



# COST-EFFECTIVE SCHEDULED CONTROL

Using time-based controls to automatically control lighting and other electrical loads is convenient and effortless as well as energy-efficient.

Homeowners and facility professionals can rely on a range of solutions, from stand-alone time switches to easy-to-install relay panels.

## IN THIS SECTION:

<b>Product Line Introduction and Product Matrix</b>	<b>D1-D4</b>
<b>Timers</b>	<b>D5-D16</b>
<b>Contractor Panels</b>	<b>D17-D26</b>





TIME-BASED CONTROLS



# CONVENIENT TIME-BASED CONTROL BRINGS ENERGY SAVINGS TO EVERY CORNER

Time switches are ideal for controlling outdoor lighting, spa equipment, garage lighting and lighting in storage areas or rooms where convenience and security are of primary importance. Small contractor panels offer robust control for up to eight lighting zones or circuits. Choose from pre-packaged, preprogrammed LP panels or modular LC8 panels with easy snap-in relay modules.

WattStopper offers a selection of time switches and small contractor panels with features designed for convenience, security and energy savings in a variety of applications.

### Digital control

- Precise control for exact shutoff

### Selectable on times

- Preset intervals for convenient control

### Audible and visual alerts

- Adjustable warnings of impending shutoff

## PRODUCT MATRIX

TIME BASED CONTROL	MODEL AND PAGE #	VOLTAGE						UNIQUE FEATURES	NEUTRAL REQ.	APPLICATIONS											
		120V	240V	277V	347V	480V	24VPP			OO	HS	R	SR	E							
<b>TIMERS</b>																					
	RT-50 P. D7-8	▲					▲	Preset 6 Button Countdown	■			●	●	●							
	RT-100 P. D9-10	▲					▲	Programmable Countdown	■			●	●	●							
	RT-200 P. D11-12	▲					▲	Astronomical, Dawn/Dusk Scheduling	■				●	●							
	TS-400 P. D13-14	▲	▲				▲	Digital Countdown Timer	■			●	●								
	TS-400-24 P. D15-16						24VAC	Digital Countdown Timer	■			●	●								
			24VAC										●	●							
<b>CONTRACTOR PANELS</b>																					
	LP8 P. D19-20	▲	▲	▲	▲			Scheduled control for up to 8 single pole Lighting Circuits													
	LP24 P. D21-22	▲	▲	▲	▲			Scheduled control for up to 24 single pole Lighting Circuits													
	LC8 P. D23-24	▲		▲			▲	Touch Screen, Astronomical Time Clock,	■	●	●		●								
	LCSP-2 P. D23-24	▲		▲				Dual single-pole relay module, two 20 Amp relays													
	LCDP-1 P. D23-24		▲				▲	Double-pole relay module, one 20 Amp relay													
	LVSW-100 P. D25-26						24VDC	Manual override control		●	●										

115V	277V
120V	347V
240V	480V
24VPP = Power Pack Required	

OO-Open Offices	R-Restrooms
HS-Hallways & Stairs	SR-Storage Rooms
	E-Exteriors





12:00

TIME-BASED CONTROLS





## TIME SWITCHES

WattStopper offers a variety of time switches, with capabilities ranging from simple pushbutton control to programmable, astronomical control.





12:00

TIME-BASED CONTROLS

# RT-50 Preset Countdown Time Switch

Pushbutton switch for automatic-off control

Easy operation and precise time countdown

Lighted switch for visibility in darkened rooms



Ideal for closets, laundry rooms, pantries and storage areas

Choice of six preset on-times from 1 minute to 60 minutes

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The RT-50 Preset Countdown Time Switch automatically turns lighting or other loads off when the selected on-time expires. It replaces standard single-pole wall switches for energy savings throughout a range of applications.

### Operation

Users press one of the six preset buttons to turn connected lighting on for the corresponding period of time. After the time has elapsed, lighting is automatically turned off. Lights can be turned off before the countdown is complete by pressing the on/off button. Users may press the on/off button to turn lights on. The time switch will activate the preset that was last used, and the indicator light for that preset will turn on. To change the countdown, users press the desired preset button and the RT-50 will reset to that countdown interval.

