Nidec

Measuring Quality

DT-361 High Intensity LED Stroboscope AC Power

The DT-361 High-Intensity LED Stroboscope is a velocity analyzing and measuring device that is ideal for machinery process inspection. The DT-361 Stroboscope is capable of flashing its LED lights in a synchronous frequency to the operating machinery, creating the illusion of viewing slowed or frozen images. Utilizing this phenomenon of slowing or stopping the motion with the adjusted flash rate of its LED lights, machine parts and processes may be inspected for defects, aiding in preventative maintenance programs. The DT-361's LED technology extends operation due to the low energy requirement of the light diodes compared with xenon stroboscopes. Maintenance time and down time is reduced since there is no need to replace the bulb typical of xenon lit stroboscopes. The light output (Lux) of the LED array is far brighter than not only xenon powered stroboscopes, but all comparable LED stroboscopes on the market.

The DT-361 has a vibrant red LED display that is ideal for viewing in dark locations. The simple to use keypad plus rate adjustment dial aids in making quick changes of the flash rate to coincide with changes in the speed of your process. The dial allows fine-tune altering of the flash rate while the x2/÷2 keys enable large spanning over the entire flash range.

The DT-361 has the added feature of modifying the flash duration or on time which aids in picture clarity often necessary in printing processes. The phase shift function is ideal for rotating equipment where the user needs to change the focus on different blades, gears, or section of the machinery. The DT-361 is also capable of being synchronized with an input signal. To complete the system, the DT-361 has a power output to supply an input sensor if desired. The robust aluminum housing is NEMA4X (IP65) protected allowing usage in many harsh plant environments.

Typical applications for using the DT-361 is to determine speeds, inspect rotors, meshing gears, vibration diagnostic equipment, textile equipment, printing production lines, industrial fan inspection and many more.



Features

- *Extraordinary durability with extruded aluminum, NEMA 4X (IP65) construction.*
- *Bright LED display and simple controls aid in user operation.*
- *Phase shift (in degrees of delay time) enables visual analysis of rotating or reciprocating objects through all points of motion/time/angle*
- *Flash controller dial permits accurate adjustments to the flash rate*
- *LED technology greatly extends operation life and eliminates need to replace burned out bulbs.*
- *Capable of being synchronized with input signal from sensor or controller.*

Easy Operation Control



MEM	Store and retrieve 5 flash setting values
SIG	Change Operation from INTERNAL to EXTERNAL flash control
MODE	Select between Flash Mode or Flash Duration and phase shift settings
X2/÷2	Multiply or divide Flash Rate Setting by X2 or ÷2
+/-	Phase "SHIFT" Advance or Reverse viewed motion in degrees or milliseconds
UNIT	Select between degrees or ms in phase shift mode, select between degrees and μs in flash duration mode

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DT-361 Specifications

Range FPM (RPM)	60-120,000 ; From Input Signal 40-35,000
Accuracy	±0.02% of reading
Lux Rating	6000 FPM & 3.6° (100 μs): Distance 8″ (20 cm) 18,400 lx with 10″ (250 mm) irradiation dia., Distance 20″ (50 cm) 6200 lx with 13.5″ (350 mm) irradiation dia. 1500 FPM & 3.6° (400 μs): Distance 8″ (20 cm) 15,000 lx with 10″ (250 mm) irradiation dia., Distance 20″ (50 cm) 6000 lx with 13.5″ (350 mm) irradiation dia.
Lamp Lifetime	Typ. 50,000 hours. Varies depending on usage.
Display	6 digit Red LED
Resolution	Internal Mode 1 FPM. External Mode 0.1 FPM
Flash Duration	0.1 to 3.6° (0.14 μsec to 400 μsec)
Phase Shift	0 to 999 msec; 0 to 359°
Power Requirement	100 to 230 VAC
Synchronization Input Signal	H level: 2.5 - 12V; L level: 0 - 0.4V
Input Signal Range FPM (RPM)	40 - 35,000
Input Signal Flash Delay FPM (RPM)	60-10,000
Power Supply Output	DC12V 40mA for sensor input
Temperature Limits	32 to 104°F (0 to 40°C)
Humidity Limits	35 to 85% RH
Protection Class	NEMA 4X (IP65)
Product Weight	4 lbs (1.8 kg)
Package Weight	6 lbs (2.72 kg)
Approvals	RoHs
Included Accessories	Input Signal Connector, flash-light style attachable handle
Warranty	2 year

Ordering Details

DT-361	High Intensity LED Stroboscope with AC Power
SAS-360	Flexible swing arm for DT-361, DT-365, DT-365E LED Stroboscopes
SAS-360BASE	SAS-DT360 Mounting base
CABLE-361-10FT	Daisy chain syncing cable for DT-361 and DT-365 stroboscopes with Connectors, 10 ft length
NIST-STROBE-IN	NIST traceable certificate of calibration for stroboscopes