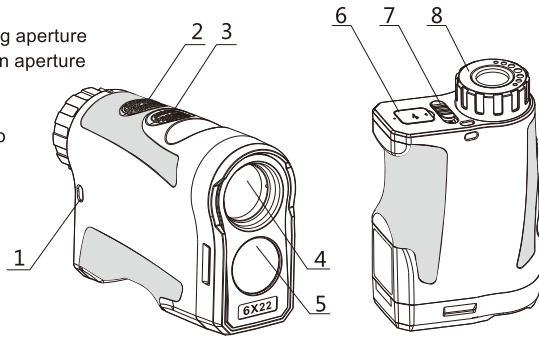


## Operation Manual LF Model Series

### 01 Parts Of Device

- 1) Lanyard hole
- 2) Power button
- 3) Mode button
- 4) Laser receiving aperture
- 5) Laser emission aperture
- 6) USB plug
- 7) DIP switch
- 8) Eyepiece knob



### 02 Product Parameters

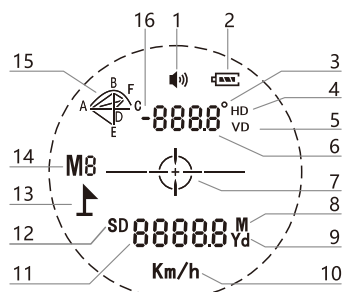
Range :	1000m/1500m/2000m/3000m
Range Measuring Accuracy:	±1m
Angle Measuring Range:	-60°~60°
Laser Type:	905nm(Class 1 laser)
Magnification Type:	6X
Exit Pupil Diameter:	3.7mm
Object Lens Size:	22mm
Filed Of View:	7.5°
Battery:	build-in lithium battery 3.7V/800mAh
Weight:	168g
Dimensions:	118mm*75mm*40mm
Operating Temperature:	-10°~50°C/-50°~122°F

#### List of Accessory:

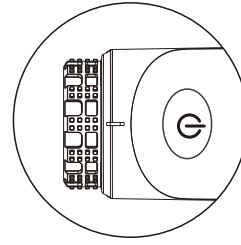
- |                        |                        |                  |
|------------------------|------------------------|------------------|
| Laser rangefinder-1pcs | USB charging wire-1pcs | Packing bag-1pcs |
| Packing Box-1pcs       | Operation Manual-1pcs  | Lens Cloth-1pcs  |

### 03 LCD Display Description

- 1) Vibration icon
- 2) Electricity icon
- 3) Angle unit icon
- 4) Horizontal distance icon
- 5) Vertical height icon
- 6) Angle / Horizontal distance / Vertical height value
- 7) Target icon
- 8) Meter
- 9) Yard
- 10) Speed unit icon
- 11) Range data
- 12) Ranging mode icon
- 13) Flag pole icon
- 14) Measurement mode code icon
- 15) Measurement symbol icon
- 16) Angle/Height negative sign icon



### 04 Power On/power Off



Power button

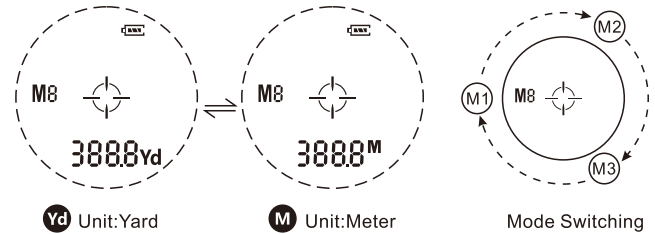
#### Power on

Short press the button to turn on.

#### Power off

The machine will shut down automatically after 8 seconds if no any operations.

### 05 Unit / Mode Switching



#### Unit setting:

In the boot state, press the mode button for more than 2 seconds, then unit switch can be activated. The unit can be switched and retained after the mode button released.

#### Mode switching:

In the boot state, press the Mode button and keep less than 2 seconds, then measurement mode switch can be activated.

### 06 Basic Operations



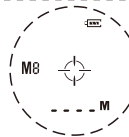
#### Single measurement:

Short press the button to start the single measurement. (Take M1 mode as an example)



#### Continuous measurement:

Press the button and keep over 2 seconds, the measured distance value displayed alternately on the screen, and the target sign "+" will be showed on the screen until release the button.

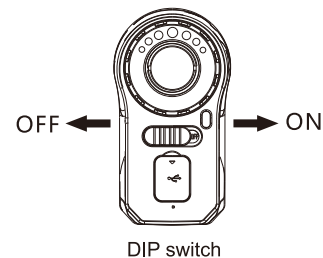


#### Failure measurement :

If the measure fails, the data on the screen will be displayed as: "----". Press the button to remeasure.

### 07 Dip Switch Settings

DIP switch control vibration function

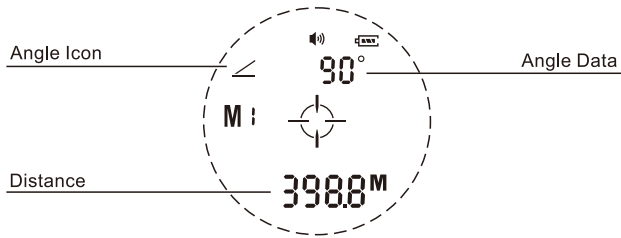


DIP switch

Dip switch control slope correction function

Push the DIP switch to the right, the vibration function is ON. Push the DIP switch to the left, the vibration function is OFF.

