

DT02234 Digital Photo Tachometer



User Manuel
Gebruikershandleiding
Manuel d'Utilisation

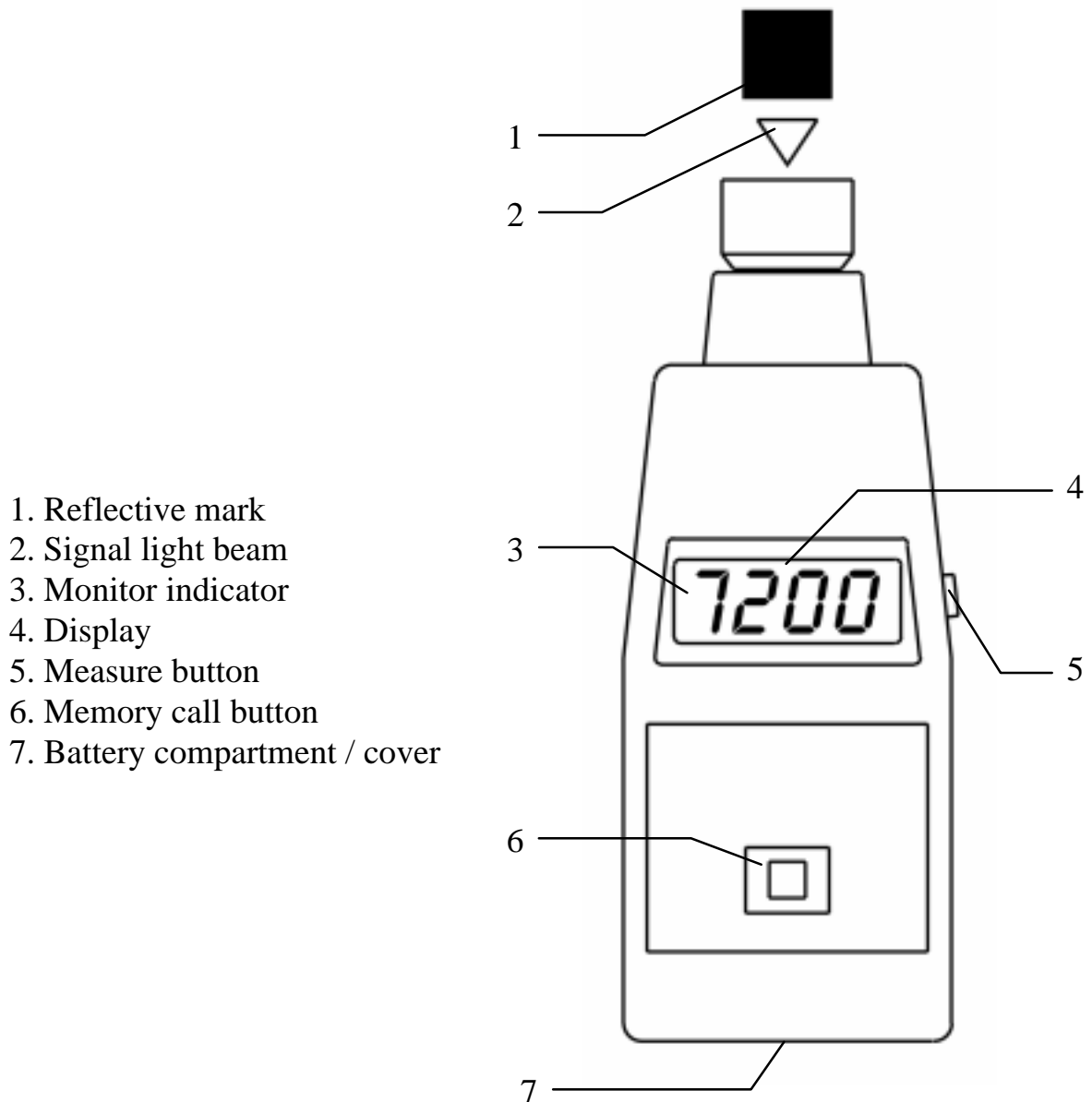
1. FEATURES

- Measuring RPM is safe & accurate without attachment to object.
- Wide measuring range & high resolution
- Digital display gives exact RPM with no guessing or errors.
- Uses the exclusive MICRO-COMPUTER LSI-circuit and crystal time base to offer high accuracy measurement & fast measuring time.
- The last value / max. value / min. value will be automatically stored in memory and can be obtained by pressing MEMORY CALL BUTTON.
- The use of durable, long-lasting components, including a strong, light-weight ABSplastic 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, 10mm (0.4") LCD (Liquid Crystal Display) with function annunciation
Test Range :	5 to 100000 RPM
Resolution :	0.1 RPM (0.5 to 999.9 RPM) 1 RPM (over 1000 RPM)
Accuracy :	$\pm (0.05\% + 1 \text{ digit})$
Sampling Time :	1 sec. (over 60 RPM)
Test Range Select :	Automatic
Memory :	Last value, Max. value, Min. value
Detecting Distance :	50 to 150mm (2" to 6"), typical max. 300mm (12"), depending upon ambient light
Time Base :	Quartz crystal
Circuit :	Exclusive one-chip of microcomputer LSI circuit.
Batteries :	4 x 1.5V AA (UM-3) batteries
Power consumption :	Approx. 150mA (operation)
Operation Temp. :	0 to 50°C (32 to 122°F)
Size :	191 x 72 x 38mm (7.5" x 2.8" x 1.5")
Weight :	250g (0.55 lb) (including batteries)
Accessories :	Carrying case : 1 pc Reflection tape marks (600mm) : 1pc Operation manual : 1pc

3. FRONT PANEL DESCRIPTIONS



4. MEASURING PROCEDURE

Apply a reflective mark to the object being measured. Depress the MEASURE BUTTON (5) and align the visible light beam (2) with the applied target. Verify that the MONITOR INDICATOR (3) lights up when the measuring stabilises (about 1 to 2 seconds).

