

Nova-Strobe x - The standard for high intensity multi-function portable stroboscopes. Models are available with digital displays, battery or AC power, and a useful range of features which provide unmatched performance and value. Four models range from the Nova-Strobe **DBX** Deluxe, the most versatile battery powered digital stroboscope with internal phase shifting, down to the Nova-Strobe **BAX** Basic, the most cost effective AC powered digital stroboscope.

Both the battery powered Nova-Strobe **DBX** and AC powered Nova-Strobe **DAX** provide a range of 30 to 20,000 flashes per minute and an accuracy of $\pm 0.002\%$ of setting. Flash rates are easily adjusted to fractional RPM by a coarse/fine control knob. Individual TTL compatible input and output jacks are provided for 'daisy chaining' of multiple strobes, triggering from an external source, or providing a trigger signal to external equipment.

Both **DBX** and **DAX** provide internal phase shifting to keep the target precisely in view. Both provide x2 and $\div 2$ capability for distinguishing actual RPM from harmonic frequencies. In addition, 9 user programmable memory flash rates for repetitive measurements and storage of the last flash rate measured are included.



Features (all models)

- Internal rechargeable batteries or AC powered models
- Lightweight (Less than 2.0 pounds) for easy handling
- Continuous cool operation
- Tripod mountable

Nova Strobe DAX and DBX also add:

- NIST Traceable Calibration Certificate
- Internal phase shifting for easy reference target viewing
- Tach mode, speed measurement up to 250,000 RPM
- Power for optional sensors
- Pulse repeater output



Specifications	DBX Deluxe Battery	DAX Deluxe AC	BBX Basic Battery	BAX Basic AC
Range Flashes/Minute:	30-20,000 FPM		30-10,000 FPM	
Display:	6 Digit Numeric and 5 Digit Alphanumeric LCD			
Accuracy/Resolution:	0.002% of setting or ± 1 least significant digit / 0.01 FPM			
Flash Energy/Duration:	230 mJoule up to 3450 FPM / 8-20μsec			
Average Power-Watts:	>13W above 3450 FPM			
Flash Tube & Life:	High Power Xenon, 100 million flashes typical			
External Triggers - in/out: (1/8" (3.5mm) phone jack)	TTL (24Vdc Max) Input. Provides 3.3Vdc TTL output		N/A	
Tachometer Mode:	5-250,000 RPM -Use with optional remote sensor		N/A	
Programmable Memory:	Yes	Yes	N/A	
Internal Phase Shift:	Yes	Yes	N/A	
Operating Time:	2 hours typical @ 1800 FPM	Continuous	2 hours typical @ 1800 FPM	Continuous
Power Supply:	Internal NiMH rechargeable batteries	115 Vac, 50-400Hz or 230 Vac, 50-400Hz	Internal NiMH rechargeable batteries	115 Vac, 50-400Hz or 230 Vac, 50-400Hz
Weight:	1.9 lbs. (0.86 kg)	1.5 lbs. (0.68 kg)	1.9 lbs. (0.86 kg)	1.5 lbs. (0.68 kg)
Size (L x W x H):	Body: 9" x 3.66" x 3.56" (229 x 93 x 90mm); Reflector Housing: 4.8" (122mm) diameter; Handle: 4.25" (108mm) long			

Ordering Information

Item	Description	Part No.
BAX 115	Basic 115Vac powered xenon Strobe	6206-010
BAX 115 Kit	Same as BAX 115 plus latching carry case and spare lamp	6206-011
BAX 230	Basic 230Vac powered xenon Strobe	6206-012
BAX 230 Kit	Same as BAX 230 plus latching carry case and spare lamp	6206-013
BBX 115/230	Basic xenon Strobe, battery powered, with PSC-2U (115/230 Vac) recharger with interchangeable plugs	6207-012
BBX 115/230 Kit	Same as BBX 115/230 plus latching carry case and spare lamp	6207-013
DAX 115	Deluxe 115Vac powered Strobe with NIST certificate	6203-010
DAX 115 Kit	Same as DAX 115 plus latching carry case and spare lamp	6203-011
DAX 230	Deluxe 230Vac powered Strobe with NIST certificate	6203-012
DAX 230 Kit	Same as DAX 230 plus latching carry case and spare lamp	6203-013
DBX 115/230	Deluxe Strobe, battery powered, with PSC-2U (115/230Vac) recharger with interchangeable plugs and NIST certificate	6204-012
DBX 115/230 Kit	Same as DBX 115/230 plus latching carry case and spare lamp	6204-013

