevant person.

⚠ It is strictly prohibited to shoot eyes or other parts of body with the laser. It is not allowed to take the laser to shoot the surface of any highly reflective objects.

⚠ Due to electromagnetic radiation interference to other equipment and devices, please don't use the meter in the plane or around medical equipment, don’t use it in inflammable, explosive environment.

⚠ Discarded meter device should not be processed just like household garbage, please handle it in line with related law and regulations.

⚠ Any quality issues or any questions on the meter, please contact local distributors or manufacturer in time, we are ready to offer solutions for you.

Applied Range

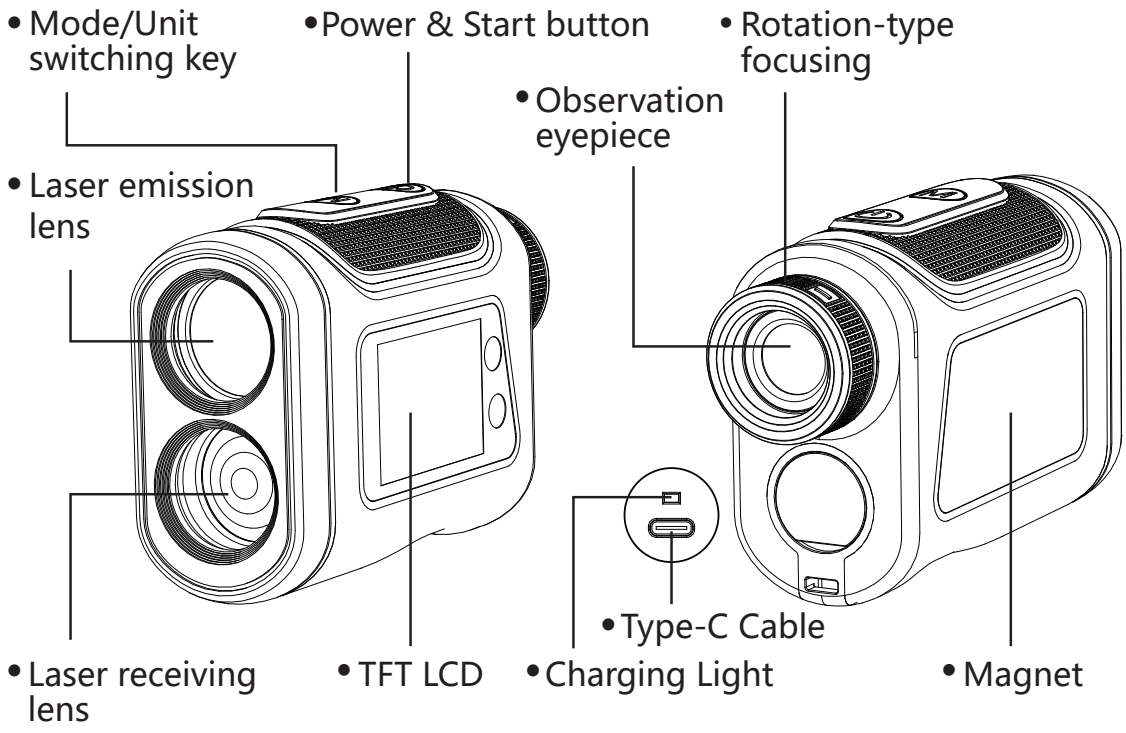
Brief Introduction:

SNDWAY telescope rangefinder is an instrument based on the principle of pulsed laser ranging. It is suitable for outdoor long-distance measurement, and can be applied to a variety of scenarios, such as: golf, engineering survey, positioning crane, position control, measuring the inaccessible objects, etc. In addition, it also has the following functions: Angle measurement, height measurement, horizontal distance acquisition, instantaneous speed capture, area measurement and volume measurement.

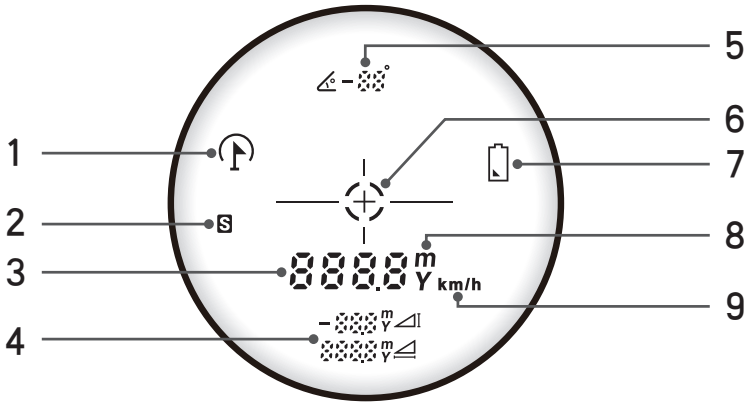
Features:

