Lighting Control System

About Lighting Control System

Lighting Control System is a device that controls electric lights for a building or residence. It consists of a device including photoelectric components and relay switch. Lighting Control System usually is applicable to AC electrical light fixture for outdoor, that control ambient light, also use to AC power supply management for other electric products.

A major advantage of a lighting control system over conventional lighting is the ability to control any device from any interface. It allows users the ability to toggle power of lights, dim lights, and program lighting levels. When lighting control detects the ambient light is less than programmed lighting level, the light fixture turns on automatically. While lighting control detects the ambient light is above the programmed lighting level, the lighting control turns off.

In addition, lighting control systems provide the ability to automatically power a device based on programming events such as time of day or offset from a time, sunrise/ sunset or specific days in a month or year, alarm conditions ....etc.

Touch control can work upon the ambient light reach to setting light level

Time-Delay control works after some decade seconds at the time when ambient light reach to setting light level. It gives advantage to prevent interference from flash or car light at night time.

The climate conditions such as Ultraviolet rays could result in unfavorable durability of lighting control. 4~5 years to replace a new one is recommended.
[**Button Control**]

**LMLC-001 Button Control**

- Rated voltage: 120V / 220V / 240V / 277V
- Rated loading: 500W, 850VA ballast
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Lead wire length: 180mm AWG#18 wire
- Electrical Life: 6,500 cycles

**Features:**

- SPST-NO
- Thermal switch
- Polycarbonate enclosure & eye
- 1/2” Cds photocell
- 3/8” – 18 thread nipple, with rubber gasket & plastic lock-nut
- High grade leads available
- Append 2 numeric digits to indicate lead length in inch
- Applicable to control passage lighting and doorway lighting automatically according to ambient lighting level
- Raintight for outdoor use
- Certificate:

[UL] [cUL]

[**Swivel Control**]

**LMLC-002 Swivel Control**

- Rated voltage: 120V / 220V / 240V / 277V
- Rated loading: 1000W, 1000VA ballast
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Lead wire length: 150mm
- Electrical Life: 6,500 cycles

**Features:**

- SPST-NO
- Thermal switch
- Polycarbonate enclosure & eye
- 1/2” Cds photocell
- 1/2” threaded conduit, with rubber gasket & zinc alloy lock-nut
- Append 2 numeric digits to indicate lead length in inch
- Applicable to control passage lighting and doorway lighting automatically according to ambient lighting level
- Assembled swivel with the sensor/switch body for direction adjustable after installation.
- Raintight for outdoor use
Conduit Thermal Control | Direct Wire-in Thermal Control

[Swivel Control]

LMLC-003 Swivel Control
- Rated voltage: 120V / 220V / 240V / 277V
- Rated loading: 1000W, 1000VA ballast
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40ºC ~ +70ºC
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Lead wire length: 150mm
- Electrical Life: 6,500 cycles

Features:
- SPST-NO
- Thermal switch
- Polycarbonate enclosure & eye
- 1/2” Cds photocell
- 1/2” threaded conduit, with rubber gasket & zinc alloy lock-nut
- Append 2 numeric digits to indicate lead length in inch
- Applicable to control passage lighting and doorway lighting automatically according to ambient lighting level
- Raintight for outdoor use

[Swivel Control]

LMLC-004 Swivel Control
- Rated voltage: 120V / 220V / 240V / 277V
- Rated loading: 1000W, 1000VA ballast
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40ºC ~ +70ºC
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Lead wire length: 150mm
- Electrical Life: 6,500 cycles

Features:
- SPST-NO
- Thermal switch
- Polycarbonate enclosure & eye
- 1/2” Cds photocell
- 1/2” threaded conduit, with rubber gasket & zinc alloy lock-nut
- Append 2 numeric digits to indicate lead length in inch
- Applicable to control passage lighting and doorway lighting automatically according to ambient lighting level
- Assembled swivel with the sensor/switch body for direction adjustable after installation.
- Light shielding slide for performance adjustment.
- Raintight for outdoor use
LMLC-005/LMLC-006/LMLC-007 Swivel Control

