KAiWEETS

# User Manual

Industrial Tachometer **KTA04**




CE RoHS MADE IN CHINA

Contact us: support@kaiweets.com

**Please read the instruction manual carefully before use! Pay attention to the cautions, notes, warnings, etc. listed in the instruction manual.**

# Safety Instructions

## ⚠ Warning

- Direct laser radiation: permanent damage to eyesight or even blindness. Do not look directly into the laser beam, both reflected and diffused lasers are dangerous.
- Aim the laser only at the object to be indicated, and only at inanimate target objects.
- Never use optical instruments (such as binoculars, microscopes, etc.) to observe the beam, which will concentrate the light energy and increase the danger.
- Do not let children use it unattended.
- The laser path should not be established at the same level as the human eye (both when sitting and standing). The laser beam should be above or below it.

# Product Features

- Ergonomic Design — Sleek, lightweight, and easy to operate with one hand for comfortable use.
- Wide Range & High Accuracy — Supports a broad measuring range with high resolution for reliable results.
- Advanced Measurement Technology — Uses a microcontroller, photoelectric sensor, and anti-interference algorithms for precise RPM measurement.
- Large LCD Display — Extra-large screen provides clear and easy-to-read data, even in low-light conditions.
- Low Battery Alert — Notifies users when battery power is low to avoid measurement interruptions.
- Auto Power-Off — Shuts down automatically after about 15 minutes of inactivity to save battery life.

# Function Key Overview

| | |
|---|---|
|  | Power on/off |
|   | Test/Unit button |

# Specifications

| | |
|---|---|
| Display: | 5–digit, 24mm LCD display |
| Accuracy: | ±(0.05%+1) |
| Range Selection: | Auto–ranging |
| Effective Distance: | 500mm |
| Dimensions: | 157.5 × 24 × 28.8 mm |
| Power Supply: | 2 × AAA batteries |
| Power Consumption: | Approximately 44mA |
| Weight: | Approximately 60g (including batteries) |
| Measurement Range: | Photoelectric RPM Measurement Mode: 10~99,999 rpm (revolutions per minute) Counting Measurement Mode: 1~99,999 r |

| | |
|---|---|
| Resolution: | Photoelectric RPM Measurement Mode: 0.1 rpm (10~9,999.9 rpm) 1 rpm (≥10,000 rpm) Counting Measurement Mode:1 r (1~99,999 r) |

# Instructions for Use

## Power on

- Insert two AAA batteries (ensure correct polarity as indicated in the battery compartment). Long press the  power button to turn the device on or off.

## Photoelectric Speed Measurement Mode

- Attach a piece of reflective tape to the surface of the object being measured.
- Long press the  power button to turn on the device, then long press
- the test button  to select the RPM measurement mode.
- Short press  the test button to align the visible light beam with the target object. Once the displayed value stabilizes, you can read the RPM. After completing the

measurement, press 

the test button again to exit measurement mode. The last recorded RPM will be retained.

## Counting Measurement Mode

- Attach a reflective marker to the object being measured.
- Long press the  button to turn on the device, then long press the 

test button to select COUNT R measurement mode.
- Short press 

the test button to align the visible light beam with the target object to start counting. After completing the measurement, press 

the test button again to exit measurement mode.
- Each detected count increases the count value by one, and a beep sound will be emitted as an alert.

## Battery Replacement

- When the battery voltage drops below 2.5V, the low battery indicator  will appear on the LCD screen, indicating a low battery condition.
- When the battery voltage drops below 2.3V, the low battery indicator  Flashing will appear on the LCD

screen, indicates that the product is about to shut down.

- When the battery voltage drops below 2V, the product will automatically shut down. You need to replace the battery immediately.
- Open the battery cover, remove the old batteries, and install new ones according to the polarity markings in the battery compartment.