- Multifunctional LCD sight
- Side with color screen, more convenient to view;
- Touch function, more direct operation;
- Silent operation, automatic power off system;
- Using pulse laser, harmless to eyes;
- Rapid ranging;
- Speed measurement function;
- Area and volume measurement function;
- Using 750mAh rechargeable lithium battery;
- Automatic data storage function;
- Viewing stored data function;
- Flagpole locking function, convenient to measure slender targets like flagpoles, telegraph poles, signal towers, etc.

Instrument Structure



Inner Display



1> Flagpole locking mode

2> Ranging mode

3> Straight-line distance data display

4> Vertical height /Horizontal distance display

5> Angle

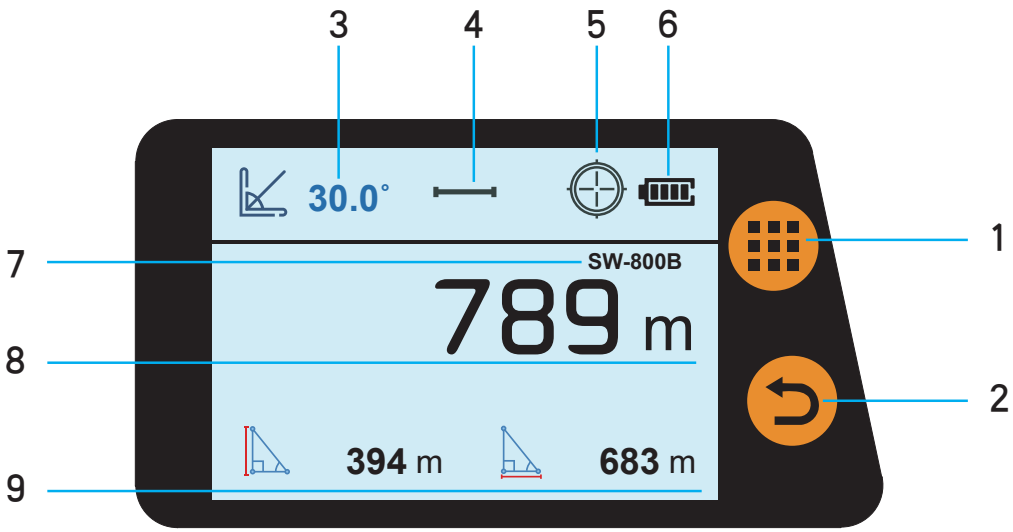
6> Target

7> Battery

8> m/Y Unit

9> km/h Speed unit

Touch Screen



1. Mode
2. Back
3. Angle
4. Measuring Mode
5. Scanning
6. Battery level
7. Instrument model
8. Main Display Area
9. Sub Display Area

Note: When touching , if touching near area of , it may cause the touch about 2s to fail briefly. After 2s, the touch can be used normally.

Basic Operation

1. Power on/off

Power on: Short press ⏻ to start the instrument.

Power off: If there is no operation in 2 minutes, the instrument will automatically shut down.

2. Mode Switching

Short press MODE to switch the "distance/speed/flagpole locking" mode; Touch ⠿ to switch the "distance/speed/flagpole locking/area/volume" mode.

Touch ↩ , if there is data, clear the current measurement data; If there is no data, return the distance mode.

Generally, after the modes are changed, the modes of the side screen and inner screen are the same. But when the side screen is in area/volume mode and the inner screen is in distance mode, press MODE to switch the inner screen from distance mode to speed mode and the side screen from area/volume mode to speed mode.

3. Unit Switching

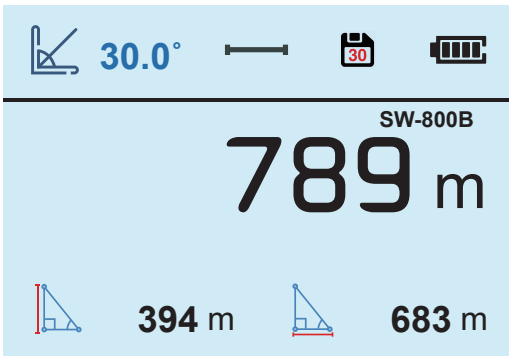
Long press MODE to convert meters (m) and yards (Y). After converting the unit, the instrument will calculate the area and volume by the current length, width and height.

