

protech

# Digital Tachometer

Non-Contact

HOBBYIST



## User Manual

QM1449

## GENERAL INFORMATION & SAFETY INSTRUCTIONS

To avoid injuries to animal or human eyes, Please do not point the laser beam in eyes or look directly into beam. If the instrument is not to be used for any extended period, Please remove battery.

**WARNING: The manufacturer is not responsible for any potential injury from misuse**

## BOX CONTENTS

- 1x Digital Tachometer
- 1x 9V Battery
- 1x Carry Case

## FEATURES

- This Digital Tachometer provides fast and accurate Non-contact RPM and surface speed measurements of rotating objects.
- This tachometer is used the CPU technique, photoelectrical technique, and junction laser technique for one instrument combined PHOTO TACH. (RPM&REV)
- Two test modes: rotate speed mode (unit: RPM) & count mode (unit: REV)
- Wide measure range and high resolution.
- High visible digital LCD and Backlight display.
- Built-in memory recalls Max Min and Last value stored.

## MEASURING MANUAL

Apply a reflective mark to the object being measured. Depress the "MEAS" button and align the visible light beam with the applied target. Verify that monitor indicator lights when the target aligns with the beam. Then the current mode is the last time mode. If you need to change the mode, release the "MEAS" button and press the "MODE" button before the instrument auto power off(released the "MEAS" button this instrument will auto power off in 10 sec) will converted between "RPM" and "REV"(revolution). Selected the mode of you need, depress the "MEAS" start measures.

Press the "MEM" button can reading the Max, Min and Last value of last time measuring.

## MEASURING CONSIDERATION

### Reflective mark

Cut and adhesive tap provide 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.

### 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.

## SPECIFICATIONS:

Display:	5 digits LCD display
Accuracy:	$\pm(0.05\%+1 \text{ digits})$
RPM test rang:	2 to 99,999RPM
Count rang:	1 to 99,999 REV
Resolution:	0.1 RPM (2 to 999.9 RPM) 1 RPM. (over 1000 RPM)
Sampling time:	0.5 sec. (over 120 RPM)
Detecting distance:	50mm to 500 mm
Time base:	Quartz crystal
Power consumption:	Approx 45mA
Power Supply:	9V Battery or 6V Exterior DC
Operation temp:	0°C to 50°C
Dimension:	160x58x39mm
Weight:	151g

## WARRANTY

Our product is guaranteed to be free from quality and manufacturing defects for a period of 12 Months.

If your product becomes defective during this period, Electus Distribution will repair, replace, or refund where a product is faulty; or not fit for intended purpose.

This warranty will not cover modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim warranty, please contact the place of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim. Should you not be able to provide proof of purchase with a receipt or bank statement, identification showing name, address and signature may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by:

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