## 08-1 Ranging + Angle Mode

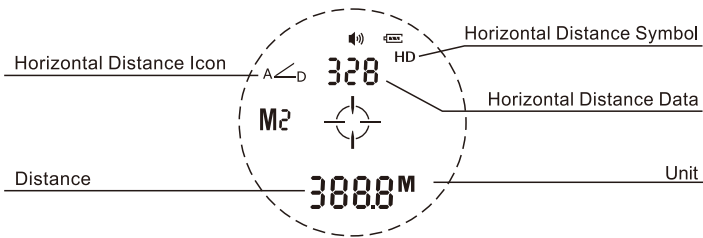


### Operation Method:

In the mode, short press the  $\text{⏻}$  button after targeting, the angle would be displayed on the top of the screen, and the distance would be displayed on the bottom. (long press for continuous measurement)

- If the data shows a "-" sign means that this angle is a depression angle when measuring the angle.

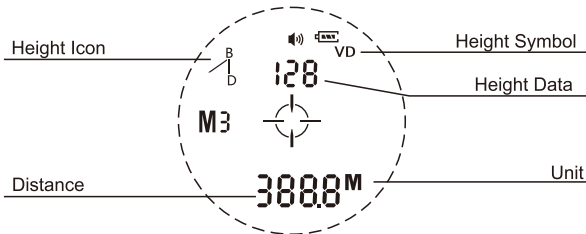
## 08-2 Ranging + Horizontal Distance Mode



### Operation Method:

In the mode, short press the  $\text{⏻}$  button after targeting, the horizontal distance data would be displayed on the top of the screen, and the distance would be displayed on the bottom. (long press for continuous measurement)

## 08-3 Ranging + Height Mode

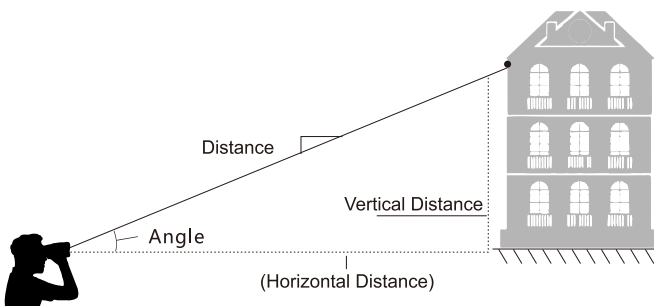


### Operation Method:

In the mode, short press the  $\text{⏻}$  button after targeting, the height data would be displayed on the top of the screen, and the distance would be displayed on the bottom.

- If the data shows a "-" sign means that the target is lower than the measurer when measuring height.

## 09 General Usage Scenes Description



## 10 Battery

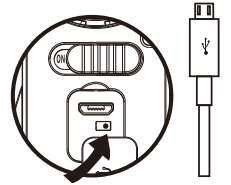
This machine uses a built-in rechargeable lithium battery (hereinafter referred to as battery)

- Fully charged
- Low battery, please charge

**Battery specifications:** built-in 3.7v lithium battery

**Battery life:** charge and discharge 800 times; (measured 30,000 times after full charge)

**Power adapter:** 5V/0.8A (accessories without power adapters)



Battery charging schematic

### Charging instructions

After power-on, first observe the power from the LCD screen, if the power is insufficient, please charge in time; Open USB charging plug, the indicator shows that the red is charging, the indicator shows that the green is charging completed.

## 11 Precaution

### 1 Warning: Laser safety

To avoid any harm to eyes, please do not look at the laser emission aperture after pressing the power  $\text{⏻}$  button.

### 2 Transportation

Please add enough cushioning material to the box to avoid unnecessary damage during transport.

### 3 Storage

Please keep the product out of reach of children. Don't put it on a high and unsteady place to prevent falling on the ground. Do not place the product in a high temperature environment or it may cause damage of the products

### 4 Maintenance

Please do not touch the lens with your fingers to avoid damage to the glass coating. In the case of extreme changes in temperature, the lens surface will be covered by fog, please don't use it before the fog evaporates. Please clean the lens only with a soft cloth and nothing else when there are smudges on the lens.

### 5 Disposal

The package and discarded products should be recycled or disposed properly in accordance with local laws.

## 6 Measurement Considerations

The laser range finder is suitable for measuring highly reflective objects (such as highway's Road sign), moderately reflective objects (such as building's wall) and low reflectivity objects (such as tree, golf, utility pole, animal etc.) When reflectivity is reduced, the effective operating range will be reduced accordingly.



## 7 Factors that influence ranging capability

### Target Reflectivity

Generally speaking, the higher the reflectivity of the object, the better the ranging ability. For example, for moderate reflectivity object, the measuring range is 1500M, and it can up to 1800M for high reflectivity object, but may be only 600M for low reflectivity one. (It may fail to measure the target that can hardly create diffuse reflection, such as water surface.)

### Target Shape

When a target is too small or uneven, the ranging ability will decrease.

### Measuring Angle

The ranging ability would be better if the measured object is vertical with the laser emission's direction. It's possible that the measuring range cannot meet the ranging ability specified in the manual under some extreme conditions.

### Environment Factor

The environment factors including sunshine intensity, the concentration of water vapor in the air and suspended particles (such as rain, snow, fog, haze, etc.)

### The Range Ability Of The Product Defined Under The Following Conditions

- 1) The measurement target is with moderate reflectivity, such as building walls.
- 2) The measured object is vertical with laser emission direction.
- 3) The weather condition is sunny but not direct sunlight.
- 4) The reflection area is larger than 2m\*2m.