### Choice of On Times

The RT-50 will keep lighting on for 1, 5, 10, 20, 30 or 60 minutes. The digital on-time options provide precise control and help users avoid leaving lights on unnecessarily.

### Applications

Countdown time switches are an ideal lighting control choice for areas where wall switch vacancy or occupancy sensors may be inappropriate. The RT-50 preset time switch is recommended for controlling lighting in areas such as closets, laundry rooms, pantries and storage rooms.

## Features

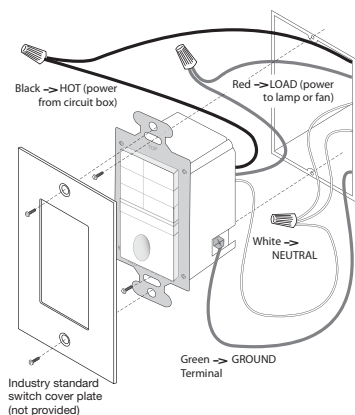
- Seven-button preset time switch
- Replaces single-pole switch
- Selectable on-time: 1, 5, 10, 20, 30, 60 minutes
- Lighted switch for visibility in darkened rooms
- Low-profile styling
- Choice of five decorator colors
- Operates most common types of lighting
- Relay-based switching
- Zero crossing reduces stress on the relay and increases product longevity
- No current leakage to load in off mode for safety
- Compatible with decorator wall plates

## Specifications

- 120 VAC, 60 Hz; neutral required
- Load ratings: 0-600W incandescent, LED, fluorescent, compact fluorescent (CFL), magnetic low voltage (MLV), electronic low voltage (ELV), and 1/6 Hp motor
- On-time options: 1, 5, 10, 20, 30, 60 minutes
- 2.63" x 1.69" x 1.88" (67.8mm x 42.9mm x 47.8mm) L x W x D
- Operating conditions: 32-131°F (0-55°C), 95% RH, non-condensing; for indoor use only
- UL and cUL listed
- Five year warranty

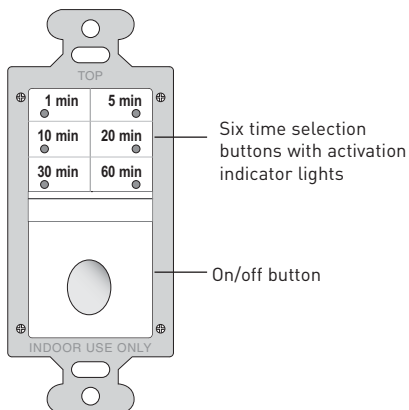
## Installation & Wiring

### Wiring Diagram



## Controls

### Product Controls



## Ordering Information

Catalog No.	Color	Description	Voltage	Load Rating
<input type="checkbox"/> RT-50-W	White	Preset Countdown Time Switch	120 VAC; 60 Hz	0-600W incandescent, LED, fluorescent, CFL, MLV, ELV, 1/6 Hp motor
<input type="checkbox"/> RT-50-I	Ivory			
<input type="checkbox"/> RT-50-LA	Lt. Almond			
<input type="checkbox"/> RT-50-A	Almond			
<input type="checkbox"/> RT-50-B	Black			

Order wall plate separately.



# RT-100 Programmable Countdown Time Switch

Programmable switch for automatic-off control

Backlit display shows countdown in progress

Lighted switch for visibility in darkened rooms



Ideal for garages, outdoor lighting, storage areas and spa control

Programmable on-time from 5 minutes to 12 hours

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The RT-100 Programmable Countdown Time Switch automatically turns lighting or other loads off when the programmed on-time expires. It replaces standard single-pole wall switches for energy savings inside and outside.

### Operation

Users turn connected lights on by pressing the on/off button, which activates the on-time programmed by the installer. If users want the lights to remain on for a different period of time, they simply press and hold the on/off button until the display shows the desired time. When the button is released, the lights will remain on for the newly selected on-time. After the time has elapsed, lighting is automatically turned off. Lights can be turned off before the countdown is complete by pressing the on/off button.