- Rated voltage: 120V / 220V / 240V / 277V
- Rated loading: 3000W, 3000VA ballast (LMLC-007)
- Light level: ON/OFF
  10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Lead wire: 150mm AWG#14 (LMLC-005 & LMLC-006)
- Lead wire: 150mm AWG#10 (LMLC-007)
- Rated: 105°C
- Electrical Life: 6,500 cycles

Features:
- SPST-NO
- Thermal switch
- Polycarbonate enclosure (LMLC-005)
- Aluminum die-cast housing (LMLC-006 & LMLC-007)
- 1/2” Cds photocell (LMLC-005 & LMLC-006)
- 1” Cds photocell (LMLC-007)
- 1/2” threaded conduit, with rubber gasket & zinc alloy lock-nut
- Append V for additional swivel; 2 numeric digits to indicate lead length in inch
- Time-delay: 30~60 seconds, eliminate turning-off by headlights at night.
- Die-cast enclosure for vandalism protection.
- Waterproof, applicable for outdoor and underwater.
- Light shielding slide for field performance adjustment
- Optional swivel with the sensor/switch body for direction adjustable after installation.
Plug-In Locking Control

[ Instant Electromagnetic Control ]

LMLC-008 Instant Electromagnetic Control

- Rated voltage: 120V / 220V / 240V / 277V
- Rated loading: 1000W, 1800VA ballast
- Light level: ON/OFF
  - 6 lux ON (dusk); 50 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 5,000 cycles

Features:
- SPST-NO
- Electromagnetic AC relay switching
- UV stabilized polycarbonate cover & clear window
- High impact PBT (polybutylene terephthalate) base
- 1” Cds photocell for standard; 1/2” Cds photocell with heat sink available.
- 110J/3500A MOV for standard
- 235J & 460J MOV available
- Append “15” for 235J or “23” for 460J MOV
- Append “U” for 1” photocell
- Easy to maintain Twist-lock
- IP65 protection while installed
- Easy to test instant switching-over
- Multi-volts available
- Surge Arrester built-in
- Certificate:

[ Semi-Electric Control ]

LMLC-009 Semi-Electric Control

- Rated voltage: 120V / 240V or 120/240 dual-volt
- Rated loading: 1000W, 1800VA ballast
- Light level: ON/OFF
  - 10~15 lux ON (dusk); 30~40 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 5,000 cycles

Features:
- Thermal switch driven by control circuit
- UV stabilized polycarbonate cover
- High impact PBT (polybutylene terephthalate) base
- 1/2” Cds photocell
- Easy to maintain Twist-lock
- IP65 protection while installed
- 30~60 seconds time delay switching-over for luminaries protection
- Advanced stable performance
**Plug-In Locking Control** | **Twist-Lock/Plug-In Locking Type Control**

### [Time-Delay Thermal Control]

**LMLC-010 Time-Delay Thermal Control**

- Rated voltage: 120V / 220V / 208V / 277V
- Rated loading: 1800W, 1000VA ballast
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Enclosure color: grey / maroon / blue (M & H types)
- Clear enclosure: available
- Electrical Life: 6,500 cycles

**Features:**

- SPST-NO
- Electromagnetic AC relay switching
- UV stabilized polycarbonate cover & clear window
- High impact PBT (polybutylene terephthalate) base
- 1” Cds photocell for standard; 1/2” Cds photocell with heat sink available.
- 110J/3500A MOV for standard
- 235J & 460J MOV available
- Append “M” for medium cover, or “H” for higher cover
- Append “15” for 235J or “23” for 460J MOV
- Append “U” for 1” photocell
- Easy to maintain Twist-lock
- IP65 protection while installed
- 30~120 seconds time-delay switching-over for luminaries protection
- Surge Arrester built-in
- Various enclosure size available
- Certificate: [UL] [cUL]
**[Electric Control]**

**LMLC-011 Electric Control**
- Rated voltage: 110V-277VAC
- Rated loading: 1000W, 1800VA ballast
- Light level: ON/OFF
  - 6 lux ON (dusk); 50 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 5,000 cycles

**Features:**
- Photodiode sensor
- Electromagnetic DC relay switching
- UV stabilized polycarbonate cover
- High impact PBT (polybutylene terephthalate) base
- Easy to maintain Twist-lock
- IP65 protection while installed
- 5~20 seconds time delay switching-over for luminaries protection
- Unique ON-OFF levels for multi-volts