## Auto Power Off

- Long press the  button to turn on the device. The auto power off symbol will appear in the top left corner of the screen. The device will automatically turn off after 15 minutes of use.
- Disable Auto Power Off: When turning on the device by long pressing both the  button and the 

button, the auto power off function will be disabled, and the auto power off symbol will no longer appear in the top left corner of the screen.

## Measurement Precautions

- Reflective Marker: Cut an appropriately sized piece of reflective tape and attach it to the selected surface of the

object. The non-reflective area must be larger than the reflective area.

- If the shaft surface is highly reflective, apply black paint or black tape before attaching the reflective tape.
- Ensure the shaft surface is clean and smooth before applying the reflective tape.
- Avoid direct sunlight or strong ambient light on the measurement target, as this will interfere with the photoelectric sensor and cause inaccurate readings.
- Keep the device stable during measurement to avoid the laser beam deviating from the reflective tape.

## Low-Speed Measurement

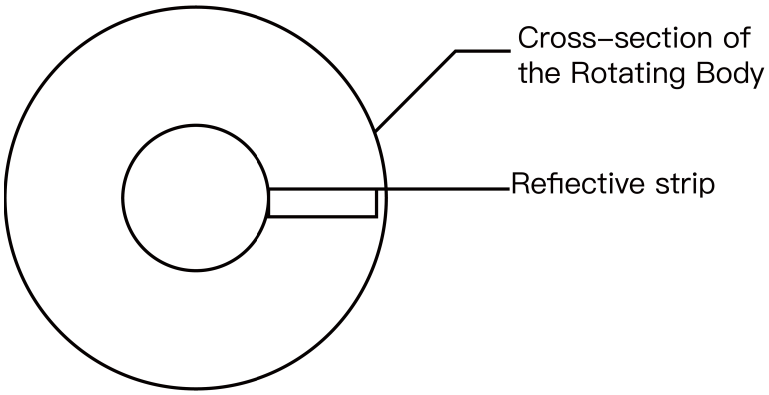
To improve accuracy at very low rotational speeds:

1. Attach 2 or more evenly spaced reflective tapes to the rotating object.

2. The actual RPM = displayed reading ÷ number of reflective tapes.

Example: If you attach 2 evenly spaced reflective tapes, and the display reads 200 RPM, the actual rotational speed is 200 ÷ 2 = 100 RPM.

- The length of the reflective tape should be smaller than the radius of the rotating object.




- If the instrument will not be used for an extended period, remove the batteries to prevent leakage and potential damage.

## Laser Safety Precautions

- Direct Laser Radiation: Direct exposure can cause permanent eye damage or blindness. Do not look directly at the laser beam, as both direct and reflected laser radiation can be hazardous.
- Always aim the laser only at the intended target, and ensure it is a non-living object.
- Do not use optical instruments (such as binoculars or microscopes) to view the laser beam, as they can intensify the laser energy, increasing the risk of injury.
- Keep out of reach of children and do not allow

unsupervised use. Ensure that the laser path is not at eye level (both when sitting and standing). The beam should always be directed above or below eye level.

## Package Included:

- 1 * KTA04 Industrial Tachometer
- 12 * Reflective tape, Size: 50mm × 10mm
- 1 * Instruction manual

Note: For safety reasons, it is recommended to use photoelectric measurement when measuring high speeds.

✓ Three Years Warranty

✓ Contact: support@kaiweets.com

**Manufacturer: Shenzhen Wanhe Innovation Technology Co., Ltd.**

**Address:** 2nd Floor, Building D, No. 2, Tengfeng 1st Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen

**Email:** support@kaiweets.com

EC REP
CET PRODUCT SERVICE SP. Z O.O.
Ul. Dluga 33 102,95-100 Zgierz,Poland
Email: info@cetproduct.com Tel: +48 791019706

UK REP
YH Consulting Limited
C/O YH Consulting Limited Office 147, Centurion House, London Road, Staines-upon-Thames,Staines, Surrey, London, TW18 4AX
+44 07514-677868
H2YHUK@gmail.com