



# ELECTRONIC PHOTOCONTROLS

## Unsurpassed Quality & Dependability

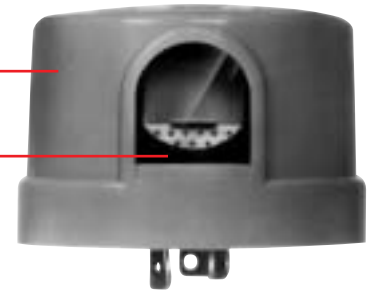
For more than 45 years, Precision Multiple Controls has manufactured locking-type photocontrols for the utility industry. During this time, our commitment to quality—demonstrated by our use of only the highest grade materials and components—has created an excellent reputation for dependability.

Our electronic models, offer a tight turn-on/turn-off ratio that will maximize energy savings and are available with or without a built-in time delay.

### Impact Resistant Housing

Because it's molded from UV stabilized polypropylene, our weatherproof cover has excellent color retention. Low degree of flammability, high resistance to ultraviolet light, ozone exposure and low temperature impact strength all exceed ULU requirements. Meets ULU 773. (Not shown. See fig. 1, right page)

Our UV stabilized acrylic window will not crack, craze or discolor. It will maintain its clarity and light transmission quality during the life of the photocontrol.



### Lightning/Surge Protection

190 Joule MOV. Secondary zener diodes and surge-suppressing capacitors for added protection are standard. High Joule ratings are available (consult factory).

### State of Art Technology

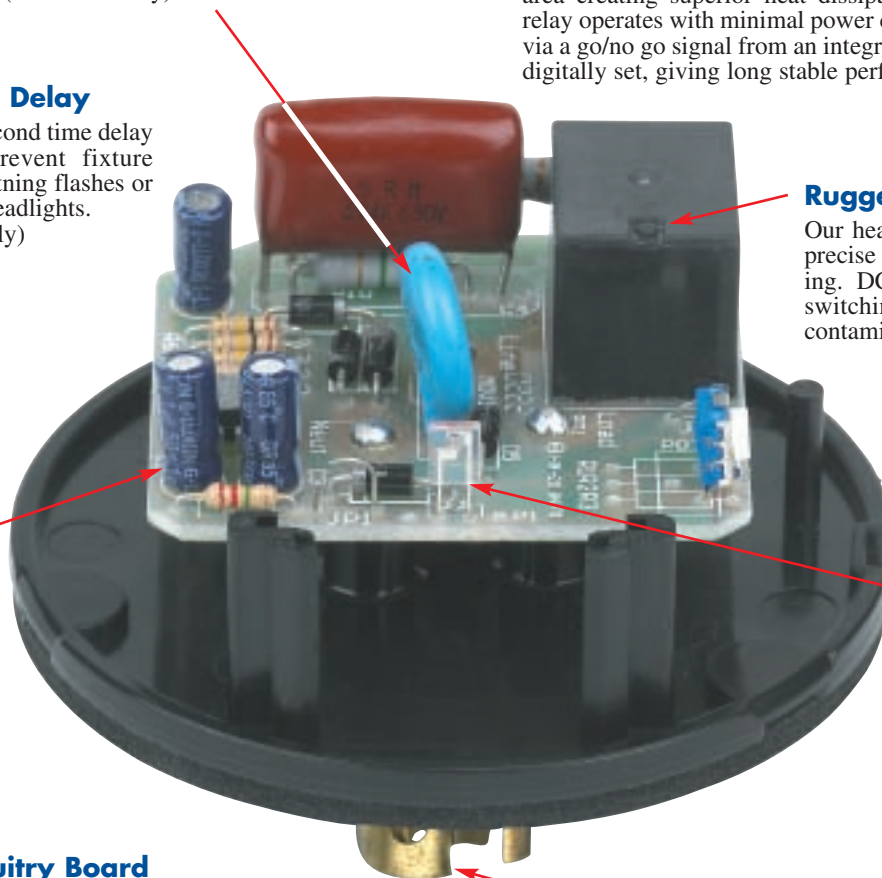
Using State of the Art, Solid State Technology, our circuit board requires fewer components, offering a wide surface area creating superior heat dissipation. The D.C. powered relay operates with minimal power consumption and operates via a go/no go signal from an integrated chip. Light levels are digitally set, giving long stable performance.