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**[Electric Control – Fail On mode]**

**LMLC-012 Electric Control**
- Rated voltage: 110V-277VAC
- Rated loading: 1000W, 1800VA ballast
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 5,000 cycles

**Features:**
- Photodiode sensor
- Electromagnetic DC relay switching (SPST-NO)
- UV stabilized polycarbonate cover
- High impact PBT (polybutylene terephthalate) base
- Easy to maintain Twist-lock & Fail-On mode
- IP65 protection while installed
- 5~20 seconds time delay switching-over for luminaries protection
- Unique ON-OFF levels for multi-volts
**[ Electric Control - Reversed ]**

LMLC-013 Electric Control - Reversed

- Rated voltage : 110V-277VAC
- Rated loading : 1000W, 1800VA ballast
- Light level : ON/OFF
  - 30~40 lux ON (dusk) ; 10~20 lux OFF (dawn)
- Ambient temperature : -40ºC ~ +70ºC
- Related humidity : 96%
- Power consumption : 1.5VA Max.
- Electrical Life : 5,000 cycles

**Features :**
- Photodiode sensor
- Electromagnetic DC relay switching
- UV stabilized polycarbonate cover
- High impact PBT (polybutylene terephthalate) base
- Earlier turning-off in dawn for saving energy
- Easy to maintain Twist-lock
- IP65 protection while installed
- 5~20 seconds time delay switching-over for luminaries protection
- Unique ON-OFF levels for multi-volts

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**[ Shorting Cap ]**

LMLC-014 Shorting Cap

- Rated loading : 1000W, 1800VA ballast 480V Max.
- Cap color : clear or black

**Features :**
- Intend to short a twist-lock photocontrol receptacle while under maintain
- Easy to maintain Twist-lock
- IP65 protection while installed
- Surge protection available
- UV stabilized polycarbonate cover
- High impact PBT (polybutylene terephthalate) base

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**[ Open Cap ]**

LMLC-015 Open Cap

- Rated loading : 480V Max.
- Cap color : maroon

**Features :**
- Intend to temporarily turn-off a luminaire with twist-lock receptable
- Easy to maintain Twist-lock
- IP65 protection while installed
- UV stabilized polycarbonate cover
- High impact PBT (polybutylene terephthalate) base
Plug-In Locking Control

Twist-Lock/Plug-In Locking Type Control

[ Omni Directional – BS version ]

LMLC-016/LMLC-017/LMLC-018/LMLC-019
Omni Directional (BS version)

- Rated voltage: 220-240VAC / 110-277VAC
- Rated loading: 1000W, 1800VA ballast
- Light level: ON/OFF
  10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40ºC ~ +70ºC
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 5,000 cycles

Features:
- Thermal / Semi-electronic/Electronic
- BS 5972:1990 Omni-directional
- Easy to install Omni-direction meeting BS 5972
- Easy to maintain twist-lock meeting ANSI C136.10
- LMLC-016: Thermal switch providing 30~60 seconds time-delay
- LMLC-017: PCB controlled advanced stable thermal switch
- Polycarbonate enclosure in opal or frosted clear
- Cds sensor and thermal switch (LMLC-016)
- Photodiode and DC relay switching (LMLC-018/LMLC-019)
LMLC-020/LMLC-021 Bulb Holder Control

- Rated voltage: 120VAC or 240VAC
- Rated loading: 100W / 150W
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40ºC ~ +70ºC
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 2,500 cycles

Features:
- Thermal switch with 30~60 seconds time-delay applicable for all luminaires
- 150W (up) or 100W (down) maximum loading
- Electronic switching for incandescent bulbs only
- Polycarbonate / PPS enclosure
- Cds sensor
- Nickel plated brass contacts

LMLC-022/LMLC-023/LMLC-024 Bulb Holder Control

- Rated voltage: 120VAC or 240VAC
- Rated loading: 60W / 100W
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 15 lux OFF (dawn)
- Ambient temperature: -40ºC ~ +70ºC
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 2,500 cycles

Features:
- 100W (up) or 60W (down) maximum loading
- Electronic switching for incandescent bulbs only
- Polycarbonate / PPS enclosure
- Cds sensor
- Nickel plated brass contacts

