



**PHOTO
TACHOMETER**

DT-2234B

**OPERATION
MANUAL**

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1. FEATURES

- * Wide measuring range from 5 to 100,000 RPM.
- * 0.1RPM resolution for the measured value from 5 to 999 RPM.
- * The last value,max,value,min.value will be stored into the memory automatically & can be obtained by pressing Memory Call Button.
- * High visible LCD display gives RPM reading exactly with no guessing or errors & saves battery energy.
- * This tachometer used the exclusive one chip Micro-Computer LST circuit & crystal time base, offer the high accurate measurement & fast sampling time.
- * The use of durable,long lasting components,including a strong,light weight ABS plastic housing,assures almost maintenance free performance for many years.
- * The housing cabinet has been carefully shaped to fit comfortable in either hand.

2. SPECIFICATIONA

Display	5 digits,10mm(0.4")LCD(Liquid Crystal Display),with function annunciation.
Measurement & Range	5 to 99,999 RPM.
Resolution	0.1 RPM (< 1,000 RPM). 1 RPM (> 1,000 RPM).
Accuracy (23 ± 5℃)	± (0.05% + 1 digit). <i>*Spec.tested under the environment RFField Strength less than 3V/M & frequency less than the 30 MHZ only.</i>
Time base	Quartz crystal,4.194 MHZ.

Circuit	Exclusive one-chip of microcomputer LSI circuit.
Operating Temp.	0-50°(32-122°F).
Operating Humidity	Less than 80%R.H.
Memory	Last,Maximum,Minimum value.
Battery	4x1.5V AA(UM-3)battery.
Power Consumption	Approx.DC 153mA.
Size	190x72x37mm(7.5x2.8x1.5 inch)
Weight	235g(0.52 LB)/including batteries.
Accessories Included	Carrying case1 PC. Reflecting tape marks(600mm).....1 PC. Operation manual.....1 PC.

3.FRONT PANEL DESCRIPTION

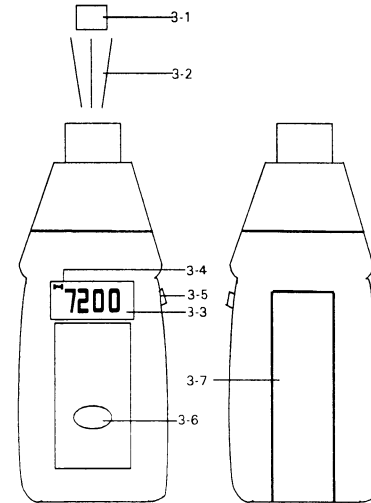


Fig. 1

- 3-1 Reflecting Mark
- 3-2 Photo Signal Light Beam
- 3-3 Target indicator
- 3-4 Display
- 3-5 Operation Button
- 3-6 Memory Call Button
- 3-7 Battery Compartment/Cover

4. MEASURING PROCEDURE

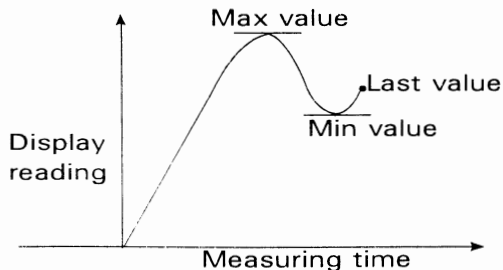
Apply a reflecting mark to the object being measured. Depress the "Operation Button" (3-5, Fig. 1) & align the visible "Photo Signal Light Beam" (3-2, Fig. 1) with the applied target. Verify that the "Target Indicator" (3-3, Fig. 1) lights when the target pass thru the light beam. Release the "Operation Button" when the reading stabilizes (about 2 seconds).

Consideration:

If the measured RPM values is very low (for example less than 50 RPM), recommend to attach more "Reflecting Marks" to the object uniformly. It will get the real RPM with high resolution, precisely & fast sampling time when divided the reading values by the number of the "Marks".

5. MEMORY CALL BUTTON OPERATION

1) The minimum, maximum and the last (final) reading S are automatically stored during measurement. These values can be recalled anytime by pressing the "Memory Call Button" (3-6, Fig. 1).



2) To recall the stored value, follow those procedures as: Release the "Operation Button" (3-5, Fig. 1) first.

- a) Press the "Memory Call Button" (3-6 Fig. 1) once to display the last reading. The symbol "LA" will appear on the display.
- b) Press the "Memory Call Button" (3-6 Fig. 1) once again to display the maximum value. The symbol "UP" will appear on the display.
- c) Press the "Memory Call Button" (3-6 Fig. 1) once more to display the minimum value. The symbol "dn" will appear on the display.

6. BATTERY REPLACEMENT

- 1) When the LCD display appear "LO", it indicate a normal battery output of less than approx. 4.5V. It is necessary to replace the battery. However in-spec measurement may still be made for several hours after low battery indicator appears before the instrument become inaccurate.
- 2) Open the "Battery Cover" (3-7, Fig. 1), replace with new batteries correctly into the battery compartment and reinstate the cover.