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TACHOMETER / STROBOSCOPE

Model : DT-2259

ISO-9001, CE, IEC1010

LUTRON ELECTRONIC

The Art of Measurement

MERASERW5

TACHOMETER/STROBOSCOPE, Model : DT-2259

(2 in 1, DIGITAL PHOTO TACHOMETER with DIGITAL STROBOSCOPE)

FEATURES

* Intelligent, microprocessor circuit design, high accuracy, wide range, digital readout.
* One instrument include two functions of " Digital Photo Tachometer " & " Digital Stroboscope "
* *Digital Stroboscope :*
  Wide setting range from 100 RPM to 100,000 RPM, digital display with high accuracy. Modern solid state high visible orange light, long life, almost maintenance free. It is ideal for inspecting and measuring the speed of moving gears, fans, centrifuges, pumps, motors and other equipment used in general industrial maintenance, production, quality control, laboratories and as well as for schools and colleges for demonstrating strobe action.
* *Digital Photo Tachometer :*
  No contact RPM measurement, wide measuring range from 0.5 to 100,000 RPM. 0.1 RPM resolution for the measured value < 1000 RPM. The last value, max., value, min. value can be stored into the memory automatically & be obtained by pressing " Memory Call Button ". High visible LCD display gives RPM reading exactly with no guessing or errors.
* The use of durable, long lasting components, including a strong, light weight ABS plastic housing. Cabinet has been carefully shaped to fit comfortable in either hand.

GENERAL SPECIFICATIONS

Display	5 digits, 10 mm (0.4") LCD (Liquid Crystal display) with function annunciation.	Operation Temperature	0 - 50 ℃ (32 - 122 ℉).
		Operating Humidity	Less than 80% RH.
Accuracy	± (0.1 % + 2 digit).		
Sampling Time	1 second (60 RPM).	Size	215 x 65 x 38 mm. (8.5 x 2.6 x 1.5 inch).
Time base	: Quartz crystal.		
Circuit	Exclusive one-chip design microprocessor LSI circuit.	Weight	300g(0.66 LB)/including battery.
		Accessories	: Carrying case ..... 1 PC.
Battery	4 x 1.5V AA (UM-3) battery.		Operation manual .....1 PC.

ELECTRICAL SPECIFICATIONS (PHOTO TACHOMETER)

Measurement Range	5 to 99,999 RPM	
Resolution	0.1 RPM (< 1,000 RPM)	1 RPM (1,000 RPM)
Photo Tach. detecting distance	50 to 150 mm/2 to 6 inch. * Typical max. 300 mm/12 inch depending upon ambient light.	

ELECTRICAL SPECIFICATIONS (STROBOSCOPE)

Stroboscopic Flash Rate	100 to 100,000 FPM/RPM *FPM : flash per minute* *RPM : round per minute*	Flash tube	High efficiency orange LED lamp.
		Flash Duration	Approximately 60 to 1,000 microseconds.
Flash Adjust Range	3 ranges : Range A: 100-1,000 FPM Range B: 1,000-10,000 FPM Range C: 10,000-100,000 FPM	Flash color	Orange
		Flash Duration	Approx. 16% of period time.
		Flash Adjust Knob	Coarse adjust knob and Fine adjust knob.
Resolution	0.1 FPM/RPM. (Less than 1,000 FPM/RPM)	Calibration	Crystal time base and microprocessor circuit, don't necessary take any external calibration process.
	1 FPM/RPM (Over 1,000 FPM/RPM)		

OPERATIONS PROCEDURES (STROBOSCOPE)

Preparation	Determine the range switch to " 1000 RPM " ," 10,000 RPM " or " 100,000 RPM " position.
Checking Speed	When checking speed, care must be taken to insure that the strobe is flashing in unison (one to one) with the object being monitored. A Stroboscope will also stop motion at 2:1, 3:1, 4:1 et., this is normally referred to as harmonies. To be sure of unison, turn the dial until two images appear - this will double the actual speed. Then lower the flashing rate until a single and stationary image appears - this is the actual true speed.
Checking Motion	For motion analysis, simply locate the actual speed as mentioned above and then turn the dial slowly up or down. This will give a slow motion effect allowing complete inspection.