Features:
- 100W (up) or 60W (down) maximum loading
- Electronic switching for incandescent bulbs only
- Polycarbonate / PPS enclosure
- Photodiode sensor
- Nickel plated brass contacts
**Direct Wire-In Control & Mini-Twist Control**

**[ Electronic Wire-In Control ]**

LMLC-025 Electronic Wire-In Control

- Rated voltage: 220-240VAC
- Rated loading: 2.5 Amp Max.
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn)
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Lead wire: 180mm
- Electrical Life: 5,000 cycles

**Features:**

- Direct wire-in
- 5~20 seconds time-delay for luminaries protection
- Extended sensor parts for engineering convenience
- Polycarbonate enclosure
- Photodiode sensor
- Rubber gasket & lock-nut plastic

**[ Mini-Twist-Lock Control ]**

LMLC-026/LMLC-027 Mini-Twist Control

- Rated voltage: 120VAC or 240VAC
- Rated loading: 100W or 150W (LMLC-026)
- Rated loading: 60W or 100W (LMLC-027)
- Light level: ON/OFF
  - 10~20 lux ON (dusk); 15 lux OFF (dawn) – LMLC-027
  - 10~20 lux ON (dusk); 30~60 lux OFF (dawn) – LMLC-026
- Ambient temperature: -40°C ~ +70°C
- Related humidity: 96%
- Power consumption: 1.5VA Max.
- Electrical Life: 2,500 cycles

**Features: LMLC-026**

- Thermal switch with 30~60 seconds time-delay for luminaries protection
- Electronic switching for incandescent bulbs
- Polycarbonate enclosure
- Cds sensor

**Features: LMLC-027**

- Electronic switching for incandescent bulbs
- Polycarbonate enclosure
- Photodiode sensor
- Printed circuit board
**TWIST-LOCK RECEPTACLE**

### [Receptacle for Luminaires Assembly]

**LMLC-028 Receptacle for Luminaires Assembly**
- 480V Max. 15 Amp Max.
- Ambient temperature: -40°C ~ +80°C
- Related humidity: 99%
- Weight: approx. 60g

**Features:**
- UL773 / ANSI C136.10-1996 receptacle for luminaires
- UL & C-UL recognized
- Phenolic socket
- Brass / Phosphor Bronze contacts
- AWG #14 / Rated 105°C or 150°C leads, 6” minimum

### [Receptacle for Wall Mounting]

**LMLC-029/LMLC-030 Receptacle for Wall Mounting**
- 480V Max. 15 Amp Max.
- Ambient temperature: -40°C ~ +80°C
- Related humidity: 99%
- Weight: approx. 100g

**Features:**
- UL773 / ANSI C136.10-1996 receptacle for wall mount
- UL & C-UL recognized
- Phenolic socket
- Brass / Phosphor Bronze contacts
- AWG #14 / Rated 105°C leads, 6” minimum
- ABS waterproof back cover
- Various aluminum mounting bracket
- 1/2” conduit with zinc alloy lock-nut

### [BS Twist-Lock Receptacle]

**LMLC-031/LMLC-032 BS Twist-Lock Receptacle**
- 240V Max. 10 Amp Max.
- Ambient temperature: -40°C ~ +80°C
- Related humidity: 99%
- Weight: approx. 100g

**Features:**
- BS5972 / ANSI C136.10-1996 receptacle for wall mounting
- Field connection (LMLC-031) or Wall Mounting (LMLC-032)
- Polycarbonate socket & bracket
- Phosphor Bronze contacts
- Rubber basket
- Waterproof temporary cover

### [Compact Receptacle for Luminaires]

**LMLC-033 Compact Receptacle for Luminaires**
- 480V Max. 15 Amp Max.
- Ambient temperature: -40°C ~ +80°C
- Related humidity: 99%
- Weight: approx. 100g

**Features:**
- UL773 / ANSI C136.10-1996 receptacle for luminaires
- Field rotation available
- Phenolic socket
- Brass / Phosphor Bronze contacts
- AWG #14 / AWM1015 leads, 6” minimum
PHOTOELECTRIC CONTROL