### Optional Time Delay

A built-in 2 to 4 second time delay is available to prevent fixture cycling due to lightning flashes or stray automobile headlights. (On the off side only)

### Rugged DC Relay

Our heavy-duty DC relay provides quick, precise response and chatter-free switching. DC relay is fully sealed to protect switching element from environmental contaminants.



### Drift-free Sensing

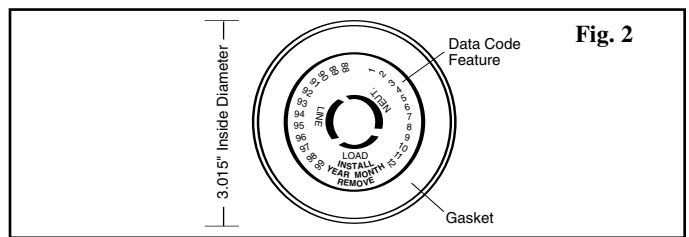
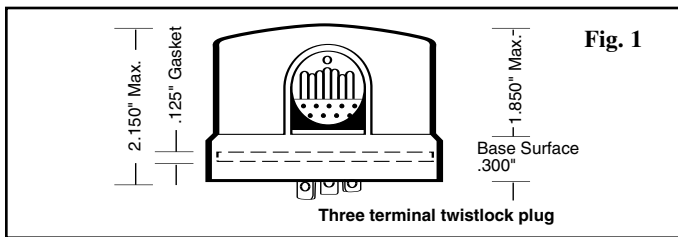
Choice of either a cadmium sulfide cell, (see photo on cover), or a fully sealed silicon sensor, (as shown) for long term cell stability. In either case, minimal power dissipation prevents drift-causing cell heat. Silicon sensor equipped with filter is available upon request.

### Elevated Circuitry Board

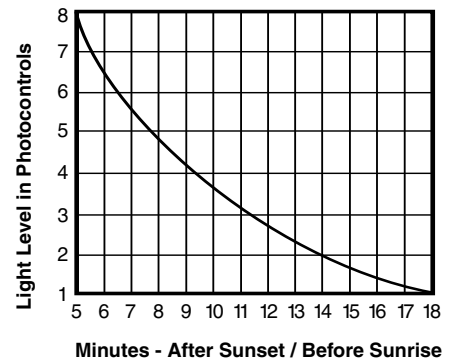
Printed circuit board is mounted on standoffs to isolate electronic components from luminaire heat conducted by the plug blades. The resultant air flow allows components to operate at lower temperatures and thereby assure longer, dependable service. (See photo on cover.)

### Solid Brass Plug Blades

Resist corrosion and have high load/current carrying ability.



**The Illumination Curve**, at right, will help you calculate the savings you can realize from Precision's energy-efficient electronic photocontrols. A tighter off/on ratio will allow closer turn on and turn off light levels so that you can reduce luminaire burning hours and reduce energy usage every day. **EXAMPLE:** An electronic photocontrol that turns on at 1fc and off at 1.5fc will save about 7 minutes per day per fixture compared to an electro-mechanical photocontrol that turns on at 1fc and off at 5fc.