### Programmable Options

The on-time can be programmed for 5 to 55 minutes (in 5-minute increments) or 1 to 12 hours (in 15-minute increments). It is typically set for the period of time the connected load normally needs to remain on. Other programming options include enabling or disabling audible and visible shutoff warnings.

### Applications

Countdown time switches are an ideal lighting control choice for areas where a wall switch vacancy or occupancy sensor may be inappropriate. The RT-100 programmable time switch is recommended for applications, including garages, outdoor lighting, storage areas and spas, where users will benefit from real time feedback of the countdown time remaining as well as audible and visible warnings of impending shutoff.

## Features

- Programmable countdown time switch
- Replaces single-pole switch
- Adjustable on-time from 5 minutes to 12 hours
- Optional audible beep and/or visible light flash warnings before automatic off
- Lighted switch for visibility in darkened rooms
- Low-profile styling
- Choice of five decorator colors
- Operates most common types of lighting
- Relay-based switching
- Zero crossing reduces stress on the relay and increases product longevity
- No current leakage to load in off mode for safety
- Compatible with decorator wall plates

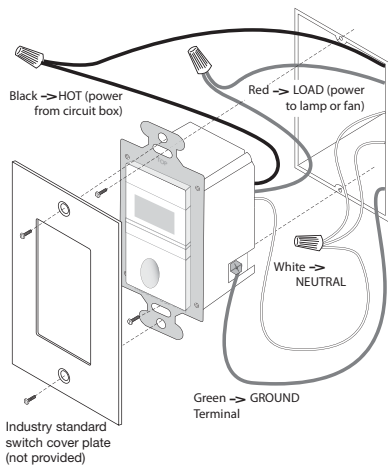


## Specifications

- 120 VAC, 60 Hz; neutral required
- Load ratings: 0-600W incandescent, LED, fluorescent, compact fluorescent (CFL), magnetic low voltage (MLV), electronic low voltage (ELV), and 1/6 Hp motor
- Adjustable on-time from 5-55 minutes (5-minute increments) to 1-12 hours (15-minute increments)
- 2.63" x 1.69" x 1.88" (67.8mm x 42.9mm x 47.8mm) L x W x D
- Operating conditions: 32-104°F (0-40°C), 95% RH, non-condensing; for indoor use only
- UL and cUL listed
- Five year warranty

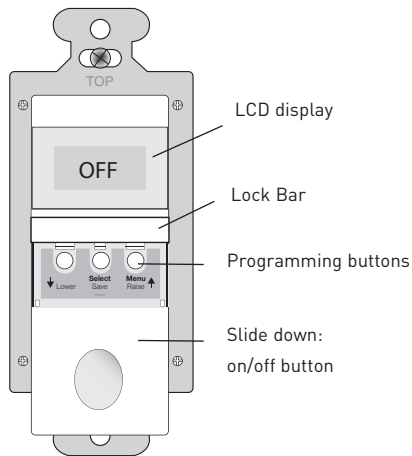
## Installation & Wiring

### Wiring Diagram



## Controls

### Product Controls



To access RT-100 setup buttons, gently pull the Lock Bar away from the switch face and slide the on/off button down.

## Ordering Information

Catalog No.	Color	Description	Voltage	Load Rating
<input type="checkbox"/> RT-100-W	White	Programmable Countdown Time Switch	120 VAC; 60 Hz	0-600W incandescent, LED, fluorescent, CFL, MLV, ELV, 1/6 Hp motor load
<input type="checkbox"/> RT-100-I	Ivory			
<input type="checkbox"/> RT-100-LA	Lt. Almond			
<input type="checkbox"/> RT-100-A	Almond			
<input type="checkbox"/> RT-100-B	Black			

Order wall plate separately.