4. Measurement

Short press ⏻ to measure the distance once. Press ⏻ for scanning ranging. During the measurement, " ＋ " constantly flashes, indicating that the target is currently being measured. When the distance is obtained or no data can be measured, the icon stops blinking.

5. Auto Storage Function

After the calculation result of the final measurement is obtained, the instrument will automatically store the data of the side screen. After 30 records are stored, the instrument will re-store the data from the first record. In area and volume mode, only data in area and volume modes are stored. After the unit is converted, data is not stored. Data is automatically stored only when the measurement is retaken. Press ⮌ for more than 3s, and the screen will pop up the history record. Viewing the record through MODE and ⏻ , and long press MODE to delete all the records, as shown in the figure:



6. Reset the Instrument

When the instrument has unexpected errors, long press ⏻ and MODE for more than 6s at the same time to reset the instrument to make it work normally.

7. Diopter Adjustment

In order to obtain a clear image of the eyepiece, the diopter needs to be adjusted to focus. The operation is as follows: Start the instrument. When the inner screen is displayed, then rotate the eyepiece ring clockwise or counterclockwise to get a clear image.

8. Battery Level & Charging Indication

When the inner screen displays or the side screen displays , it means that the battery is low and it needs to be charged. The instrument shows red light when charging and green light when fully charged. The charging time is about 3 hours.

Note: If the power of the instrument is too low, it will not be able to start up. At this time, it should be fully charged before use.

9. Power-saving Function

Without pressing keys or touching screen, the instrument will automatically turn off the side screen backlight after 40s, and shut down after 2 minutes. After the backlight is off, touch or to turn the backlight on, but no operation is performed.

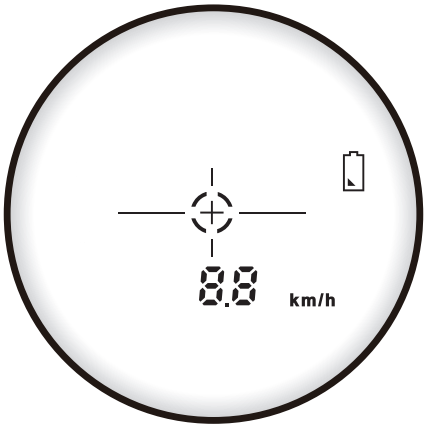
Operation Instruction

- The rangefinder is equipped with two keys, namely, launch key and mode key MODE . Press the launch key for about 1s to turn on the instrument.
- When the instrument has unexpected errors, long press and MODE for more than 6s at the same time to reset the instrument to make it work normally.

Press the mode key to switch among the three measurement modes:

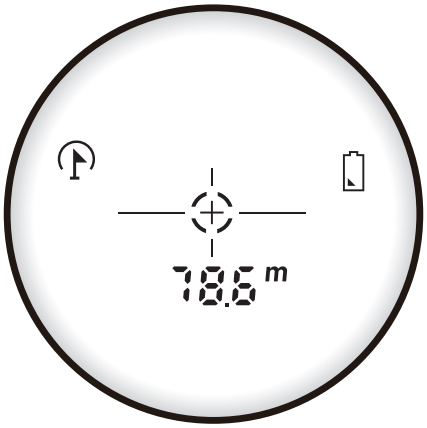
1、straight-line distance, angle, horizontal distance and vertical height simultaneous measurement mode;

2、Speed measurement mode. As shown in the following picture:



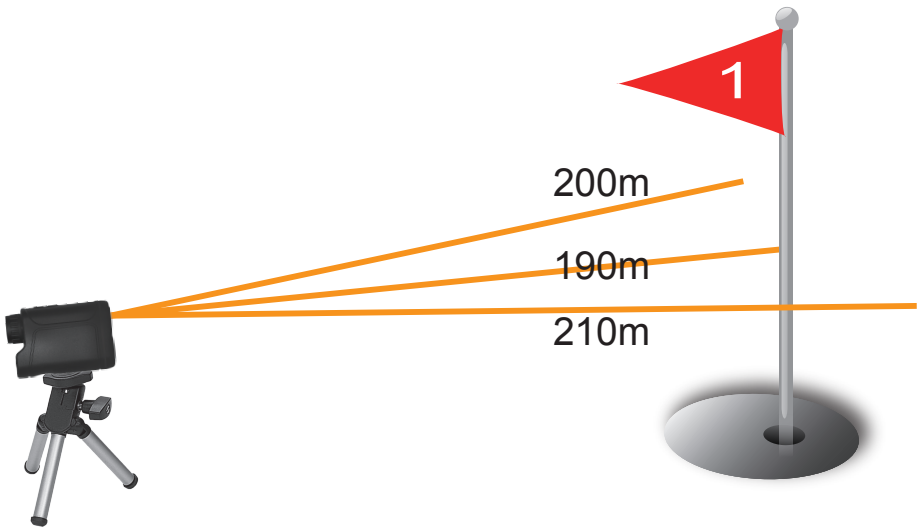
Hold ⏻ and do not release to measure the moving target. The instrument will display the target speed every 1 second or so.