| SPECIFICATIONS   |  |
|--|--|
| <p><b>Supply Voltage</b><br/>           EC120 Series<br/>           105-130 volts, 50/60 Hz AC (120V nominal).<br/>           EC240 Series<br/>           200-300 volts, 50/60 Hz AC (240V nominal).<br/>           ECDV Series<br/>           105-285 volts, 50/60 Hz AC (dual-volt).</p> <p><b>Load Rating</b><br/>           1000 watts/1800 VA max. SPST, N.C.<br/>           (1000 watts incandescent)<br/>           (1800 VA mercury vapor, Hi Pressure Sodium)</p> <p><b>Life at Rated Load</b><br/>           5,000 On-off operations</p> <p><b>Operating Levels</b><br/>           Turn-on 1.5 Fc + 0.3 fc nominal. Turn-off/Turn-on ratio: 1.5 to 1. Other settings available.</p> <p><b>Dielectric Strength</b><br/>           5KV minimum between any current-carrying part and metal mounting surface.</p> | <p><b>Power Consumption</b> : 0.6 watts @ 120 V</p> <p><b>Lightning Protection</b><br/>           All Precision electronic models come standard with a 320 Joule MOV.</p> <p><b>Time Delay</b><br/>           A 2 to 4 second time delay is standard; other delays are optional. (Only on the off side)</p> <p><b>Ambient Temperature Range</b><br/>           -40°F to +158°F<br/>           -40°C to +70°C</p> <p><b>Moisture Resistance</b><br/>           100% relative humidity</p> <p><b>Mechanical</b><br/>           Cover - UV stabilized polypropylene<br/>           Chassis - Molded polycarbonate<br/>           Plug blades - Solid brass/3 pole locking<br/>           Gasket - Cross linked polyethylene</p> |

## Ordering Information: Please specify the basic model number plus the suffix code letter for features shown below.

### PRECISION Electronic Series

Example: EC120 - A C

| Precision Control Model | Voltage | Code | Turn-on Levels | Code | Sensor Options   | Surge Protection |
|-------------------------|---------|------|----------------|------|------------------|------------------|
| EC 120                  | 105-130 | A    | 1.0 fc         | C    | Cds Surface      | Standard         |
| EC 240                  | 200-300 | B    | 1.5 fc         |      | Passivated Cell  | 320 Joule MOV    |
| EC DV                   | 105-300 | C    | 2.0 fc         | P    | Silicon          |                  |
|                         |         |      |                | F    | Filtered Silicon |                  |

### Direct Replacement Catalog Numbers for The Precision 8000 Series and Competitive Products

| Precision Electronic Model # |          | Precision Older Control Model # |          | Dark to Light Model #        |          | Fisher Pierce Model # |
|------------------------------|----------|---------------------------------|----------|------------------------------|----------|-----------------------|
| EC120                        | Replaces | 8660                            | Replaces | DP120-1.5-STM / D120-1.5-STM | Replaces | 7571B-MCB / 7671B-MLB |
| EC240                        | Replaces | 8672                            | Replaces | DP240-1.5-STM / D240-1.5-STM | Replaces | 7572B-MCB / 7672B-MLB |
| ECDV                         | Replaces | 8690                            | Replaces | DP124-1.5-STM / D124-1.5-STM | Replaces | 7573B-MCB / 7673B-MLB |

email: [precision@precisionmulticontrols.com](mailto:precision@precisionmulticontrols.com)

# PERMATROL® MULTIPLE RELAYS FOR STREET LIGHTING



**P**ermatrol multiple relays have been manufactured for over 50 years, providing centralized switching for a group of light fixtures. Use of Permatrol relays effectively increases the load switching capacity of a photocontrol or any other switching device when needed.

Over ten thousand Permatrols have been installed in more than 30 countries around the world, in every area of the U.S.A. and Canada over the years. Used primarily by the power utilities for the control of street and area lighting. Rugged, time tested, and meets a variety of utility standards as well. Custom configurations are also available.

Rated 30 and 60 amp. Normally open or normally closed contacts at night. Mercury, as well as electro mechanical type contractors, with or without photocontrol receptacle.



The Permatrol Model SLHM is unique pole mounted unit with a non-resettable hour meter which can be externally read. This allows a reading to be made from time to time so that the actual burn hours of the street lighting in that latitude can be calculated. A simple indicator which also serves to determine the quality of the photocontrols used on the system. Not all photocontrols are equal. Utility grade photocontrols have narrow on to off light level ratios, whereas commercial grade units have wide on to off ratios which result in longer lamp burning hours. Request Model SLHM information from our Sales Department.

 **PRECISION**

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