SHIMPO INSTRUMENTS

Measuring Quality

Series ST-320BL Black Light LED Stroboscope

The ST-320BL is a portable or permanent mount

stroboscope. Utilizing super bright high-powered black light LED lamps, these stroboscopes are perfect for UV ink printing applications. The ST-320BL's LED array provides a bright, stable strobe light over a wide measurement range with a lifetime far exceeding xenon lit stroboscopes. Operation is simple with the 8 button keypad and quick rate adjustment dial, combined with large, backlit LCD display. Phase shift, flash duration, plus flash rate are all quickly adjustable. The unit can work off user adjusted flash frequency or from a remote sensor's signal which will automatically adjust to corresponding process fluctuations.

The ST-320BL is designed for speed and frequency measurements in the printing, packaging, textile, automotive, cable, mining, steel, chemical, optical and medical industries in various applications.



ST-320BL Black Light LED Stroboscope

Features

- Wide Flash Range 60 120,000 Flashes/min. (1-2000 Hz) can be adjusted to meet almost any high-speed application
- Long-life Black Light LED operation for UV ink applications
- Adjustable Flash Pulse duration achieves sharper images for detailed inspection
- Phase Shift Advances or retards flash timing for viewing gear teeth, cutting surfaces, repeats or "drifting" images
- Input sensor trigger function allows process machinery to control flash rate
- Delay time adjustment combined with leading or trailing edge activation simplifies process set-up when using external signal input
- x2 and 1/2 keys for large adjustment rate change or +/- for fine tuning
- 1/4-20 UNC connection for permanent mount applications (remove trigger handle)



Operation Panel & Flash Adjustment Dial



Test Equipment

1-800-517-8431

99 Washington Street Melrose, MA 02176 Phone 781-665-1400 Toll Free 1-800-517-8431





ST-320BL Specifications

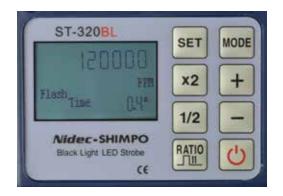
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Flash Rate Range	60 to 120,000 FPM ; 1-2000 Hz	
Accuracy	0.01%±1 digit of F.S. @ 77° F (25°C)	
Lamp	9 black light LED's; 415 to 420 nm wave length.	
Lamp Lifetime	Approximately 3~5 years depending on usage.	
Display	Backlit LCD	
Resolution	60 ~12,000 FPM = 0.1 FPM; 12,001~120,000 FPM = 1 FPM; 1~200 HZ = 0.01 Hz; 201~2000 = 0.1 Hz	
Flash Duration	0.1°- 2.5°	
Phase Shift	0-359°	
Power Requirement	ST-320BL-1: 100-120 VAC (230V available upon request); ST-320BL-2: Rechargeable Battery with 100-240VAC power adapter.	
Battery (ST-320BL-2)	Lithium DC 10.8V 2000mA	
Battery Life (ST-320BL-2)	Approx. 12 hrs depending on settings	
Input Signal	12 V Pulse Input; 3 pin M-12	
Input Signal Range	60-120,000 FPM (1-2000 Hz)	
Input Pulse Width	Over 50 µs	
Input Signal Flash Delay	0-999 ms; 0-359°	
Temperature Limits	32-95°F (0-35°C)	
Humidity Limits	35 to 85% RH	
Enclosure	Aluminum & ABS	
Mounting	1/4-20 UNC Thread	
Enclosure Rating	IP54	
Product Weight	ST-320BL-1: 1.85 lb (0.84 kg); ST-320BL-2: 1.98 lb (0.90 kg)	
Package Weight	ST-320BL-1: 4.40 lb (2.0 kg); ST-320BL-2: 5.73 lb (2.6 kg)	
Approvals	CE	
Warranty	1 year	
Included Accessories	Carrying Case, ST-320BL-1: 6.5' (2 m) AC power cord; ST-320BL-2: Power Recharging Adapter with cord	

Ordering Details

Model	Description	
ST-320BL-1	Portable Black Light LED Stroboscope, 100-120 VAC Line Powered.	
ST-320BL-1-230V	Portable black light LED Stroboscope, 220 -240 VAC line powered.	
ST-320BL-1-230V-EU	Portable black light LED Stroboscope, 220 -240 VAC line powered, EU connector.	
ST-320BL-2	Portable Black Light LED Stroboscope, Rechargeable Battery with 100- 240VAC power adapter.	
ST-320BL-2-EU	Portable Black Light LED Stroboscope, Rechargeable Battery with 100- 240VAC power adapter, EU connector.	

Accessories

Model	Description
SG-320BL	Front Rubber Strobe guard for ST-320BL
ST320-HANDLE	Top Handle for ST-320BL
E2E-X5ME1-Z-USB	Proximity sensor with mini-USB connection



Operation Control Panel



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