LMLC-034 Thermal Photo Control
- Rated voltage: 110V / 127V / 230V / 240V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30" ~ 180"
- Electrical Life: >6,500 cycles

LMLC-035 Electromagnetic Photo Control
- Rated voltage: 120V / 240V, 125V~287V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: <15"
- Electrical Life: >6,500 cycles

LMLC-036 Electronic Photo Control
- Rated voltage: 105V-240V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 10~16 lux / 20~30 lux
- Acting time: <15"
- Electrical Life: >6,500 cycles

LMLC-037/LMLC-038 Electronic Photo Control
- Rated voltage: 105V-240V, 50/60Hz
- Rated current: 3A / 6A
- Light level: ON/OFF; 10~30 lux / 40~120 lux
- Acting time: <15"
- Electrical Life: >6,500 cycles

LMLC-039 Thermal Photo Control
- Rated voltage: 120V / 127V / 230V / 240V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30" ~ 180"
- Electrical Life: >6,500 cycles

LMLC-040 Thermal Photo Control
- Rated voltage: 110V / 127V / 230V / 240V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 20~30 lux / 100~150 lux
- Acting time: 30" ~ 180"
- Electrical Life: >6,500 cycles
**LMLC-041 Thermal Photo Control**
- Rated voltage: 110V / 127V / 230V / 240V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30” ~ 180”
- Electrical Life: >6,500 cycles

**LMLC-042 Thermal Photo Control**
- Rated voltage: 110V / 127V / 230V / 240V, 50/60Hz
- Watt loading: 1,000W, 2000W incandescent lamps
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30” ~ 180”
- Electrical Life: >6,500 cycles

**LMLC-043 Thermal Photo Control**
- Rated voltage: 110V / 127V / 230V / 240V, 50/60Hz
- Rated current: 3A / 6A
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30” ~ 180”
- Electrical Life: >6,500 cycles

**LMLC-044 Thermal Photo Control**
- Rated voltage: 105V-240V, 50/60Hz
- Rated current: 10A / 16A
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30” ~ 180”
- Electrical Life: >6,500 cycles

**LMLC-045 Thermal Photo Control**
- Rated voltage: 110V / 127V / 230V / 240V, 50/60Hz
- Rated current: 10A / 15A
- Light level: ON/OFF; 10~16 lux / 50~80 lux
- Acting time: 30” ~ 180”
- Electrical Life: >6,500 cycles
LMLC-046/LMLC-047/LMLC-048 Photo Control Receptacle

- Rated voltage: 150V-480V
- Rated current: 10A / 15A
- Receptacle circumrotation: 360°

LMLC-049/LMLC-050/LMLC-051 Photo Control Receptacle

- Rated voltage: 120V-230V
- Rated current: 10A / 15A
- Receptacle circumrotation: 90° / 180°

LMLC-052
- Rated voltage: 120V/240V
- Power load: 150W

LMLC-053
- Rated voltage: 120V/240V
- Power load: 150W

LMLC-054
- Rated voltage: 120V/240V
- Power load: 300W

LMLC-055
- Rated voltage: 120V/240V
- Power load: 150W
LMLC-056 Photo Control Switch
- Rated voltage: 110V / 220VAC, 50/60Hz
- Light level: 5~45 lux
- Rated current: 10A

LMLC-057 Photo Control Switch
- Rated voltage: 110V / 220VAC, 50/60Hz
- Light level: 5~45 lux
- Rated power load: 1200W (220VAC)
  800W (110VAC)

LMLC-058 Photo Control Switch
- Rated voltage: 110V / 220VAC, 50/60Hz
- Light level: 5~45 lux
- Rated power load: 1200W (220VAC)
  800W (110VAC)

LMLC-059 Photo Control Switch
- Rated voltage: 110V / 220VAC, 50/60Hz
- Light level: 5~45 lux
- Rated current: 1A / 3A

LMLC-060 Photo Control Switch
- Rated voltage: 110V / 220VAC, 50/60Hz
- Light level: 5~45 lux
- Rated current: 10A

LMLC-061/LMLC-062 Photo Control Switch
- Rated voltage: 110V / 220VAC, 50/60Hz
- Light level: 20~70 lux
- Rated current: 5A