

## Digital Stroboscope - Technical Specification DT-2239A

### General Specification

Display	0.3" LED, 4 digits.
Stroboscopic Flash Rate	100 to 10,000 minute (FPM).
Accuracy	100 to 5,000 FPM/RPM) - $\pm 1$ digit. over 5000 FPM/RPM - $\pm 0.05\%$ .
Resolution	Less than 10,000 FPM/RPM- 1 FPM/RPM. Over 10,000 FPM/RPM - 10FPM/RPM
Sampling Time	1 second.
Range Select	Automation
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.
Power Supply	110 Vac 10%, 50/60 Hz. or 220 Vac 10%, 50/60 Hz. or 230 Vac 10%, 50/60 Hz.
Power Consumption	Less than 30 Watt.
Operating Temperature	0 to 50 (32 to 122 ).
Operating Humidity	Less than 80% R.H.
Dimension	HWD - 21 x 12 x 12 cm (8.3x4.8x4.8 inch).
Weight	1Kg/2.2 LB.
Housing	Compact and impact plastic injection case with plastic mirror type reflector.
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 Duration	Approximately 60 to 1,000 microseconds.
Flash Colour	Xenon white 6,500 K degree.
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 Mins. Above 3,600 RPM - 5 Mins. Always allow a 10 minute cooling off period between cycles.
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.

### 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 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.