

# Operating Manual of Intelligent Digital Tachometer

1rpm (above 1000rpm)

Contact line speed: 0.01m/min (0.05-99.999m/min)

0.1m/min (above 100m/min)

## I. Characteristics

1. Beautiful and elegant appearance design, convenient and comfortable to use;
2. Wide measurement range, and high resolution;
3. Single-chip microcomputer technology, photoelectric technology and anti-interference technology used, to accurately measure the rotation speed;
4. Super large-size LCD, with clear reading;
5. Automatically memorizing the measured maximum, minimum and the last displayed values;
6. Low power indication when the battery voltage is lower than the specified value;
7. Automatic off: Automatic off in about 15min when no key is operated.

## II. Specifications

Function	
Photoelectric type	△
Contact type	△
Contact line speed (metric system)	△
Contact line speed (British system)	

Display: 5-digit 16mm LCD

Accuracy: ± (0.05%+5)

Range selection: Automatic range

Effective distance: 50mm-500mm

Dimension: 157mm\*64mm\*31mm

Power supply: 1\*9V 6F22 batteries

Power consumption: Less than 40mA

Weight: About 200g (including batteries)

Measurement range:

10-99999 rpm for photoelectric rotation speed

1.0-19999 rpm for contact rotation speed

1.00-1999.9 m/min for contact line speed

Resolution:

Photoelectric rotation speed: 0.1rpm (2.5-999.99rpm)

1rpm (above 1000rpm)

Contact rotation speed: 0.1rpm (0.5-999.99rpm)

## III. Operation Instructions

### 1. Starting up

Load four 9V 6F22 batteries. Long press the ON/OFF key to switch it on or off, and short press this key for function selection.

### 2. Photoelectric rotation speed:

A: Stick one reflective marker on the object to measure.

B: Long press ON/OFF key to switch it on, short press ON/OFF key to select the measurement mode photo RPM, and remove the contact accessory installed, if any.

C. Press the TEST key to make the visible beam and the measured target in a line. Release the TEST key after the displayed value stabilizes and the measured maximum, minimum and the last displayed values will be automatically stored in the instrument.

D. Press MEM key to display the maximum, minimum and the last measured values.

### 3. Contact rotation speed

A. Short press ON/OFF key to select the measurement mode: contact RPM, and install the contact accessory.

B. Get the contact rubber head close with the measured object and make it rotate in sync with the measured object.

C. Press TEST key to start measuring, and release the TEST key after the displayed value stabilizes and the measured values will be automatically stored.

D. Press MEM key to display the maximum, minimum and the last measured values.

### 4. Contact line speed

A. Short press ON/OFF to select the measurement mode: m/min (metric system), and install the contact accessory.

B. Get the contact accessory close with the measured object and make it rotate in sync with the measured object.

C. Press TEST key to start measuring, and release the TEST key after the displayed value stabilizes and the measured values will be automatically stored.

D. Press MEM key to display the maximum, minimum and the last measured values.

### 5. Measurement Notes

A: Reflective marker: Cut off 12mm square adhesive tapes, and

stick one on each rotation axis. Pay attention that the non-reflective area shall be larger than the reflective area. If the rotation axis obviously gives out light, first smear it with black paint or stick black tape, and then stick reflective marker thereon; rotation axis surface must be clean and smooth before sticking of the reflective marker.


B: Measurement of low rotation speed: To improve the measurement accuracy, user is recommended to evenly stick more reflective markers on the measured object when the rotation speed is very low, and then divide the reading on the display by the number of reflective markers to obtain the actual measured value.

C. Please take out the batteries if not to use the instrument for a long time, so as to avoid damaging the instrument by corroded batteries.

## 6. Description of MEM Function

When TEST key is released, the display will display “0” and current measurement mode, but the measured maximum, minimum and the last measured values are automatically stored in the instrument, and at this time, press MEM key for it to display the measured values, wherein “MAX” means maximum, “MIN” means minimum, and “LA” means the last value. Each time the MEM is pressed, another memorized value will be displayed.

## 7. Battery Replacement

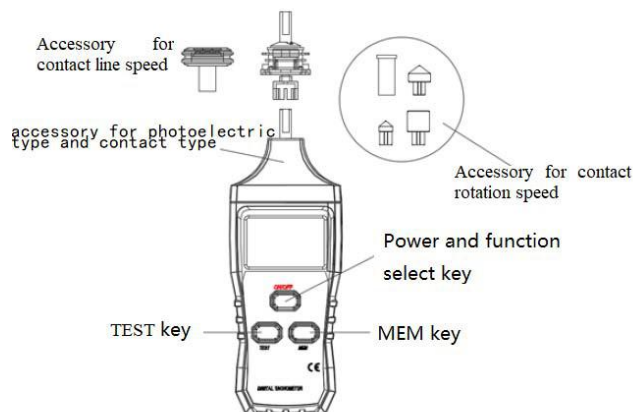
A. When batteries are lower than 7V, LCD will display  icon to prompt for battery replacement.

B. Open the battery cover and take out batteries, and then correctly install batteries according to the identifications in the battery case.

### Accessories:

Reflective tape	600mm long
Manual	1 copy
Accessory for contact line speed measurement	1 piece
Accessory for contact rotation speed measurement	3 pieces

## Panel description as shown below



**Attention: Photoelectric type measurement is recommended during measurement of high rotation speed for sake of safety.**