illumiNova™
Fixed Mount LED Stroboscopic Inspection Systems

Description

The illumiNova™ fixed mount LED stroboscopic inspection systems are designed for continuous use in high speed applications requiring crisp, clear, stop motion quality inspection. The extraordinarily bright LED's provide an ultra uniform white spectrum light. Available in lengths from 1 to 8 feet and 3 different lens options ensures you will have light coverage for any job.   The powerful on board intuitive digital controller allows the user to quickly set flash rates, flash duration, brightness levels and many other advanced features. Flash rates can also be triggered remotely using machine mounted sensors connected directly to illumiNova's digital input or use the optional remote controller to extend the operating distance up to 100 feet. Monarch Instrument has been manufacturing the world's most popular portable stroboscopes for over 30 years. We know a thing or two about stop motion analysis.   Let us customize an illumiNova™ fixed mount strobe system to meet your application specific requirements.

Applications

Printing
- Color quality
- Registration
- Specialty packaging
- UV security markings

Converting
- Slitting (cut quality)
- Rewinding
- Laminating inspection
- Coating

Special Effects/Entertainment
- Interactive water displays
- High speed video/photography
- Amusement rides

Paper Processing
- Finishing
- Embossing
- Coating
- Die cut quality
- Perforation

Metal Processing
- Rolled steel finishing
- Foils
- Aluminum
- Cut quality

Production Line Inspection
- Cooling fans
- Tires
- Pumps

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Intuitive Control

Based on our incredibly popular Nova-Pro® series of portable inspection stroboscopes, illumiNova's on board controller makes set up and use simple and intuitive. The easy to read inverse LCD display is viewable even in high ambient light areas. Flash rates can be quickly entered using the rotary dial or the touch screen keypad. The optional remote controller can be mounted up to 100 feet away putting full control and real time information where you need it. USB or Bluetooth communications offers even more flexibility for control.

Advanced Features

- **Digital input/output**
  illumiNova™ includes digital input and output jacks. Have a machine that provides a synchronizing pulse? Simply connect your signal to the input jack of the illlumiNova™ and the flash will be synchronized with your equipment. If you need to cover a large or irregular area with light, multiple illumiNovas can be connected in series.
- **Phase/Time Delay**
  Use the phase or time delay features to adjust or "position" the virtually stopped image to suit your needs.
- **Memory**
  illumiNova™ has 10 memory presets allowing you to quickly change from one process speed to the next
- **Adjustable intensity levels**
  Three adjustable light intensity levels give you complete

control over the amount of illumination on your process. Low light settings can be used for highly reflective surfaces while high light settings may be used for darker or high contrast materials.

illumiNova™ UV

illumiNova™ fixed mount strobes are also available with ultraviolet LED's for illumination of UV security markings and UV coatings.

Remote Control

The optional wired remote controller can be mounted up to 100 feet away putting full control and real time information directly where you need it. USB or Bluetooth communications offer even more flexibility for control using PC or Android and iOS devices.

Specifications

illumiNova™ Models	100	200	300	400	500	600	700	800
Controller/Display:	6 digit numeric and 5 digit alphanumeric LCD with touch keypad and rotary tuning dial. High contrast blue background with backlight							
Flash Rate:	30 to 999,999 FPM							
Accuracy:	0.001% of setting or +/- 1 lsd							
Resolution:	6 digits to 0.001							
Flash Duration:	Adjustable: 1-120 µSecs, 0.1 to 2.0 Degrees							
LED Array Size:	12"	24"	36"	48"	60"	72"	84"	96"
Number of LED's:	108	216	324	432	540	648	756	864
Lux output @6000 FPM/Spot lens								
@100cm (39.37")	2900	5200	5360	5680	5810	5810	5810	5810
@200cm (78.74")	1250	2400	2670	2850	2910	2910	2910	2910
Available Lens Types:	**Spot:** Provides narrowest, brightest illumination area **Wide:** Produces a horizontally wide light output allowing smaller strobes to illuminate wider processes **Flood:** Produces a vertically wide light output to illuminate a larger linear process area							
External Trigger Input:	Open collector, Dry contact Input for sensors (3-5 Vdc pulse) provides 5Vdc sensor power, Isolated input 5-12Vdc 50mA max							
Prescale Input:	Adjustable from 0-1000 pulses per revolution							
Digital Output:	Provides 3.3 Vdc TTL output							
Programmable Memory:	10 Set points							
Phase Delay/Time Delay:	360° to 345°/± 50 mSecs							
Input Power:	120 or 240 Vac ±10%, 50/60Hz							
Watts Max	33W	65W	95W	120W	145W	170W	200W	225W
VA	40VA	70VA	100VA	130VA	160VA	190VA	220VA	250VA
Dimensions:								
Height (Inch/cm)	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11
Width (Inch/cm)	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11	4.375/11.11
Length (Inch/cm)	15.44/39.21	27.43/69.69	39.93/101.44	51.93/131.92	63.93/162.38	75.93/192.88	87.93/223.34	99.93/253.84
Weight: (lbs/kg)	7.42/3.37	13.26/6.02	19.18/8.70	25.02/11.35	30.10/13.65	36.69/16.64	42.53/19.29	48.36/21.94
Housing Material:	Extruded and die-cast aluminum, powder coated							
Housing Rating:	General Purpose							

illumiNova™ 800 - 8 foot fixed mount strobe has 864 bright white LED's

Flexible Illumination

illumiNova™ is available with 3 different lens options. Select the illumination area that best suits your application. **Spot:** Provides the brightest most concentrated light pattern over the tightest area of your process. The narrow focal width allows the strobe to be mounted further away from the process while still providing bright uniform lighting **Flood:** Illuminates a longer linear distance on your process. **Wide:** Illuminates a narrow band but over a much wider area for applications that are wider than the length of the strobe.

Spot	*Flood*	*Wide*

Ordering Information

Select lens type

1	Spot
2	Flood
3	Wide

Select communications

1	USB
2	Bluetooth (Coming Soon)

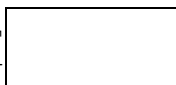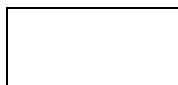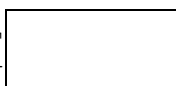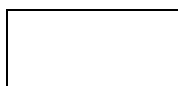| Model			Description:
illumiNova™ 100 -	-		illumiNova™ 100 - 12" fixed mount LED stroboscope with 108 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.
illumiNova™ 200 -	-		illumiNova™ 200 - 24" fixed mount LED stroboscope with 216 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.
illumiNova™ 300 -	-		illumiNova™ 300 - 36" fixed mount LED stroboscope with 324 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.
illumiNova™ 400 -	-		illumiNova™ 400 - 48" fixed mount LED stroboscope with 432 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware, and operation manual.
illumiNova™ 500 -	-		illumiNova™ 500 - 60" fixed mount LED stroboscope with 540 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.
illumiNova™ 600 -	-		illumiNova™ 600 - 72" fixed mount LED stroboscope with 648 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.
illumiNova™ 700 -	-		illumiNova™ 700 - 84" fixed mount LED stroboscope with 756 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.
illumiNova™ 800 -	-		illumiNova™ 800 - 96" fixed mount LED stroboscope with 864 LED's, 115 or 230Vac Power 50/60Hz. Includes built in full featured intelligent controller, mounting hardware and operation manual.