

## Photocontrol - NIGHTFOX Stem Mount Electronic Photocontrol, 120-277 V

Item EK4136S



### PRODUCT DESCRIPTION

NIGHTFOX electronic photocontrols permanently install on outdoor electrical boxes or outdoor lighting fixtures. Ideal for LED fixtures with long-life expectations. 1/2"-14 NPSM threaded stem fits standard outlet boxes and wall packs with a minimum installation hole size of 7/8" diameter. Come with 9" wire leads.

### FEATURES

- ▶ Non-drift silicon light sensor with IR filter
- ▶ DC relay with zero-crossing circuitry for extended life
- ▶ Conformal coated PCB
- ▶ 15-year design life
- ▶ Exceeds 10,000 ON/OFF switching cycles
- ▶ Fail ON mode
- ▶ Ideal for single or multifixture HID and LED installations (up to 1,650 W @ 277 VAC)
- ▶ 255 J MOV surge protection element
- ▶ 1/2"-14 NPSM threaded stem fits standard outlet boxes and wall packs for a minimum installation hole size of 7/8 inch diameter
- ▶ #18 AWG wire leads

### APPLICATIONS

- ▶ Outdoor Lighting Control

### TECHNICAL DATA

#### General

Model Number	EK4136S
Description	NIGHTFOX Stem Mount Electronic Photocontrol, 120-277 V
UPC Code	078275146297
Brand	Intermatic
Country of Origin (Intermatic)	MEXICO
Warranty Period	8-Year limited

#### Control Specifications

Sensor Time Delay	Instant ON; 2 sec to 5 sec OFF
Photocell Type	Silicon Diode
Photo Control Switch Type	Relay
Fail Mode	ON
Activation On	1.5 fc
Activation Off	4.5 fc
Photocontrol Type	Electronic
Application Compatibilities	LED; Incandescent; HID
Photocontrol Style	Stem Mount
Photocontrol Sensor Location	Side

#### Dimensions

Product Height (in)	2.25
Product Height (mm)	57.2
Product Width (in)	1.313

Product Width (mm)	33.3
Product Depth (in)	1.25
Product Depth (mm)	31.8
Wire Lead Length (in)	6
Wire Lead Length (mm)	152.4
Wire Size Max	#18 AWG

#### Material Specifications

Color	Gray
Cover Color	Gray
Housing Material	Polycarbonate

#### Load Ratings

Tungsten Range(s)	1000 W
Ballast Fluorescent Ranges	1800 VA
Electronic Ballast Load Ratings Ranges	6 A, 120-277 VAC, 50/60 Hz

#### Electrical Specifications

Wiring Option	Wire leads
Input Voltage Range(s)	120-277 VAC, 50/60 Hz (Nominal Voltage)
Operating Voltage Range(s)	102-305 VAC
Surge Protection Technology	255 J MOV, 5,000 A Surge

#### Packaging

Shipping Weight (lbs)	0.215
Unit Carton Dimensions (H x W x D) in	4.875 x 3 x 1.75 in

#### Operating Specifications

Expected Lifetime (Years)	15
Expected Lifetime (Operations)	10000

#### Environmental Specifications

Temperature (operation)	-40°C..70°C
Usage Environments	Outdoor

#### Standards and Certifications

UL Certification	cULus
Other Certifications and Compatibilities	Title 20; Ansi C136.24; Green Energy +
California Proposition 65	DEHP
RoHS Certification	Y

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## ACCESSORIES



22LG0120  
Light Guard Accessory for EK4000 Series  
Electronic Fix Mount Photocontrols



6LV1352  
Light Shield Accessory for EK4036S,  
EK4436SM, K4000 Series Button  
Photocontrols



K43-WP-KIT  
Wall Plate Kit for EK4036S, K4000 Series  
Button Photocontrols

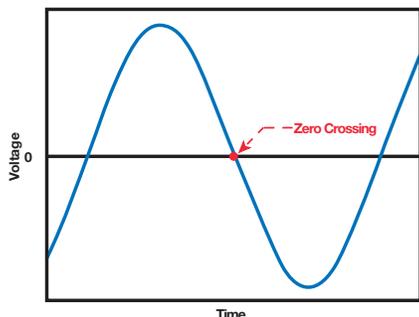


LGLBL  
Lens Sticker Accessory for EK4000 & K4000  
Series Photocontrols



# Zero-Crossing Technology Drives Long-Lasting Intermatic Solutions

Ensure your next lighting installation is designed to last for the long haul with reliable lighting controls from Intermatic. Select Intermatic timers, photocontrols and occupancy sensors include innovative zero-crossing technology, which helps minimize the damaging effects of high inrush current events.



## What is Zero Crossing?

Zero Crossing refers to the relay switching technology found in a variety of high-performance Intermatic controls. These models are designed to trigger load switching when AC voltage passes the zero mark rather than when operating current is near its peak.

Without this built-in technology, lighting controls can face severe high inrush transients that are up to 100 times the recommended operating level. Over time, this can damage or even completely destroy controls.