Accessories: See page 6 for compatible Nova-Strobe accessories

PSX Palm Strobe x



Features

- Patented Plug in Battery Pack
- Easy one hand operation
- Lightweight
- Flash rates to 12,500 FPM
- Tachometer mode from Self Powered Sensors
- TTL compatible input/output (3.5mm phono plug)
- NIST Certificate included

Palm Strobe x offers excellent brightness, exceptional features, rugged construction and extra long battery life. Unique one-touch joystick-type button allows single hand operation for fast fractional RPM tuning. Select mode of operation for internal tuning, external TTL pulse input, tachometer display and x2 ÷2 functions. Eight memory positions provide rapid recall of user defined frequencies. The **Palm Strobe x** can be ordered in various configurations to fit the demand of your application.

Optional Accessories



Protective Rubber Cover



Holster



Quick Change Battery Pack



Palm Strobe x Deluxe Kit

Specifications

Internal Mode Range:	100 to 12,500 FPM (Flashes per minute)
Light Power:	7.9 watts @ 6000 FPM, 150 mJoules up to 3100 FPM
Flash Lamp Life:	100 million flashes typical
Flash Duration:	10 - 30 µsec typical
Display:	6 digit alphanumeric backlit LCD display
Flash Rate Resolution:	0.1 FPM
Flash Rate Accuracy:	Greater of ±0.01% of reading or ±0.5 FPM
Tachometer Mode:	5 to 250,000 RPM
External Input:	0 to 5 Vdc (12 Vdc max.) TTL compatible, positive edge triggered
Output Pulse:	0 to 5 Vdc typical - 350µsec positive pulse (2.5mm) 1/8" phono plug
Run Time:	2 hours typical @1800 FPM >1 Hour typical @ 6000 FPM
Memory:	8 programmable flash rates and last flash rate at power down
Adjustment:	Four quadrant tuner button with blinking decade select for flash rate up and down, multiply by 2 and divide by 2
Modes:	Internal, External, Tachometer, Preset, x or ÷ by 2, locked on
Battery Power:	Removable 6Vdc rechargeable NiMH battery pack
Recharger:	100-240 Vac, 50/60Hz, includes 4 interchangeable adapters
Weight:	1.2 lbs. (0.55 kg) including battery
Strobe Dimensions:	3.04 x 9.34" (77 x 237mm)

Ordering Information

Item	Description	Part No.
Palm Strobe x	Palm Strobe x, battery pack, PSC-2U 115/230 Vac recharger, NIST certificate and manual	6205-050
Palm Strobe x Pak	Palm Strobe x, 2 battery packs, PSC-2U 115/230 Vac recharger, NIST certificate, manual and holster	6205-051
Palm Strobe x Kit	Palm Strobe x, battery pack, PSC-2U 115/230 Vac recharger, NIST certificate, spare lamp, manual and latching carry case	6205-052
Palm Strobe x Deluxe Kit	Palm Strobe x, 2 battery packs, PSC-2U 115/230 Vac recharger, NIST certificate, spare lamp, manual and latching carry case	6205-053
Accessories		
PS Input Cable	TTL pulse input cable, 6 feet (1.82m) -1/8" stereo plug to BNC male connector	6280-032
PS Output Cable	TTL pulse output cable, 6 feet (1.82m) -1/8" stereo plug to BNC male connector (CA-4044-6)	6280-037
PS Holster	Holster with belt loop and pouch	6280-043
Rubber Cover	Protective rubber cover for Palm Strobe x	6280-044

