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1. FEATURES

- * Multi-function, single instrument with combined PHOTO TACHO (RPM) & CONTACT TACHO (RPM,m/min., ft/min.)
- * Wide measuring range form 0.5 to 100,000 RPM.
- * The last value/max. value/min. value will be automatically stored in memory and can be recalled by pressing MEMORY CALL BUTTON.
- * High visible, with zero suppression LCD display gives exact RPM with no guessing or error and saves battery energy.
- * The tachometer uses an exclusive one chip MICRO-PROCESSOR LSI-circuit and crystal time base to offer high accuracy measurement & fast measuring time.
- * The instrument uses durable, long-lasting components, enclosed in a strong, light weight ABS-plastic housing which assures maintenance free performance for many years. The housing has been carefully shaped to fit comfortably in both hands.

2. SPECIFICATIONS

Display	5 digits, 10mm (0.4") LCD (Liquid Crystal display) with function annunciation.	
Measurement	Photo Tacho	5 to 99,999 RPM.
	Contact Tacho	0.5 to 19,999 RPM
	Surface Speed (m/min.)	0.05 to 1,999.9 m/min.
	Surface Speed (ft/min.)	0.2 to 6,560 ft/min.

Resolution	Photo Tacho	0,1 RPM (5 to 999.9 RPM). 1 RPM (over 1,000 RPM).
	Contact Tacho	0,1 RPM (0.5 to 999.9 RPM). 1 RPM (over 1,000 RPM).
	Surface Speed (m/min.)	0.01 m/min.(0.05 -99.99 m/min.) 0.1 m/min. (over 100 m/min.)
	Surface Speed (ft/min.)	0.1 ft/min. (0.1 to 999.9 ft/min.) 1 ft/min. (over 1,000 ft/min.)
Accuracy	(0.05% + 1 digit).	
Sampling Time	Photo Tacho - 1 sec. /over 60 RPM. Contact Tacho - 1 sec. /over 6 RPM.	
Photo Tacho Detecting Distance	50 to 150 mm/2 to 6 inch. (typical max. 300mm/12 inch, depending upon ambient light).	
Range select	Automation.	
Time base	Quartz crystal.	
Circuit	Exclusive one-chip design microprocessor LSI circuit.	
Battery	4 x 1.5V AA (UM-3) battery.	
Operation Temperature	0 - 50 蛭 (32 - 122 蚌).	
Size	215 x 65 x 38 mm. (8.5 x 2.6 x 1.5 inch).	
Weight	300g(0.66 LB)/including battery.	
Accessories	Carrying case1 PC. Reflecting tape marks (600mm).....1 PC RPM adapter (CONE).....1 PC. RPM adapter (FUNEL).....1 PC. Surface speed test wheel.....1 PC. Operation manual1 PC.	

3. FRONT PANEL DESCRIPTION

Fig. 1

- 3-1 Reflective mark
- 3-2 Signal light beam
- 3-3 Monitor indicator
- 3-4 Display
- 3-5 Measure button
- 3-6 Memory call button.
- 3-7 Function select switch
- 3-8 Rotating ring
- 3-9 Circumferential speed ring
- 3-10 Battery Compartment

4. PHOTO TACHOMETER MEASURING PROCEDURE

- A. Slide the FUNCTION SWITCH (3-7, Fig.1) to "RPM (PHOTO)" position.
- B. Affix a reflective mark (tape) to the object being measured. Press the MEASURE BUTTON (3-5 Fig. 1) and align the visible light beam with the reflective mark (3-1, Fig. 1) Ensure that the MONITOR INDICATOR(3-3, Fig. 1) lights when the target passes through the light beam. Release the MEASURE BUTTON (3-5 Fig.1) when the reading stabilizes(about 2 seconds),
In order to obtain greater accuracy for measurement of less than 50 RPM, use 2 or 3 pieces of reflective tape and then divide the reading with the number of pieces used to calculate the final figure.

5. CONTACT TACHOMETER MEASURING PROCEDURE

5-1 RPM Measurement

- A. Slide the FUNCTION SWITCH (3-7, Fig.1) to "RPM (CONTACT)" position.
- B. Press the MEASURE BUTTON (3-5, Fig. 1) and lightly pressing the rotating devise (3-8, Fig. 1). Release The MEASURE BUTTON (3-5 Fig.1) When the reading stabilizes (approx. 2 seconds).

5-2 Surface Speed Measurement

- A. Slide the FUNCTION SWITCH (3-7, fig.1) to "m/min.(SURFACE SPEED) or "ft/min. (SURFACE SPEED)".
- B. Press the MEASURE BUTTON (3-5 fig. 1) and simply attaching surface speed test wheel to the detector. Release The MEASURE BUTTON (3-5 Fig.1) When the reading stabilizes.

6. MEMORY CALL BUTTON OPERATION

- 6-1 The minimum, maximum and the last (final) readings are automatically stored during measurement. These values can be recalled anytime by pressing the MEMORY CALL BUTTON(3-6, Fig. 1).

6-2 To recall the stored value, follow these procedures.

- 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 maximum value. The symbol " dn " will appear on the display.

7. BATTERY REPLACEMENT

- (1) When the battery voltage drops below 4.5V dc, the symbol " LO " will appear on the display. The battery should be replaced.
- (2) Remove the screw retaining the battery compartment lid, and slide the cover away from the instrument.
Remove the battery.
- (3) Install the new batteries (4 x 1.5 V AA/UM-3) and replace the cover.

8. PATENT & PATENT PENDING

This exclusive TACHOMETER already holds patent in

**USA - 4,823,080,
GERMANY - G9015492.4 G8708922.0,
TAIWAN - 45478,**