# RT-200 Astronomical Time Switch

Turns lights on and off relative to dusk or dawn, or at selected times of day

Bright OLED display for clear viewing from a wide angle

Activates lighting on selected days of the week



Ideal for any application where precise time-based control is desired

Includes eight programmable control schedules

Compliant with California Title 24-2013 (outdoor lighting)

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The RT-200 Astronomical Time Switch automatically turns lighting or other loads on and off according to user programming. It replaces standard single-pole wall switches for energy savings and security.

### Operation

Users can manually turn the connected load on or off by pressing the on/off button. Prior to automatic operation, the local longitude, latitude, time and date must be entered into the time switch. The user can then program up to eight schedules to automatically turn the connected load on and off at the desired times. If lighting has been turned on manually prior to a scheduled on-time, it will remain on until the next scheduled off-time, or until turned off manually. If enabled, an audible beep and/or a visible flash warn of an impending automatic off-time.

### On/off Programs

Each of the eight automatic control programs includes user selectable day(s) of operation and on and off times. Day(s) of operation choices include: everyday, weekdays, weekends, a selected day or no days, to deactivate the program. On- and off-time choices include: specific time of day, or up to 99 minutes before or after dusk or dawn.

### Applications

The RT-200 Astronomical Time Switch is an ideal control choice for both outdoor and indoor lighting as well as spas. The astronomic clock function saves energy by automatically making daily adjustments to on- and off-times as the days become longer or shorter, so lighting is only turned on when it is needed. Both the astronomic and scheduling functions provide security by automatically turning lighting on to make the application feel inviting and to provide a lived-in look.

## Features

- User programmable wall switch for astronomical and scheduled control
- Replaces single-pole switch
- Optional audible beep and visible light flash warnings before automatic off
- 72 hour power failure memory
- Lighted switch for visibility in darkened rooms
- Low-profile styling
- Choice of five decorator colors
- Operates most common types of lighting
- Relay-based switching
- Zero crossing reduces stress on the relay and increases product longevity
- No current leakage to load in off mode for safety
- Compatible with decorator wall plates
- CA Title 24-2013 compliant (outdoor lighting)

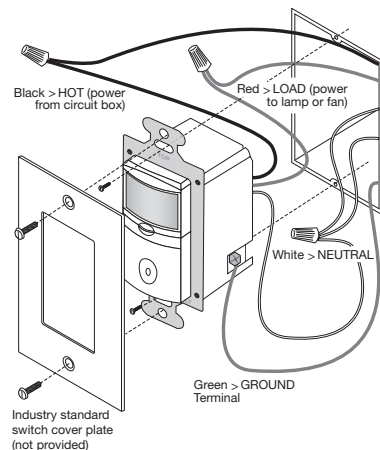


## Specifications

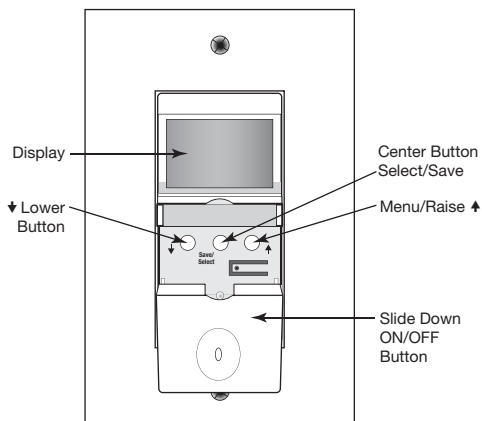
- 120VAC, 50/60 Hz; neutral required
- Load ratings: 0-800W incandescent, LED, fluorescent, compact fluorescent (CFL), magnetic low voltage (MLV), electronic low voltage (ELV), and 1/6 Hp motor
- 8 programmable schedules for on/off times on selected days of the week
- 170° OLED display
- 2.63" x 1.69" x 1.88" (67.8mm x 42.9mm x 47.8mm) L x W x D
- Operating conditions: 32-122°F (0-50°C), 95% RH, non-condensing; for indoor use only
- UL and cUL listed
- Five year warranty