## Key to Preventing Damage

Zero-crossing technology helps lighting controls match the long lifespan of new LED lighting systems. By taking a proactive approach and confirming lighting controls are compatible with LED bulbs, you can avoid maintenance issues and unexpected replacement costs down the road.

## Finding the Right Match

Intermatic has a strong lineup of LED-rated controls that are UL-certified and designed to fit a wide range of applications. From outdoor billboards and parking lot lights to indoor offices and hydroponic applications, our zero-crossing solutions have you covered.

## MEET OUR TEAM OF ZERO-CROSSING SOLUTIONS

### ET2000 Series Basic+ Electronic Time Switches:

The ET2000 Series offers an easy-to-use interface and detailed scheduling options to match nearly any application. With up to 96 ON/OFF events and 50 holiday blocks, it's a robust digital control that fits seamlessly into existing Intermatic enclosures. The unit's 100-hour capacitor also helps safeguard against power outages.

### NightFox™ Pro Series:

Balancing efficiency, durability and functionality, NightFox Pro Series provides municipalities, utilities and co-ops a new level of customization with photocontrols. Tested at full load to 5 k, 10 k, and 15 k ON/OFF cycles with NEMA 410 inrush load abilities, they help meet a wide variety of application needs and budgets without sacrificing quality. They're a top-level photocontrol solution that's tested and warranted to match the life expectancy of LED fixtures.

### NightFox™ Series:

Similar to the NightFox Pro Series, standard NightFox Series photocontrols are designed to match the long life of LED and induction lighting fixtures. They come with a 10- to 20-year service life expectancy and include solid-state light sensors and relays that feature zero-crossing technology for more

precise control. Locking type models in two voltage ranges, 120-277 V or 347-480 V, which makes it easy to accommodate any power supply configuration.

### talento smart™ Time Switch:

The new talento smart product family was developed with electricians at its core. Its compact DIN rail design streamlines the installation process while Bluetooth® connectivity and the intuitive talento smart mobile app makes it easy to save time programming the device. Zero-crossing technology, 365-day scheduling and automatic Astronomic dusk-to-dawn functionality, it's the perfect digital time switch to manage energy costs in both commercial and residential settings.

### Commercial Grade Occupancy Sensors

Intermatic Commercial Grade Occupancy Sensors help installers save on energy costs while adding a level of convenience and security to all types of facilities. Choose from both in-wall and ceiling mount styles, as well as PIR or Dual Technology solutions, to match your project's needs. Our Occupancy Sensors are compatible with incandescent, fluorescent, CFL and LED fixtures, and include zero-crossing technology to maximize the lifespan and performance of fixtures.

- In-Wall Mount Models:  
IOS-DSR/DOV/DDR,  
IOS-DOV-DT-WH
- Ceiling Mount Models:  
IOS-CMP-DT-U,  
IOS-HB-U, IOS-CMP-U

Contact your Intermatic sales representative today to learn more about our full catalog of zero-crossing solutions.



# NightFox™

## Electronic Photocontrol Portfolio

Maximize your LED investment and save on energy and maintenance costs with our long-life photocontrols.



# NightFox™ Electronic Photocontrols are a long life solution for LED light fixtures.



Installing LED light fixtures that maximize the benefits of reduced maintenance and greater energy efficiency require photocontrols that are equal to the task. Intermatic's NightFox™ Electronic Photocontrol portfolio is designed to match the long life of LED lighting fixtures with a 10- to 20-year service life expectancy. This allows full realization of both the cost savings and benefits of maintenance-free lighting installations.

### **Designed, tested and warrantied for long life**

NightFox™ photocontrols are designed to include a solid-state light sensor and relays that feature zero-crossing technology for more precise control and long service life.

As a leading manufacturer of photocontrols, we truly understand the technology needed for today's lighting applications. We have designed and tested to the latest

requirements for Long Life photocontrols specifications in ANSI C136 and UL standards that ensures a maximized ROI. This testing gives us the confidence to back our products with 6-, 8- and 12-year product warranties.

### **Zero-Crossing Technology**

High-current transients have been proven to negatively impact the lifespan of traditional photocontrols, negating the reduced maintenance cost associated with LED luminaires. Learn how the NightFox™ Electronic Photocontrol portfolio uses zero-crossing technology to suppress the impact of inrush current.

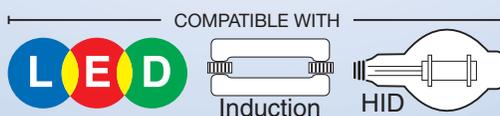
[Go to \[www.youtube.com/user/IntermaticInc\]\(http://www.youtube.com/user/IntermaticInc\)](http://www.youtube.com/user/IntermaticInc)



#### Portfolio highlights:

- Multi-voltage 120-277 V, 347 and 480 V models, accommodate any supply power configuration
- Zero-crossing electronic circuitry for extended life\*
- Conformal coated PCB assemblies for long term reliability\*
- Non-drift silicon light sensor with IR filter
- Enhanced surge protection with 255 J, 510 J, and 685 J MOV components
- Meet or exceed ANSI C136.10/C136.24 and UL/CSA requirements
- Fail ON setting keeps the light ON until a photocontrol can be serviced, ensuring safety and security
- Tested to full ON/OFF lifecycles under tungsten, magnetic and electronic ballast/LED driver loads
- Standard, Specifier and Select grade locking type models feature 6-, 8- and 12-year warranties
- 10- to 20-year design life

\* Except Standard grade locking type models.



