

LabStrobe™ STB100-F

Compact, Economical LED Stroboscope



LabStrobe P/N STB100-F with
optional Tripod (P/N TP1-F)



LabStrobe STB100-F is a hand held LED stroboscope used to measure the speed of rotation or frequency of vibration of a fan, motor, speaker, other mechanical part or system. The latest in LUXEON LED technology provides this pocket sized strobe with unparalleled brightness and battery life at this price point. Stroboscopes have the advantage not loading or disturbing the equipment under test. Mechanical equipment may be observed under actual operating conditions. Parasitic oscillations, flaws, and unwanted distortion at high speeds are readily detected.

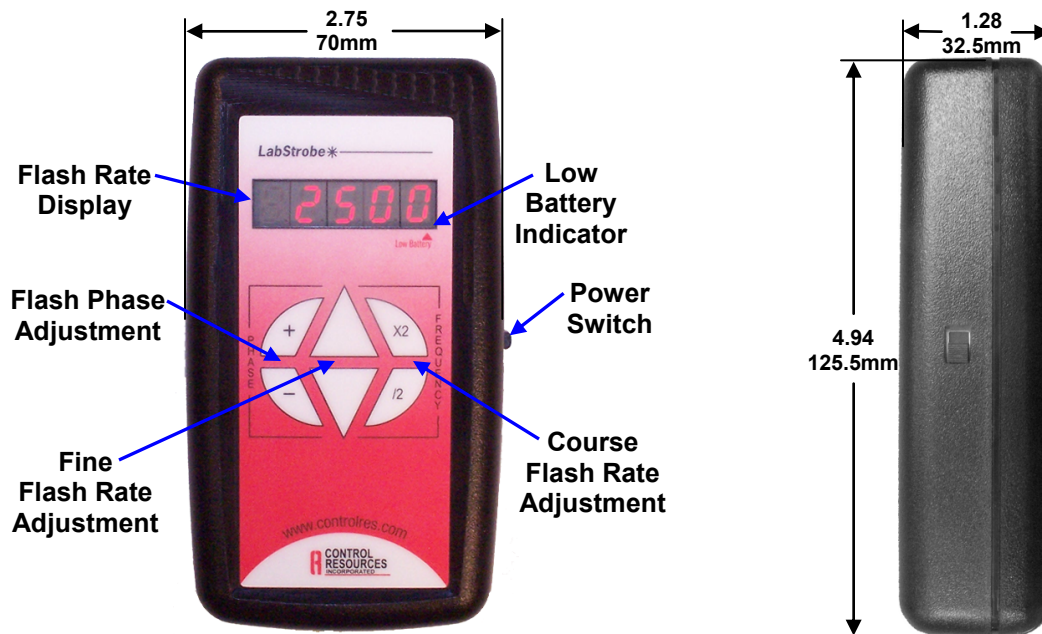
SPECIFICATIONS

- Size: 4.9"(124mm) x 2.8"(71mm) x 1.3"(33mm)
- Power: 3V (2 AA Batteries included)
- Brightness: 370 LUX @ 50 cm (19.7"), 6,000 FPM
- Six button membrane for easy operation
 - > Flash rate adjustment (4 buttons)
 - Coarse: Multiply by 2, divide by 2
 - Fine: Up & down (1-15 FPM increments)
 - > Flash phase adjustment (2 buttons)
 - Up, Down 0 - 360° adjustment
- Flash rate range in FPM: 60 - 99,990
- Flash rate range in Hz: 1 - 1,666
- Flash rate accuracy:
 - 60 - 17,300 FPM: +/- 1 LSD
 - 17,300 - 99,990 FPM: +/- .009%
- Typical Alkaline battery life: 11 hours
- Operating temperature: 14° to 122° F (-10° to 50° C)
- Tripod mountable (1/4 - 20 UNC thread)
- RoHS compliant
- Weight: 6.1 oz. (173 grams), batteries included

FEATURES

- Lightweight, pocket size design
- Battery powered for portability
- Low battery indicator
- Flash rate recall: On power up, the last flash rate that was displayed for 3 seconds or more is shown on the display
- Two high brightness PHILIPS LUXEON LEDs:
 - No costly lamp to replace
 - No heat generation
 - Ultra high efficiency for longer run time
 - Fast response rate
 - Immune to mechanical shock and vibration
 - Silent operation
- Storage bag included
- Optional tripod - Order P/N TP1-F
- Warranty: 2 years
- Made in the USA

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OPERATION

Reference Mark: When measuring the RPM of a rotating device, place or select a unique mark on the device to use as a visual reference.

Correcting for Reference Mark Illusions: A flash rate of $\frac{1}{2}$ or $\frac{1}{4}$ of the true RPM will yield one reference mark image. To eliminate this type of error, adjust the fine or course flash rate keys to get two clear reference mark images 180° apart. Then press the $\frac{1}{2}$ key once and use fine adjustments to hold the single reference mark still.

Flash Phase Adjustments: When measuring the speed of a rotating device that is partially blocked from view so that only an arc is visible, one can shift a reference mark into view by using the Phase Adjustment keys.