## Installation & Controls

### Wiring Diagram

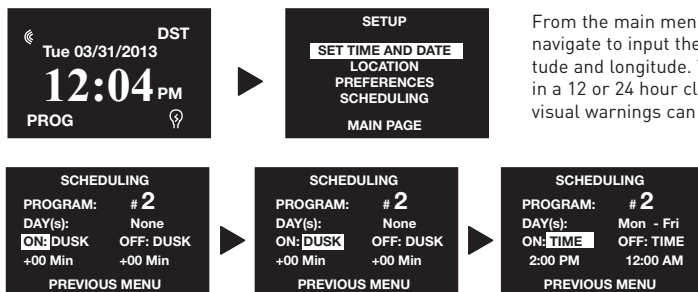


### Product Controls



## Programming

### Data Entry and Program Options



From the main menu, the user can easily navigate to input the local time, date, latitude and longitude. Time can be displayed in a 12 or 24 hour clock format. Audible and visual warnings can be enabled or disabled.

Optional settings for each of the eight programs include:

- |  |   |
|--|---|
| <p>Day(s) of week:</p> <ul style="list-style-type: none"> <li>• None (program off)</li> <li>• All (seven days)</li> <li>• Monday-Friday</li> <li>• Weekends</li> <li>• Specific day of week</li> </ul> | <p>On-time:</p> <ul style="list-style-type: none"> <li>• Specific time</li> <li>• Up to 99 minutes before or after dusk</li> </ul>  |
|  | <p>Off-time:</p> <ul style="list-style-type: none"> <li>• Specific time</li> <li>• Up to 99 minutes before or after dawn</li> </ul> |

## Ordering Information

Catalog No.	Color	Description	Voltage	Load Rating
<input type="checkbox"/> RT-200-W	White	Astronomical Time Switch	120 VAC; 50/60 Hz	0-800W incandescent, LED, fluorescent, CFL, MLV, ELV, 1/6 Hp motor load
<input type="checkbox"/> RT-200-I	Ivory			
<input type="checkbox"/> RT-200-LA	Lt. Almond			
<input type="checkbox"/> RT-200-A	Almond			
<input type="checkbox"/> RT-200-B	Black			

Order wall plate separately.

# TS-400 Digital Time Switch



PROJECT
LOCATION/TYPE

## Product Overview

### Description

The IntelliSwitch TS-400 series digital time switches automatically turn lights off after a preset time. The simple pushbutton operation provides users with convenient time out lighting control without the nuisance of twist timers.

### Operation

The TS replaces an existing wall switch. The TS-400 operates between 100 and 300 volts. Pressing the TS's on/off button turns lights on. The lights will remain on for the duration of the time-out setting which is adjustable from 5 minutes to 12 hours. Lights can be turned off before the time-out setting expires by pressing the on/off button. Also, the unit can be reset at any time by holding down the on/off button for 2 seconds. This will bring the timer back to its original time out setting and restart the countdown.

### Time Scroll Overrides

The time scroll option allows users to temporarily override the time out setting without adjusting the settings. Time scroll is selected with the calibration button. With time scroll programmed to "UP", lights can be held on longer than the time out period. With time scroll programmed to down "DN", lights can be turned off sooner than the time out period. Pressing the on/off switch for more than 4 seconds causes the timer to scroll in the set direction throughout the possible time out settings.

### Applications

The TS is an ideal lighting control choice in equipment rooms, storage areas, and closets.

## Features

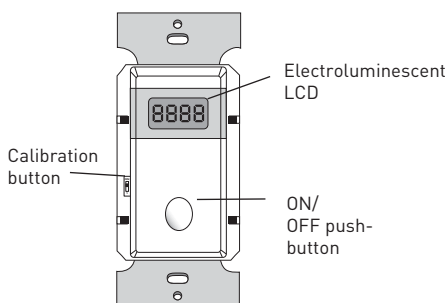
- Time-out settings range from 5 minutes to 12 hours for flexibility in fitting many applications
- Optional flash and beep warnings allow time to reset the switch if someone is present
- Time scroll option provides temporary override of the preset time out period
- Simple reset feature for returning the switch to its original preset time-out setting
- Electroluminescent back-lit LCD shows timer countdown
- Terminal style wiring simplifies installation
- Zero crossing reduces stress on the relay and increases product longevity
- Pushbutton programming gives the TS an easy set up process
- Setting the time-out for 2 hours and time scroll to down allows Title 24 compliance for using override switches
- Compatible with decorator wall plates
- Qualifies for ARRA-funded public works projects

