



# DIGITAL STROBOSCOPE

Model : DT-2239A

## DESCRIPTION

The model DT-2239A is a microprocessor circuit design, high accuracy, digital readout, light duty STROBOSCOPE/TACHOMETER that 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.

## SPECIFICATIONS

Display	0.3" LED, 4 digits.	Power Supply	110 Vac $\pm$ 10%, 50/60 Hz or 220 Vac $\pm$ 10%, 50/60 Hz or 230 Vac $\pm$ 10%, 50/60 Hz
Stroboscopic Flash Rate	100 to 10,000 flashes per minute (FPM).	Power Consumption	Less than 30 Watt.
Accuracy	100 to 5,000 FPM/RPM) - $\pm$ 1 digit. over 5000 FPM/RPM - $\pm$ 0.05% .	Operating Temp.	0 to 50 °C (32 to 122 °F).
Resolution	Less than 10,000 FPM/RPM- 1 FPM/RPM. Over 10,000 FPM/RPM - 10FPM/RPM	Operating Humidity	Less than 80% R.H.
		Dimension	HWD - 21 x 12 x 12 cm (8.3x4.8x4.8 inch).
Sampling Time	1 second.	Weight	1Kg/2.2 LB.
Range Select	Automation.	Housing	Compact and impact plastic injection case with plastic mirror type reflector.
Circuit	This stroboscope/tachometer employs a custom one-chip of microcomputer LSI circuit & crystal control time base which results in extraordinary accuracy over a wide, dynamic range.	Calibration	Crystal time base and microprocessor circuit, don't necessary take any external calibration process.
		Accessories Included	Operation manual..... 1 PC.

## FLASH TUBE SPECIFICATIONS

Flash tube	Xenon lamp.	Flash tube replacement	It is required to change the flash tube when the instrument start to flash irregularly at speeds of 3600 RPM/FPM or more.
Flash Duration	Approximately 60 to 1,000 microseconds.		
Flash color	Xenon white 6,500 ° K.		
Flash energy	4 Watts-seconds (joules).		
Beam Angle	80		
Operating duty Cycle	For prolong life and safe operation, please adhere to the following duty cycle: Below 1,000 RPM - 30 Minutes. Above 3,600 RPM - 5 Minutes. Always allow a 10 minute cooling off period between cycles.		

## OPERATIONS PROCEDURES

Preparation	(a) Plug unit into a properly grounded 110V AC, 220V AC or 230V AC outlet. (b) Turn the power switch to "on" position. (c) Determine the range switch to "Low" or "High" 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 harmonics. 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.

**Remark :** When order the stroboscope, should inform the power supply type is AC 110V, 220 V or 230 V.