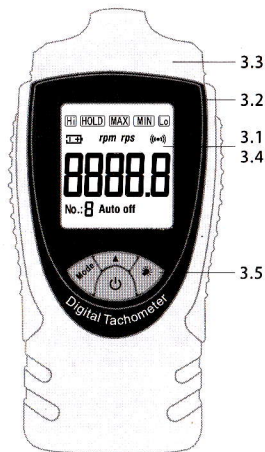


# Digital Laser Tachometer

## Instruction Manual



### 1. Brief Introduction

This instrument is a professional photo tachometer with high accuracy MPU, widely used to measure the rotating speed of impeller, roller and shaft.

### 2. Caution

- 2.1 Be careful of personal injury from the spinning objects.
- 2.2 To make sure the accuracy of measurement, please do use the reflective tape, if the reflective tape is not available, the surface of the measured objects should reflect enough light for measurement, and the device should be positioned vertically to the measured objects.
- 2.3 Keep the device 3.9~15.7" from the measured objects, and keep the angle between the light beam and reflective tape within 30°, to avoid wrong measurement caused by multiple reflection.
- 2.4 Please preset the impeller quantity, if every rotation of the measured object is accompanied with more than one reflection.

### 3. Specification

Display: 5 digits LCD display

Units: rpm, rps

Measuring Range: 100~30000rpm, 1.7~500rps

Resolution: 0.1rpm (100~999.9rpm), 0.1rps (1.7~100rps)

1rpm (1000~30000rpm), 1rps (100~500rps)

Accuracy:  $\pm (0.1\%n + 5d)$  rpm; (100~9999.9rpm)

$\pm (0.02\%n + 2d)$  rpm; (10000~30000rpm)

Sampling Rates: 1/Sec

Number of impeller setting: 1~9

Time Base: Quartz Crystal

Circuit: Exclusive one-chip of microcomputer LSI Circuit

Detecting Distance: 3.9~15.7" (100~400mm)

Auto Power Off: 10 minutes idle

Operational Condition: -10~+50°C; 14~+122°F; 10%~90%RH

Storage Condition: -20~+60°C; -4~+140°F; 10%~75%RH

Accessory: 3 x Reflective Tape Mark (total 23")

Power supply: 3 x 1.5V AAA (LR03)

Size: 4.8"x 2.2"x 1.1"

Weight: 105g (including batteries)

Accessories: 3 x Reflective Tape Mark, batteries, Manual

### 4. Display

HI: Over range Indication

Lo: low-range Indication

MAX: maximum value

MIN: Minimum value

HOLD: Hold the current reading

: Low battery indication

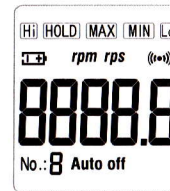
: Measurement status Indication

8888.8: the measuring result

RPM, RPS: unit of the rotate speed

No.: 8: Impeller quantity

Auto off: switch off automatically



### 5. Operation guide:

5.1: Apply a 0.5" (12mm) square piece of reflective tape to the

object being measured.

5.2: Long press button, displayed on the screen, adjust the visible light beam to make it point right to the reflective tape, position the tachometer at a appropriate distance (3.9~15.7" from the measured object), to make sure the reading is stable. Activate the measured object, and start the measurement.

5.3: Release button after the measurement is done, the last value and the mark HOLD will be displayed on the screen.

### 6. Buttons

Power button

Function: Press to switch the device on while it is off

Long press to start measuring while it is on

Press to switch the device off while it is on

\* The device goes off automatically after 10 minutes idle

Button

Press to switch the units between rpm and rps

Button

Function: Press to switch the display between Max and Min.

Long press to set up the impeller quantity. Impeller quantity can be choose from 1 to 9, press (the default setting for the impeller quantity is 1)

Back light button

Press to turn on or off the back light.