## LED array, + Photo Tachometer, Battery power STROBOSCOPE Model: DT-2299 ISO-9001, CE, IEC1010



## Features :

- \* Stroboscope use high intensity LED array.
- \* LCD display with back light.
- \* Stroboscope range : 10 to 99,999 RPM.
- \* External trigger for stroboscope.
- \* Photo tach. range : 10 to 99,999 RPM.
- \* Photo tachometer use the laser light beam.
- \* Power supply : 1.5 V ( UM-1 ) x 4 PCs
- \* DCV power supply via external AC/DC adapter is available, AC/DC adapter is optional.









## **COMBINATION STROBOSCOPE**

Model : DT-2299

FEATURES			
* Combination Stroboscope with 3 functions :	* Battery power Stroboscope, use high intensity LED		
Digital Stroboscope, Laser Photo Tachometer,	array, long life.		
Contact Tachometer (optional probe), 3 in 1,	* Back light high visible LCD display gives exact reading		
intelligent function.	with no guessing or error and saves battery energy.		
* Stroboscope, wide measuring range up to 99,999 RPM.	* High precision both for Stroboscope and Tachometer		
* The Digital Stroboscope is used the microprocessor	measurement.		
circuit design, high accuracy, digital readout, light duty,	* Use an exclusive one chip MICRO-PROCESSOR		
that is ideal for inspecting and measuring the speed of	LSI-circuit and crystal time base to offer high		
moving gears, fans, centrifuges, pumps, motors and	accuracy measurement & fast measuring time.		
other equipment used in general industrial	* Stroboscope build in external trigger input.		
maintenance, production, quality control, laboratories	* Long distance Laser Photo Tachometer build in.		
and as well as for schools and colleges for	* Optional Contact Tachometer probe is available.		
demonstrating strobe action.	* Compact and heavy duty housing case.		

GENERAL SPECIFICATIONS					
Display	5 digits ( 0 to 99999 ) LCD display.	Operating	0 to 50 $^\circ\mathrm{C}$ ( 32 to 122 $^\circ\mathrm{F}$ )		
Circuit	Exclusive one-chip design microprocessor	Temperature			
	LSI circuit.	Humidity	Less than 80% R.H.		
Measurement	Stroboscope	Power Supply	DC 1.5 V, UM-1 (D type) battery x 4 PCs		
	Unit : FPM ( rotation per minute ).		* DC 9V adapter input is built, AC/DC		
	build in external trigger input.		adapter is opional, not in included.		
	Laser Photo Tachometer	Power	Stroboscope(3600 FPM):		
	Unit : RPM ( rotation per minute ).	Consumption	DC 160 mA.		
	Contact Tachometer		Laser photo Tachometer ( 3600 RPM ) :		
	Unit : RPM ( rotation per minute ).		DC 130 mA.		
	Surface speed (ft/min., m/min)	Weight	800 g ( 1.76 LB ).		
	* It should cooperate with optional	Dimensions	21 cmx12 cmx12 cm (8.3"x4.8"x4.8").		
	contact probe ( TA-35 ).	Accessories	Operation manual1 PC.		
Sampling Time	Approx. 1 second.	Included	Reflective tape1 PC.		
Calibration	Crystal time base and microprocessor	Optional	Contact Tachometer probe (TA-35).		
	circuit, no external calibration process required.	Accessories	ACV 110V, 220/230V to DC 9V adapter.		

ELECTRICAL SPECIFICATIONS OF STROBOSCOPE					
Stroboscopic	100 to 99,999 flashes per minute (FPM).	Resolution	0.1 FPM/RPM (less than 1,000 FPM/RPM)		
Flash Rate	Low range : 100 to 1,000 RPM/FPM.		1 FPM/RPM ( > 1,000 FPM/RPM ).		
	High range : 1000 to 99,999 RPM/FPM.	External	Input signal : 5V to 30 V rms,		
Accuracy	± ( 0.05% + 1 digit ).	Trigger	100 to 99,999 RPM/FPM.		
Light Source	Long life high intensity LED array.	Input			

ELECTRICAL SPECIFICATIONS OF LASER PHOTO TACHOMETER					
Range	10 to 99,999 RPM	Accuracy	± ( 0.05% + 1 digit ).		
Photo	50 - 1,500 mm typically.	Sampling Time	1 sec. ( 60 RPM ).		
Tachometer	* Spec. of detecting distance are that	Resolution	0.1 RPM < 1,000 RPM		
detecting	under the size of reflecting tape is 10		1 RPM ≧1,000 RPM		
distance	mm square & the measuring RPM	Time base	<ul> <li>Quartz crystal</li> <li>* Less than 1 mW.</li> <li>* Class 2 laser diode. Red. Wave length is 645 nm approximately.</li> </ul>		
	value is 1,800 PPM. The max. & min.	Laser light			
	detecting distance may change under	source			
	different environment, different				
	reflecting tape or the measuring RPM				
	beyond 1800 PRM.				

ELECT	RICAL SPECIFICATIONS OF CONTACT	TACHOMETER	( OPTIONAL	PROBE, TA-35)
Range	Contact Tachometer :	Resolution	0.1 RPM	< 1,000 RPM
_	0.5 to 19,999 RPM		1 RPM	≥1,000 RPM
	Surface Speed ( m/min. ) :		0.01 m/min.	$\geq$ 100 m/min.
	0.05 to 1,999.9 m/min.		0.1 m/min.	> 100 m/min.
	Surface Speed ( ft/min. ) :		0.1 ft/min.	< 1000 ft/min.
	0.2 to 6,560 ft/min.		1 ft/min.	≥ 1,000 ft/min.
Accuracy	± ( 0.05% + 1 digit ).	Accessories	RPM adapter	( Cone type ) 1 PC.
Sampling Time	1 sec. ( 6 RPM ).	Included	RPM adapter	(Funnel type ) 1 PC.
			Surface speed	test wheel 1 PC.

 $\ast$  Appearance and specifications listed in this brochure are subject to change without notice.