## **Monarch LED Stroboscopes**

## **Nova-Strobe**

- Brightest portable LED strobes available
- For diagnostic inspection and RPM checks
- Digital LCD backlit display (DBL, PBL models)
- Lightweight design with tripod mount bushing (1/4-20) in handle
- 12 button keypad for quick entry of flash rates (DBL, PBL)
- · NIST certificate included with DBL and PBL models
- Continuous, 24/7 operation (PBL)

| NOVA-STROBE 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. Prov | vides 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 (AC power):      | N/A  |                             | continuous               |  |
| Operating Time (battery power): | 8-10 hours typical @ 1800 FPM  |                             |                          |  |
| Batteries:                      | Internal NiMH rechargeable (120/240V charger included)   |                             |                          |  |
| Size (L x W x H)/Weight:        | Body: 9" x 3.66" x 3.56" (229 x 93 x 90 mm); Reflector Housing: 4.8" (122mm) dia.; Handle: 4.254" (108 mm long) / 1.9 Lbs (860g) |                             |                          |  |



Nova-Strobe industrial stroboscopes provide a bright, uniform light output. The twelve LED source is extremely efficient, which means long battery life & 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 measurements. The Deluxe DBL adds internal phase shifting, memory for 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. The top of the line Phaser PBL has all the features of the DBL plus external phase delay, time delay & virtual RPM mode. The PBL will also run continuously with the power supply/recharger.

## **Pocket LED Strobe**

- Intuitive one hand operation
- Extremely bright, uniform light
- Quiet/Cool operation
- · Digital LCD backlit display
- Compact size, long battery life
- Tripod mounting bushing (¼-20)
- No lamp replacements
- NIST Certificate included



| ORDERING INFORMATION |                     |  |  |  |
|----------------------|---------------------|--|--|--|
| Catalog No.          | MODEL               | DESCRIPTION  |  |  |
| MN/6230-010          | Nova-Strobe BBL     | BBL Strobe, universal 115/230 recharger with interchangeable wall plugs & manual             |  |  |
| MN/6230-011          | Nova-Strobe BBL Kit | Same as above with plastic latching carry case   |  |  |
| MN/6231-010          | Nova-Strobe DBL     | DBL Strobe, universal 115/230 recharger with interchangeable wall plugs, manual & NIST Cert  |  |  |
| MN/6231-011          | Nova-Strobe DBL Kit | Same as above with plastic latching carry case   |  |  |
| MN/6232-010          | Nova-Strobe PBL     | PBL Strobe, 115/230 power supply/recharger with USA and Euro cables, manual & NIST Cert      |  |  |
| MN/6232-011          | Nova-Strobe PBL Kit | Same as above with Deluxe water tight plastic carry case                                     |  |  |
| MN/6235-010          | PLS                 | Pocket LED Strobe, 115/230 VAC recharger with interchangeable wall plugs, manual & NIST Cert |  |  |
| MN/6235-011          | PLS Kit             | Same as above with latching carry case   |  |  |
| Accessories          |                     |  |  |  |
| MN/6180-029          | ROLS-P              | Remote optical laser sensor with 8 ft cable, 1/8" phone plug & 12" reflective tape           |  |  |
| MN/6280-048          |                     | Protective rubber cover for Nova-Strobes   |  |  |
| MN/6280-040          |                     | Standard latching carry case for Nova-Strobes  |  |  |
| MN/6280-073          |                     | Protective carry pouch with belt hook for PLS  |  |  |
| MN/6180-070          | T-5                 | Reflective Tape 5 foot roll, 0.5 " wide  |  |  |

| P                      | LS SPECIFICATIONS   |
|------------------------|---|
| Light Source:          | 7 LED Array   |
| Avg. Light Output:     | 1800 Lumens at 6000 FPM 8" from lens  |
| Color Temp:            | 5600°K  |
| Power:                 | Li-lon rechargeable batteries 3.6Vdc  |
| Run Time:              | 5-6 hours typical at 6000 FPM   |
| Charge Time:           | 4-5 hours typical with supplied charger   |
| Memory:                | 5 user settable memory locations  |
| Flash Duration:        | Adjustable 0.5 to 2500 $\mu sec$ or 0.1 to 18 deg. of rotation (auto adjusts with flash rate)           |
| Internal Mode:         |   |
| Flash Range:           | 30-300,000 FPM (Flashes per minute),<br>0.5 to 5000Hz   |
| Accuracy:              | 0.005% of setting or ± last digit   |
| 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, 0 to 5000Hz  |
| Tachometer Mode:       | 30 to 300,000 RPM   |
| Accuracy:              | ±0.005% of reading or ± last digit  |
| Display Update:        | 0.5 second typical above 120 RPM  |
| Trigger to Flash:      | ~15 µsec delay  |
| External Input:        | 2.5-12V peak pulse, 500ns min pulse width, pos. or neg. edge triggered (menu selectable)                |
| Pulse In to Out Delay: | <0.2µsec  |
| Output Pulse:          | 3V pulse. One pulse per flash in internal mode.<br>Mimics input pulse in external mode                  |
| LCD Display:           | 6 digit numeric plus 5 digit alpha-numeric  |
| Indicators:            | Battery level, On Target, Select, TACH, EXT icons   |
| Dimensions:            | 7.75" x 2.75" x 2.3" (197 x 70 x 58 mm)   |
|                        |   |