5. MEASURING CONSIDERATION

5.1 REFLECTIVE MARK

Cut and peel the 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 larger than the reflective area.
- b. If the shaft is normally reflective, it must be covered with black tape or paint before attaching reflective tape.
- c. The shaft surface must be clean and smooth before applying reflective tape.

5.2 VERY LOW RPM MEASUREMENT

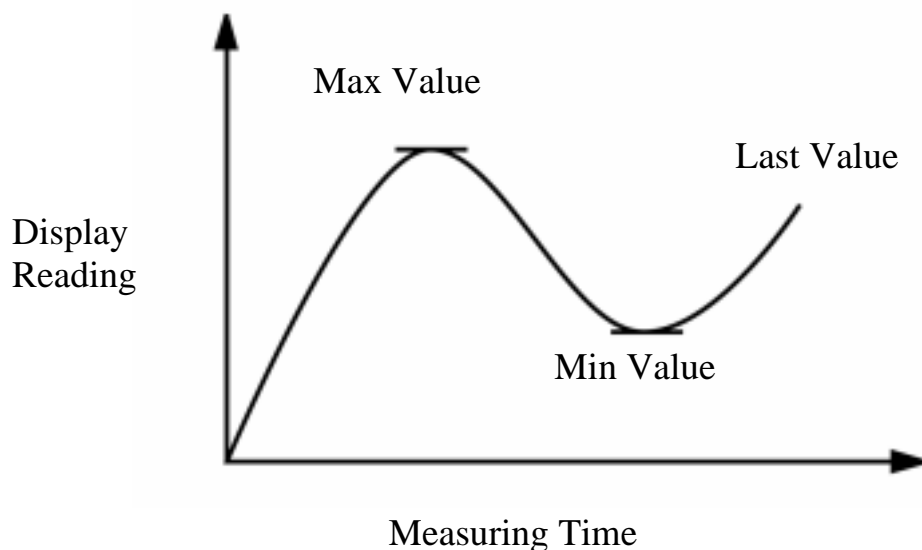
It is easy to get high resolutions and a fast sampling time. If you want to measure very low RPM values, we suggest you to attach more "REFLECTIVE MARKS" dividing the area equally. Then divide the reading shown by the number of "REFLECTIVE MARKS" to get the real RPM.

5.3 REMOVE BATTERIES

If the instrument will not be used for an extended period, remove the batteries.

6. MEMORY CALL BUTTON OPERATION

- 6.1 A readout (the last value, max. value, min. value) obtained immediately before turning off the MEASURING BUTTON is automatically memorised. For example, please refer to figure 2 below.



6.2 The memorised value will be displayed on the indicator when :

- A. First push - To display the last value :
"LAST" and "the last value" will be displayed by turn.
- B. Second push - To display the maximum value :
"MAX" and "the max. value" will be displayed by turn.
- C. Third push - To display the minimum value :
"MIN" and "the min. value" will be displayed by turn.

7. REPLACING BATTERIES

1. When it is necessary to replace the batteries (battery voltage less than approx. 4.5V), "LO" will appear on the display.
2. Slide the battery cover (7) away from the instrument and remove the batteries.
3. Install the batteries (4 x 1.5V AA/UM-3) correctly into the case. Permanent damage to the circuit may result from incorrect installation.