Nova-Strobe LED Stroboscopes



Features

- Brightest portable LED strobes available
- Diagnostic inspection and RPM checks
- Digital LCD backlit display (DBL, PBL)
- Tripod mounting bushing (¼-20) in handle
- CE and RoHS compliant
- NIST certificate included with DBL and PBL
- Lightweight industrial design
- 12 button keypad makes entering flash rates extremely quick (DBL, PBL models)
- Continuous, 24/7 operation (PBL)

The **Nova-Strobe LED** family of rugged industrial stroboscopes provide an extremely bright, uniform light output for performing stop motion diagnostic inspection and RPM measurements. The twelve LED light source is extremely efficient which means long battery life and continuous cool operation. A wide operating range of 30-500,000 flashes per minute covers all applications. The Basic **BBL** is designed for simple stop motion inspection and RPM measurement applications. The Deluxe **DBL** adds internal phase shifting, memory for up to 5 preset flash rates, NIST calibration certificate and tachometer mode for speed measurements up to 500,000 RPM using optional remote sensors or TTL pulse input/output. The top of the line Phaser **PBL** has all the features of the **DBL** and adds external phase delay, time delay and virtual RPM mode. The **PBL** will also run continuously, 24/7 with the power supply/recharger. Each unit is available stand alone or as a kit.



Specifications

	BBL Basic	DBL Deluxe	PBL Phaser
Flash Range (FPM/RPM):	30-500,000		
Display:	6 Digit Numeric and 5 Digit Alphanumeric LCD		
Accuracy/Resolution:	0.002% of setting or ± 1 least significant digit/ 0.01 FPM		
Light output:	3000 Lux @ 6000 FPM, 8 inches (20cm), 2% duty cycle		
Flash Duration:	Adjustable to 14 degrees /3000µsecs max		
Light Source:	12 LED Array		
Color Temperature:	6300°K		
External Triggers in/out:	N/A	TTL (24Vdc Max) Input. Provides 3.3 Vdc TTL output	
Tachometer Mode:	N/A	0-500,000 RPM (Use with optional remote sensor)	
Programmable Memory:	N/A	Yes	
Internal Phase Shift:	N/A	Yes	
Phase Delay - Degrees:	N/A	0.1 to 359.9 degrees	
Time Delay - milliseconds:	N/A	0.01 to 1000 msec.	
Virtual RPM (Slow Motion):	N/A	0-200 VRPM	
Operating Time:	8-10 hours typical @ 1800 FPM		8-10 hours typical @ 1800 FPM with batteries or continuous using power supply
Power Supply:	Internal NiMH rechargeable batteries with 115/230 50/60Hz recharger		Internal NiMH rechargeable batteries or continuous using 115/230 50/60 Hz Vac power supply/recharger
Weight:	1.9 Lbs (860g)		
Size (L x W x H):	Body: 9" x 3.66" x 3.56" (229 x 93 x 90 mm); Reflector Housing: 4.8" (122 mm) dia.; Handle: 4.254" (108 mm long)		

Ordering Information

Item	Description	Part No.
Nova-Strobe BBL	BBL Strobe, universal 115/230 recharger with interchangeable wall plugs and manual	6230-010
Nova-Strobe BBL Kit	Same as above with plastic latching carry case	6230-011
Nova-Strobe DBL	DBL Strobe, universal 115/230 recharger with interchangeable wall plugs, manual and NIST Cal	6231-010
Nova-Strobe DBL Kit	Same as above with plastic latching carry case	6231-011
Nova-Strobe PBL	PBL Strobe, universal 115/230 power supply/recharger with USA and Euro cables, manual and NIST Cal	6232-010
Nova-Strobe PBL Kit	Same as above with Deluxe water tight plastic carry case	6232-011

Accessories (compatible with all Nova-Strobes)

Item	Part No.
1. Remote Optical Laser Sensor	6180-029
2. Splash Proof Cover	6280-041
3. Protective Rubber Cover	6280-048
4. Reflective Tape, 5" roll x 1/2"	6180-070
5. Pulse input/output cable (BNC)	6280-037
6. Standard Latching Carry Case	6280-040
7. Deluxe Water Tight Carry Case	6280-049