# NightFox™ Locking Type Photocontrols

Our locking type design facilitates fast installation and changeover of photocontrols. They enable simple and reliable dusk-to-dawn, ON/OFF control of outdoor lighting applications, including street lighting, parking lots, pedestrian pathways and athletic facilities.

Specifier, Select and Standard models fit your needs, light fixture life expectancy and budget.

	 		 		
	Specifier		Select		Standard
Model #	LED4536SC	LED4537SC	EK4536	EK4537	ELC4536
Operating Voltage	120-277 VAC, 50/60 Hz		120-277 VAC, 50/60 Hz		120-277 VAC, 50/60 Hz
Load Ratings					
Tungsten	1000 W		1000 W		1000 W
Magnetic Ballast	1800 VA		1800 VA		1800 VA
Electronic Ballast	8 A		6 A		2 A
Activation	Instant ON, 2-5 Sec. Delay OFF		Instant ON, 2-5 Sec. Delay OFF		Instant ON, 2-5 Sec. Delay OFF
Light Level	1.5 fc ON; 2.25 fc OFF		1.5 fc ON; 2.25 fc OFF		1.5 fc ON; 2.25 fc OFF
Time Delay	2 to 5 sec		2 to 5 sec		2 to 5 sec
MOV*	510 J	685 J	510 J	685 J	510 J
Surge Protection Level per ANSI C136.10	10 kV/5 kA		10 kV/5 kA		6kV/3 kA
ON/OFF Switching Cycles	15,000 Plus		10,000 Plus		5,000 Plus
Design Life	20-year		15-year		10-year
Warranty					

\*Metal Oxide Varistor



# NightFox™ Fixed Mount Photocontrols

Fixed mount photocontrols provide an energy-saving solution for light fixtures designed with knockouts. The photocontrol can be permanently affixed onto wall packs, outdoor light posts or other exterior lighting installations. Swivel-type models allow the flexibility to adjust the photo eye based on the direction of the light.

A variety of styles meets practically any type of installation requirement.

								
	Button			In-Wall	Stem Mount Side Lens, Plastic			Stem Mount Side Lens, Metal
Model #	EK4036S	EK4027S	EK4035S*	EK4336S	EK4136S	EK4127S	EK4135S*	EK4436SM
Operating Voltage	120-277 VAC 50/60 Hz	347 VAC 50/60 Hz	480 VAC 50/60 Hz	120-277 VAC 50/60 Hz	120-277 VAC 50/60 Hz	347 VAC 50/60 Hz	480V 50/60 Hz	120-277 VAC 50/60 Hz
Load Ratings								
Tungsten	1000 W							
Magnetic Ballast	1800 VA							
Electronic Ballast	6 A	2 A	0.35 A**	6 A	6 A	2 A	0.35 A**	6 A

				
	Stem & Swivel Side Lens			Stem & Swivel Top Lens
Model #	EK4236S	EK4227S	EK4235S*	EK4736S
Operating Voltage	120-277 VAC 50/60 Hz	347 VAC 50/60 Hz	480 VAC 50/60 Hz	120-277 VAC 50/60 Hz
Load Ratings				
Tungsten	1000 W			
Magnetic Ballast	1800 VA			
Electronic Ballast	6 A	2 A	0.35 A**	6 A

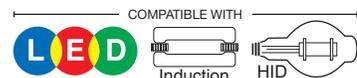
Common Ratings	
Activation	1.5 fc ON; 4.4 fc OFF
Time Delay	2 to 5 sec
MOV*	255 J/5,000 A surge
Surge Protection Level per ANSI C136.10	6 kV/3 kA
ON/OFF Switching Cycles	10,000 Plus
Wire Leads	#18 AWG, 9" or 6" L
Design Life	15-year
Warranty	<b>8</b> YEAR Limited Warranty

\* Not UL/CSA certified

\*\* Tested with 150 W LED driver with 120 Apk / 100µs in-rush peak current

Adjust photo eye sensitivity or nuisance cycling with these accessories.

6LV1352	<b>Light Shield</b> For use with EK4036S and EK4336S.
22LG116	<b>Light Guard</b> Metal bracket/shutter/glider for use with EK4100 and EK4200.
LGLBL	<b>Lens Stickers</b> 12 stickers/pack. For use with all models.



Lighting Controls | Surge Protection | Weatherproof | Photocontrols | Timers | Defrost/Refrigeration Controls



[Intermatic.com](https://www.intermatic.com)

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