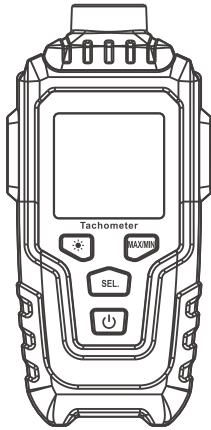# Non-Contac Tachometer User's Manual

1. Safety ⚠

Read the following safety information carefully before attempting to operate or service the meter. Use the meter only as specified in this manual, otherwise, the protection provided by the meter may be impaired.

◆ Environment conditions:

RH<90 RH% (Non-Condensation)

Operating Temperature/Humidity: 0℃ -40℃ ; 10% -80%RH

Storage Temperature/Humidity: -10℃ -60℃ ; 10%-70%RH

◆ Maintenance

Repairs or servicing not covered in this manual should only be performed by qualified personnel.

Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instrument.

Safety symbol:

CE Comply with EMC

2. General Description

880 is the reliable and safe non-contact digital tachometer, the core of this meter is a high speed single chip microprocessor, by calculating the sampling processing and calculation of the reflected light to get the accurate rotation value. With the compact stylish design, which makes 880 is an ideal tool instrument.

The applications for measuring rotation, counting, and temperature. With the backlight function, it is convenient for user to measure in dark environment and read the value clearly.

3. Features:

◆ Max.display up to 99999
◆ Release the TEST button to hold data automatically
◆ Auto power off after 15 minutes without operation
◆ Low voltage indication
◆ LCD backlight for application in dark environment
◆ MAX/MIN record

4. Function Description

880 is the accurate non-contact digital tachometer, complies with the safety standard EN61010-1; EN61326, as well as safety standard of pollution level II.

RPM measuring range: 0.1RPM – 99999RPM

Count measuring range: 0 – 99999

Temperature measuring range: 0-50℃ /32℉ - 122℉

5. Specification

Basic Functions	Range	Accuracy
RPM Measurement (RPM)	0.1RPM−99RPM	±(0.03%+2)
	100RPM – 999RPM	±(0.04%+2)
	1000RPM – 9999RPM	±(0.05%+2)
	10000RPM – 99999RPM	±(0.06%+2)
Count Measurement	0 – 99999	±1%
	Max input frequency:100kHz, Pulse width:5%	
Object Distance	50mm – 500mm	
Temperature Measurement	0℃ - 50℃	±2℃
	32℉ - 122℉	±2℉
Max Display	99999 (5-digit LCD display)	
Backlight	Yes	
MAX/MIN Measurement	Yes	
Auto Power Off	15 minutes	
General		
Sensor Type	Photosensitive diode, laser tube	
Power Supply	1.5V battery (AAA x 3pcs)	
Weight	103g (include battery)	
Dimension	122x59x30 mm (LxWxH)	

6. Meter Description
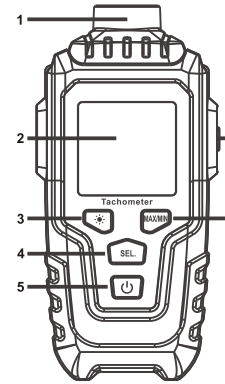
1). Laser transmitting and receiving port
2). LCD display
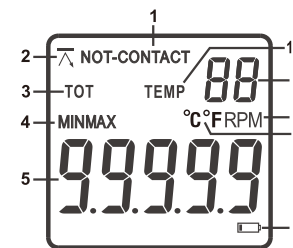3). Backlight button
4). SEL(Shift) button
5). Power on/Off button
6). MAX/MIN button
   (under temperature measurement is for shifting on ℃ and ℉)
7). Test button

7. LCD Display Description

1). Non-Contact rotating speed test function
2). Reflect signal icon
3). Counting function indication
4). MAX/MIN icon
5). Measured values display
6). Low battery indication
7). Temperature unit icon
8). RPM unit indication
9). Battery capacity display
10). Temperature measurement function

8. Operation Instruction

8.1 RPM Measurement

a. Cut off a piece of reflective paper and stick in the objective under test
b. Power on the tachometer and push "SEL" button till RPM appears in LCD
c. Power on the objective under test
d. Hold the "TEST" button and point laser to reflective paper, if the ⊼ icon appears means the tachometer detects the reflective signals and hold "TEST" button to read the values of LCD

8.2 Count Measurement

a. Power on the tachometer and push "SEL" button till "TOT" appears in LCD
b. Follow RPM measurement steps (same operation)

8.3 Temperature Measurement

a. Power on the tachometer and push "SEL" button till "TEMP" appears in LCD
b. Hold "MAX/MIN" to shift temperature units

9. Battery Replace and Attentions

9.1 Once 🔋 icon appears in LCD means battery power is not enough, please replace with the new batteries
9.2 By using "+" screw driver to open battery cover and replace 1.5V batteries
9.3 Tighten the battery cover closely
9.4 If long time no use, please take off the batteries to avoid electrolyte leakage
9.5 Do not store or use the meter under high temperature, high humidity, flammable, explosive and strong electromagnetic environments
9.6 Once using the meter, do not irradiate the eyes