## Specifications

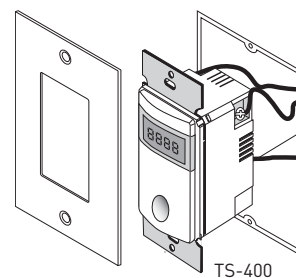
- TS-400: 120/277 VAC; 50/60 Hz
- Time-out adjustments range from 5 minutes to 12 hours (5 minute increments to 1 hour, then 15 minute increments to 12 hours)
- Optional visual warning: flashes lights at 5 minutes and 1 minute prior to time-out
- Optional audible warning: beeps every 5 seconds at 1 minute prior to time-out
- No minimum load requirement
- Compatible with all electronic ballasts, ELV, MLV, LED, and motor loads
- Dimensions: 2.66" x 1.79" x 1.76" (67.5mm x 45.5mm x 44.7mm)
- UL and cUL listed
- Five year warranty

## Controls & Installation

### Product Controls

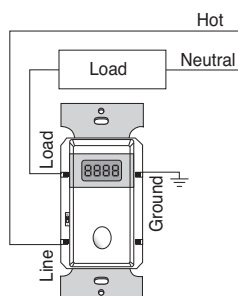


### Installation

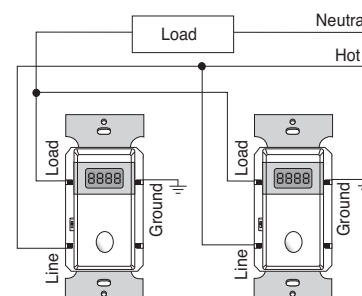


## Wiring

### TS-400 Single Level Lighting



### TS-400 3-Way Lighting



When using a three-way application, lights may be turned on from either switch, but can only be turned off at the switch that turned them on.

## Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> TS-400-W	White	120 VAC; 50/60 Hz, or 277 VAC; 50/60 Hz	0-800 Watt ballast, or 0-1200 Watt ballast
<input type="checkbox"/> TS-400-W-U			
<input type="checkbox"/> TS-400-I	Ivory		
<input type="checkbox"/> TS-400-A	Lt. Almond		
<input type="checkbox"/> TS-400-B	Black		
<input type="checkbox"/> TS-400-G	Grey		

Order wall plate separately.

-U = ARRA compliant. Product produced in the U.S.



# TS-400-24 Low Voltage Digital Time Switch



PROJECT
LOCATION/TYPE

## Product Overview

### Description

The IntelliSwitch TS-400 series digital time switches automatically turn lights off after a preset time. The simple pushbutton operation provides users with convenient time out lighting control without the nuisance of twist timers.

### Operation

The TS-400-24 operates at 24 VDC/VAC. Pressing the TS's on/off button turns lights on. The lights will remain on for the duration of the time-out setting which is adjustable from 5 minutes to 12 hours. Lights can be turned off before the time-out setting expires by pressing the on/off button. Also, the unit can be reset at any time by holding down the on/off button for 2 seconds. This will bring the timer back to its original time out setting and restart the countdown.

### Time Scroll Overrides

The time scroll option allows users to temporarily override the time out setting without adjusting the settings. Time scroll is selected with the calibration button. With time scroll programmed to "UP", lights can be held on longer than the time out period. With time scroll programmed to down "DN", lights can be turned off sooner than the time out period. Pressing the on/off switch for more than 4 seconds causes the timer to scroll in the set direction throughout the possible time out settings.

