

## PLS Pocket LED Stroboscope

The Monarch **PLS Pocket LED Stroboscope** is a compact, rugged, light weight device that provides a super bright, uniform light output for performing visual diagnostic inspection and RPM measurements. The silent cool running LED's are extremely energy efficient providing up to 5 hours of operation on a single charge. A wide operating range of 30-300,000 flashes per minute covers most industrial applications. Additional features include external input for remote triggering or tachometer mode, pulse output, memory for up to 5 preset flash rates, N.I.S.T. calibration certificate, tachometer mode for speed measurements up to 250,000 rpm using optional remote sensors and TTL pulse output.



## SPECIFICATIONS

Display:	LCD display with 6 numeric 0.506 inch (12.85mm) high digits and 5 alphanumeric 0.282inch (7.11mm) high digits
Indicators:	Battery level, On Target, Select, TACH, and EXT icons
Memory:	Last setting before power down is remembered and restored on next power up. 5 user settable memory locations
Flash Duration:	Adjustable 0.5 to 2500 microseconds or .1 to 18 degrees of rotation (auto adjusts with flash rate)
Safety:	This product is designed to be safe for indoor use under the following conditions (per IEC61010-1)
Compliance:	CE EN61326-1:2006 EMC 2004/108/EC
Operating Temp:	32-104°F (0-40°C)
Humidity:	Maximum relative humidity 80% for temperature up to 88°F (31°C) decreasing linearly to 50% RH at 104°F (40°C)
Input Power:	Battery powered: Internal Li-Ion rechargeable batteries 3.6Vdc
Light Source:	7 LED Array
Light Output:	Average: 1800 Lumens at 6000 FPM 8" from lens
Color Temp:	5600°K
Run Time:	5 hours typical at 6000 FPM, and 2.8° pulse width with fully charged batteries
Charge Time:	4-5 hours typical with supplied charger
Weight:	0.6 lbs (0.27kg) including batteries
Dimensions:	7.75" x 2.75" x 2.3" (197 x 70 x 58 mm)

Internal Mode:

Flash Range: 30-300,000 FPM (Flashes per minute) 0.5 to 5000Hz

Flash Rate Accuracy: 0.005% of setting or  $\pm$  last digit

Flash Rate Resolution: 0.01 to 1 FPM (menu selectable), 0.1 FPM resolution above 9,999.99 FPM, 1 FPM resolution above 99,999.9

External Modes:

Flash Range: 0-300,000 FPM (Flashes per minute) 0.5 to 5000Hz

Tachometer Mode: 30 to 300,000 RPM

Accuracy:  $\pm$ 0.005% of reading or  $\pm$  last digit

Display Update Rate: 0.5 second typical above 120 RPM

Trigger to Flash Delay:  $\sim$ 15  $\mu$ sec

External Input: 2.5V to 12V peak pulse 500 nanosec min pulse width, positive or negative edge triggered (menu selectable)

Display Update Rate: Instantaneous

Output Pulse: 3V pulse. One pulse per flash in internal mode. Mimics input pulse in external mode

Time Base: Ultra Stable Crystal Oscillator