

DIGITAL PHOTO TACHOMETER OPERATION MANUAL

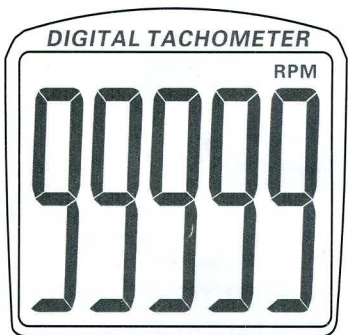


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CAUTION
BEAM OF LIGHT-DO NOT
STARE INTO EYE BEAM!

1. FEATURES

- * Large LCD displaying.
- * Wide measuring range & high resolution.
- * Digital display gives exact RPM with no guessing or errors.
- * The last value/max. value/min. value will be automatically stored in memory and can be displayed by turn anytime.
- * The use of durable, long-lasting components, including a strong, light weight ABS - plastic housing assures maintenance free performance for many years. The housing has been carefully shaped to fit comfortably in either hand.

2. SPECIFICATIONS

Display:	5 digits, 31mm LCD (Liquid Crystal Display), with function annunciation.
Test Range:	2.5 to 99,999 RPM (r/min).
Resolution:	0.1 RPM (2.5 to 999.9 RPM). 1 RPM (over 1,000 RPM).
Accuracy:	$\pm(0.05\%+1 \text{ digit})$.
Sampling Time:	0.8 sec. (over 60 RPM).
Test Range Select:	Automatic.
Memory:	Max. Value, Min. Value, Last. Value.
Detecting Distance:	50 to 200mm / 2 to 8 inch (LED) 50 to 500mm / 2 to 20 inch (Laser)
Time Base:	Quartz crystal.
Circuit:	Exclusive one-chip of microcom- puter LSI circuit.
Battery:	UM-3 1.5V x 3
Operation Temp.:	0 to 50° C (32 to 122° F)

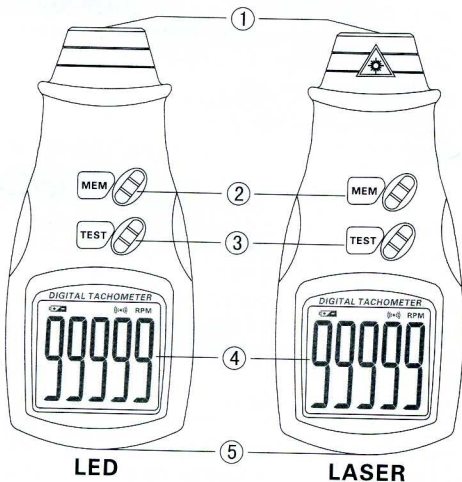
Power Consumption: Approx. 35mA (LED)
 Approx. 30mA (Laser)

Dimensions: 160×76×40mm

Weight: Approx. 280g (including battery)

Accessories: Carrying case 1 pc.
 Reflecting tape marks (600mm)
 Operation manual..... 1 pc.

3. FRONT PANEL DESCRIPTIONS



- | | |
|------------------------------|------------------|
| 1, Signal light beam | 2, Memory button |
| 3, Measure button | 4, Display |
| 5, Battery Compartment/Cover | |

4. MEASURING PROCEDURE

Apply a reflective mark to the object being measured. Depress the MEASURE BUTTON and align the visible light beam with the applied target. Verify that the MONITOR INDICATOR lights when the target aligns with the beam (about 1 to 2 seconds).

5. MEASURING CONSIDERATION

5-1 REFLECTIVE MARK

Cut and peel adhesive tape provided into approx. 12mm (0.5") squares and apply one square to each rotation shaft.

- a. The non-reflective area must always be greater than the reflective area.
- b. If the shaft is normally reflective, it must be covered with black tape or black paint before attaching reflective tape.
- c. Shaft surface must be clean and smooth before applying reflective tape.

5-2 VERY LOW RPM MEASUREMENT

As it is easy to get high resolution and fast sampling time. If measuring the very low RPM values, suggest user to attach more " REFLECTIVE MARKS " averagely. Then divide the reading shown by the number of " REFLECTIVE MARKS " averagely. Then divide the reading shown by the number of " REFLECTIVE MARKS" to get the real RPM.

5-3 BATTERY REMOVAL

If the instrument is not be used for any extended period, remove batteries.

6. MEMORY

6-1 A readout (the last value, max. value, min.Value) obtained immediately before turning off the MEASURE BUTTON is automatically memorized. For example, please ref. following fig. 1.

6-2 That Memorized value can be displayed on the indicator by turn once depressing the memory button. The Symbol "UP" represents the Max. Value and "dn", the Min Value; "LA", the last Value.

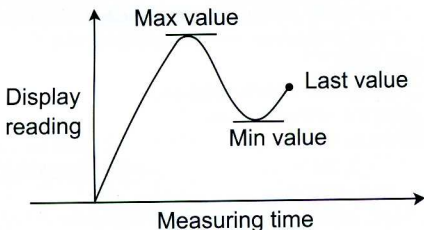


Fig.1

7. BATTERY REPLACEMENT

- (1) If is necessary to replace battery, when left corner of LCD display show " $\square + \square$ ".
- (2) Slide the battery cover (3-5) away from the instrument and remove the battery.
- (3) Install the batteries UM-3 correctly into the case.