

6610

# LASER<sup>®</sup>

## Digital Tachometer

Detecting distance 50-500mm



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## 6610 Instructions

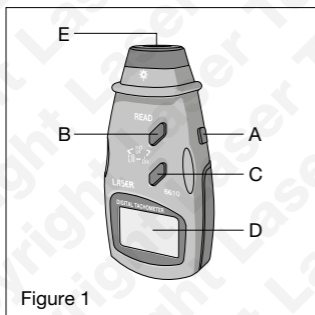
This portable laser instrument is used for non-contact measurement of rotational speed. It uses photoelectric, anti-jamming and junction laser technology to provide non-contact measurements over a wide range (2.5 – 99,999 RPM) and at great accuracy ( $\pm 0.05\% + 1$  digit).

A reflective mark on the object to be measured is used as a target for the instrument's integral laser light beam. Uses include maintenance and adjustment of various machines, conveyor belts, motors and belt drives, etc.

The large LCD screen provides clear and easily read information. Maximum, minimum and last values are saved, and 96 sets of continuous data can be saved. Low battery voltage indicator.

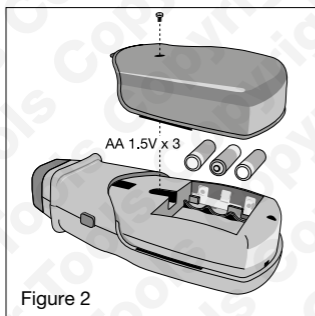
**Warning:** *DO NOT aim the laser beam at your, another person's or an animal's eyes. Be aware of reflections from mirrors or other shiny surfaces.*

# Controls



A	Measurement button
B	READ data button
C	Feature data button
D	LCD display
E	Laser light beam emitter

## Battery Fitting & Replacement:



# Operation

1. Refer to **Figure 2** and fit three AA 1.5V batteries.
2. To carry out the non-contact RPM measurement the rotating object must have a segment of the supplied, reflective, self-adhesive tape attached to it. Cut a segment (approximately 1.5cm) and attach as close to the outer edge of the object as possible.
3. To obtain an accurate reading the object should not be shiny itself; if this is the case, the object should be painted black or covered in black tape. The non-reflective area must always be greater than the reflective (indicator tape) area.
4. Refer to **Figure 1**: to take a reading, hold instrument 5 – 50 cm from the rotating object. Press and hold measurement button **A** and direct the red laser beam spot at the reflective indicator tape position.
5. As the object rotates and the instrument receives information, the scanning symbol appears in the top right corner of the display (refer to **Figure 3**). Hold the measurement button **A** for between 4 and 10 seconds for the display to stabilise, then release; the test result is automatically saved.

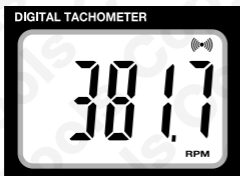


Figure 3

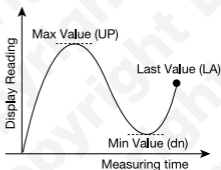


Figure 4

## Operation

6. To display the Max, Min and Last Value readings, press the Feature Data button **C**. Refer to **Figure 4**: by pressing and holding button **C**, then releasing and pressing and holding again, the reading will cycle through the maximum RPM reading obtained (**UP**), the minimum RPM reading obtained (**dn**), and the Last Value recorded (**LA**). The **LA** Last Value is the final measurement taken before the measurement button **A** is released.
7. To access saved data, press and hold the READ data button **B**. The LCD display will count down to 1, and then display **An** (anamnesis or “recall”) on the left of the display, and a figure on the right. The figure is the number of readings held in memory. For example, **An 4** indicates that 4 data readings have been recorded and stored. If the figure is 0, then there are no stored readings. Press and hold the READ data button **B** again and 1 is displayed followed by the first stored reading; release, then press and hold again - **2** is displayed, followed by the second stored reading, and so on.

## Note

When measuring very low RPM it may be necessary to apply several reflective indicators equally around the circumference of the object. When the RPM reading is obtained it should then be divided by the number of indicators applied to get a true reading. For example, if four reflective indicator tapes have been applied, divide the readings taken by 4. Thus a displayed reading of 480 will be a true reading of 120 RPM.

### **Low Battery Indication:**

When battery voltages drop to the specified level, the low battery symbol will be displayed on the LCD screen. Refer to Figure 2, remove existing batteries and replace with three AA 1.5V batteries.

If the instrument is not to be used for a long period, remove the batteries to avoid harmful leakage.

## Technical Specifications

Display:	18mm digit LCD
Range:	2.5 RPM – 99,999 RPM
Resolution:	0.1 RPM (up to 999.9 RPM) 1 RPM (over 1000 RPM)
Accuracy:	$\pm(0.05\% + 1 \text{ digit})$
Sampling Time:	0.8 second (over 60 RPM)
Range select:	Automatic
Time Base:	6MHz quartz crystal
Detecting distance:	50mm – 500mm
Dimensions:	155 x 70 x 35mm
Power:	3 x 1.5V AA batteries

## Precautions:

- **Warning:** DO NOT aim the laser beam at your, another person's or an animal's eyes. Be aware of reflections from mirrors or other shiny surfaces.
- Keep the instrument clean and in good condition; do not get the Laser light beam emitter E dirty or dusty.
- TAKE CARE when using the tachometer near running engines or machinery where there are unguarded rotational components such as belts, pulleys, fans, etc. Remove ill-fitting clothing or ties, and tie back loose hair.
- Protect the instrument from electromagnetic fields, static electricity and high temperatures.
- Protect the instrument from moisture; do not use in damp or wet conditions or where there is high condensation.

Manufacturer: The Tool Connection Ltd

EU Authorised Representative:

Comply Express Unipessoal Limitada, StartUp Madeira,  
EV141, Campus da Penteadá, 9020 105 Funchal, Portugal



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this packaging please recycle it



### Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.

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Distributed by The Tool Connection Ltd

Kington Road, Southam, Warwickshire CV47 0DR  
T +44 (0) 1926 815000 F +44 (0) 1926 815888  
info@toolconnection.co.uk [www.toolconnection.co.uk](http://www.toolconnection.co.uk)

[www.lasertools.co.uk](http://www.lasertools.co.uk)