3、Flagpole locking mode, whose icon is .
As shown in the following picture:



Flagpole locking function is used to measure signal towers, telegraph poles and other slender targets.

Function demonstration:



Flagpole locking:

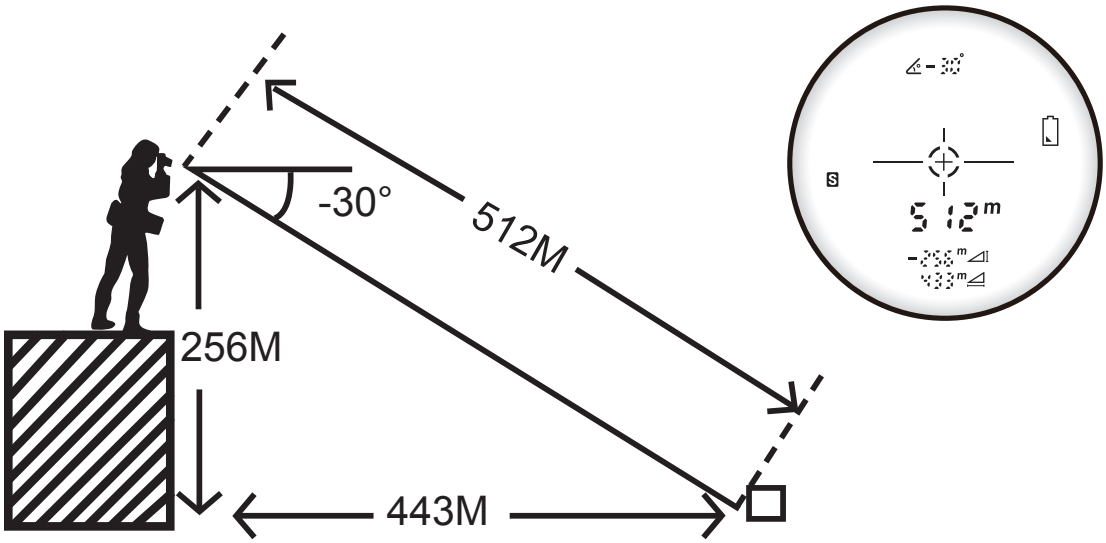
Point the telescope near the flagpole, press ⏻ , and slowly scan around the flagpole, the instrument will automatically lock the distance of the flagpole. After locking, the screen data will keep unchanged.

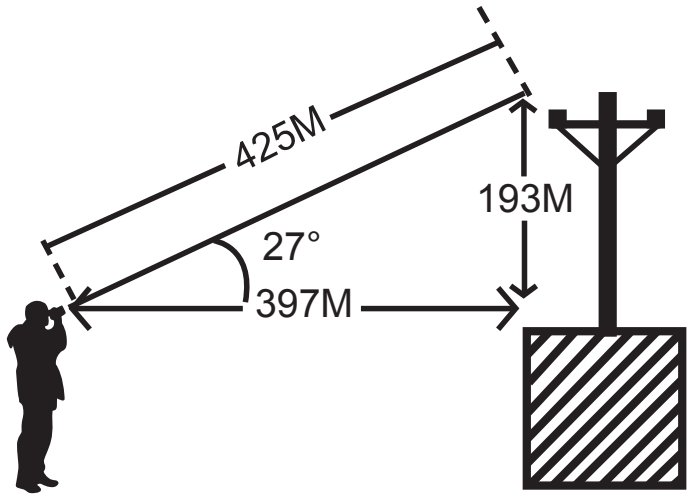
Note: The flagpole locking principle is to lock the minimum measured distance. During use, if the instrument scans a position closer than the flagpole, it will lock the data beyond the flagpole. Therefore, when selecting the scanning area, try to choose no shelter near the flagpole, or there is no target area smaller than the distance from the flagpole. When scanning back and forth near the flagpole, scan left and right at a slower speed to get an accurate flagpole distance.

