











Please read the complete instructions including safety precautions before attempting any testing.

A Please read all of the operational guide and safety regulations in this manual before operation. Improper operations without complying with this manual guided could cause damage to the device, influence on measurement result or bodily injury to the user.

The instrument is not allowed to disassemble or. repair on 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 using by any irrelevant personnel.

⚠ 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 any objects' surface with strong reflecting.

⚠ 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 batteries or meter device shall not process just like household garbage, please handle them 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.

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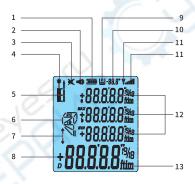
#### Overview

NF-271 designed to measure Distance, Area, Volume, Pythagorea measurement, which is mainly applied in indoor decoration and design, building construction. In these basic functions, NF-272L has upgraded many more functions, such as Level measurement, Vertical measurement, Voice broadcast, Degree measurement and so on.



	1	Add	2	Subtract
/	3	Power & Clear	4	Measure
	5	Menu		Benchmark & Unit
	7	Record query & setting	6	switch

# 1.Display instruction

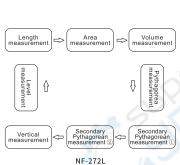


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1	Battery condition	7	Setting
2	Веер	8	Display
	Buzzer (271) 9  Voice broadcast (272L) 10  4 Laser function opener  5 Benchmark point 11		Data storage
3			Data storage number (271)
4			Degree (272L)
5			Signal
	Area/volume/ Pythagorean	12	Auxiliary indicator
6		13	Unit

### 2.Product features



NF-271



### 3. Operation instructions

#### 3.1. Turn on & off

Long press " O " 2s to turn on, Long press " CLEAR O " 2s to turn off.

### 3.2. Single measurement

Press " MEAS "turn on the laser and Press " MEAS " again, the result will display on the screen.

### 3.3. Continuous measurement

 $\label{long_press} \begin{tabular}{ll} Long press " $ \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} 2s to go in, the MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} \begin{tabular}{ll} O & \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} \begin{tabular}{ll} O & \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} \begin{tabular}{ll} O & \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} \begin{tabular}{ll} O & \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} Webs & \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \begin{tabular}{ll} The MAX & MIN will shows. Press " $ \end{tabular} \beg$ 

#### 3.4. Area measurement

Press " to go in when the testing mode in Single measurement, and Press " MEAS " to get the length & width, then it will work out the area on the screen.

#### 3.5. Volume measurement

Press "II" to go in when the testing mode in Area measurement, and Press " MEAS " to get the length & width & height values, then it will work out the volume on the screen.

### 3.6. Pythagorean measurement

Press " to go in when the testing mode in Volume measurement, then press " to get the ① & ② values, it will work out the height "L" on the screen.



### 3.7. Secondary Pythagorean measurement "①"

Press " " to go in when the testeing mode in Pythagorean measurement, then press "

MEAS " to get the ① & ② & ③ values, it will work out the height "L" on the screen.



#### 3.7. Secondary Pythagorean measurement "2"

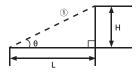
Press " " to go in when the testeing mode in Pythagorean measurement ①, then press " WEAS " to get the ① & ② & ③ values, it will work out the height "L" on the screen.



#### 3.8. Level measurement (Only for NF-272L)

Pres " to go in when the testeing mode in Pythagorean measurement ②, then press "

MEAS "to get the ①, it will automatically calculate the angle degree between the hypotenuse and the horizontal edge, vertical Length "H" and horizontal length "L".



### 3.9. Vertical measurement ( Only for NF-272L )

Pres " to go in when the testeing mode in Level measurement, then press " to go in, then press " to get the 1) & 2 length, it will work out the degree "0" and length "L".



#### 3.10. Addition & subtraction measurement

Under the Single, Area, Volume measurement mode, press " MEAS " to get a result "A", then press " To or " , press " MEAS " again to get a another result "B", then it will auto matically calculate the value ("A+B "or "A-B").

### 3.11. Unit switching

Long press "  $\blacksquare$  " 2s to switch the unit, optional from  $(0.000m\rightarrow0.00m\rightarrow0.00ft\rightarrow0'00''\%\rightarrow0.0in\rightarrow0\%in)$ 

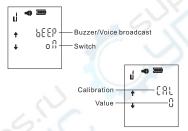
### 3.12. Benchmark switching

Press " e]" to go in, you can set the benchmark to measure from the front side ①, or from the end side ②.



### 3.13. Unit switching

### 3.14. Setting



## 4. Specification

Model	NF-271	NF-272L			
Range	50m 70m	60m 80m 100m			
Acuuracy	+/	-1.5 mm			
LCD screen	FSNT with backlight				
Wavelength & Output	620~680nm, <1mw				
Working temperature	0~40℃				
Storage termperature	-20~60℃				
Laser Off	30s				
Auto-off	21	2minutes			
Protecion level	IP54				
Power	AAA	850mAh Lithlium battery			
Voice broadcast	×	√			
Degree measurement	×	<b>√</b>			
Level measurement	×	√			
Unit switching	m/ft/in/ft+in				
Benchmark switching	√				
Single measurement	√				
Continuous measurement	√				
Area measurement	√				
Volume measurement		√			
Pythagorean measurement	√				
Vertical measurment	×	√			
Addition & subtraction measurement	×	√			
Data storage	50 sets	99 sets			
Size	119*50*26mm				
Weight	100g				

# 5.Packing List

1	Packing List	1pcs
2	Carry bag	1pcs
3	USB cable	1pcs
4	Reflector board	1pcs
5	AAA batery	3pcs
6	Manual	1pcs
7	Qualification certification	1pcs

# 6. Error reasons and solutions

Code	Reason	Solution
203	High or low temperature	Measure at the required temperature range
220	Low battery	Replace new battery
254	Wrong calculate	Measure again in correct operation
255	Weak signal	Test strong reflection ablility of target
256	Strong signal	Don't measure under strong light
257	Out of measure range	Measure within the range
300	harware error	Restart, or contact dealer if it happens again

### Overview--Laser distance meters







NF-2140

NF-2170

NF-2100







NF-2050

NF-2330

NF-2030







NF-2130L

NF-2650

NF-2230







NF-2680

NF-273L

NF-274L