- Hold down the MODE key to switch the data unit m/Y (meter/ yard).

- Press ⏻ again for a distance measurement. After ranging, the data between the measured target point and the telescope is displayed near the center of the screen. If the target has weak reflection or is out of range, "----" is displayed.

Measurement result:





- Press and hold ⏻ and do not release to start scanning ranging. The scanning icon“ S ” is displayed at the top left of the screen. With the change of the target, the linear distance data constantly refresh. At the same time, angle, horizontal distance and vertical height will also constantly refresh. Release ⏻ to stop ranging.

- “ ▭ ” indicates battery undervoltage.
  The instrument has a built-in 750mAh rechargeable lithium battery. When the screen shows ▭ , it means that the instrument needs to be charged. The instrument shows red light when charging and green light when fully charged. Charge time is about 3 hours.

- Battery operating time: continuous operation of about 30,000 times (at room temperature). Target focus measurement and automatic power off are included in a single working cycle. The times may vary depending on temperature and other factors such as the shape and color of the target.

- Diopter adjustment: Adjustment of diopter is used to obtain clear images on the eyepiece display. First, power on, then turn the eyepiece ring counterclockwise until the display is in clear focus.

Built-in magnet, easy to carry

Adsorb on the power grid tower without frequent storage

Adsorb on the surface of cart and metal for easy access

SpecificatIons

ITEMS	SPECIFICATIONS
Measuring Range	600m-1500m
Magnetic Attraction	Yes
Magnification	6X ±5%
Field of View	7.0° ±5%
Scan Distance Measure	Yes
Distance Measure Accuracy	±(1.0m+Dx0.3%)
Speed Measure Accuracy	±5 Km/h
Speed Measure Range	0~300 Km/h
Height Measurement	Yes
Flagpole Locking	Yes
Angle Range	±90°
Diopter Adjustable Range	±6°
Units of Distance	m / Y
Objective Caliber	23.5mm
Eyepiece Caliber	15.0mm
Exit pupil Caliber	3.7mm ±0.5
Battery	750mAh Li-ion
Battery Life	Charge-discharge 800 times
Battery Working Life	Single Measuring 30000 times after one time full charging
Water Resistant	IP54
Operating Temperature	-10°C~ 50°C
Dimensions	104x74.5x40.5 mm
Laser Class	Class 1
Laser Wave Length	905nm

Note:The maximum range is based on the light-colored building measurement. Weather, target size, surface shape, etc., can have an effect on the maximum range.

Notes

- The multifunctional range finder does not emitted a visible beam.It uses a non-destructive vision infrared pulse laser, and then from the selected target reflection, back to the optical receiver. By measuring each pulse from the target and back, the laser rangefinder then uses its advanced diagnostic circuit to instantly calculate the measured distance. The maximum measuring range of the device depends on the target reflectivity, colour, surface finish, size and actual shape.

Following factors ensure optimal measurement range and accuracy:

- Bright Target
- No impurities in the air
- High Reflecting Surface
- Sunny Day
- Target with a polished appearance

Following factors cannot ensure optimal measurement range and accuracy:

- Black Target
- Snowy Rainy or Foggy
- Diffuse Surface
- Tiny Target
- Glass
- Dynamic Target
- Very Strong Light or Sunshine

- When the battery shows  , it means that the battery is low. Please charge the battery in time, otherwise the error will increase.

- Do not touch the lens surface with your fingers to avoid damaging the film layer on the lens surface.
- This instrument is adjusted by precision instrument, please do not disassemble it.
- When there are impurities in the exposed lens, please gently wipe it with a wiping cloth. Do not wipe it with other objects to avoid damaging the optical glass surface film.
- When carrying or using, it should avoid collision ,heavy weight, baking or corrosion.
- It is advisable to store in a dry, cool and well-ventilated place, away from direct sunlight, dust and temperature changes.
- If the rangefinder is damaged, it should be sent to a special department for maintenance. Do not disassemble it by yourself.
- Do not direct the instrument at the sun or strong light, so as not to damage the photosensitive devices in the instrument.

Packing List

Please carefully check if the meter and attachments are in company with the below list.

NO	Item	Unit	QTY	Note
1	Telescope	pc	1	
2	Pouch	pc	1	
3	Hand Strap	pc	1	
4	Type-C	pc	1	
5	User Manual	pc	1	
6	Gift box	pc	1	