### Applications

The TS is an ideal lighting control choice in equipment rooms, storage areas, and closets. The switch can also be used as an HVAC override or to control heat lamps in hotel guest rooms. The low voltage TS-400-24 can switch loads that exceed the ratings of standard wall switches and can be used in locations where high voltage wiring in walls is prohibited. Also, when used with a WattStopper power pack, the TS-400-24 can control lighting and motor loads.

## Features

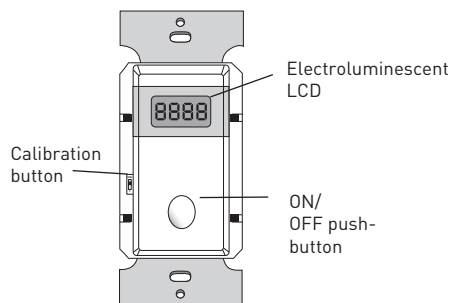
- Time-out settings range from 5 minutes to 12 hours for flexibility in fitting many applications
- Optional flash and beep warnings allow time to reset the switch if someone is present
- Time scroll option provides temporary override of the preset time out period
- Simple reset feature for returning the switch to its original preset time-out setting
- Electroluminescent back-lit LCD shows timer countdown
- Terminal style wiring simplifies installation
- Zero crossing reduces stress on the relay and increases product longevity
- Pushbutton programming gives the TS an easy set up process
- Setting the time-out for 2 hours and time scroll to down allows Title 24 compliance for using override switches
- Compatible with decorator wall plates

## Specifications

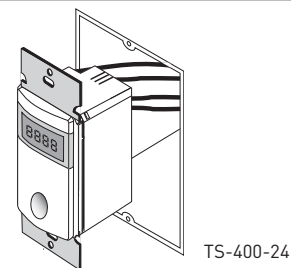
- TS-400-24: 24 VAC/VDC/VAC half-wave rectified input; current draw is 12 mA DC, 41 mA AC
- Time-out adjustments range from 5 minutes to 12 hours (5 minute increments to 1 hour, then 15 minute increments to 12 hours)
- Optional visual warning: flashes lights at 5 minutes and 1 minute prior to time-out
- Optional audible warning: beeps every 5 seconds at 1 minute prior to time-out
- TS-400-24 contains single-pole, double-throw isolated relay rated for 1A @ 30 VDC
- No minimum load requirement
- Compatible with all electronic ballasts and motor loads
- Dimensions: 2.66" x 1.79" x 1.76" (67.5mm x 45.5mm x 44.7mm)
- UL and cUL listed
- Five year warranty

## Controls & Installation

### Product Controls

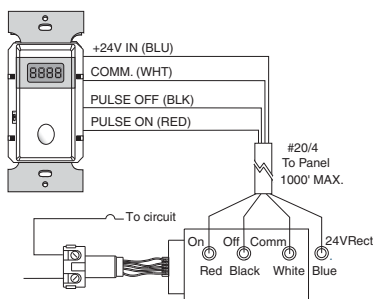


### Installation

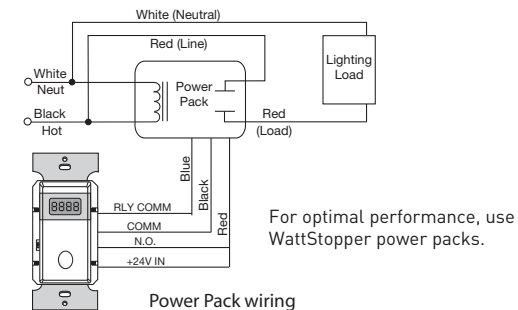


## Wiring

### TS-400-24 with Lighting Control Panel



### TS-400-24 with Power Pack



## Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> TS-400-24-W	White	24 VAC/VDC/VAC rect.	Current: 12 mA; DC / 41 mA AC
<input type="checkbox"/> TS-400-24-I	Ivory		
<input type="checkbox"/> TS-400-24-A	Lt. Almond		
<input type="checkbox"/> TS-400-24-B	Black		
<input type="checkbox"/> TS-400-24-G	Grey		

Order wallplates separately. The TS-400-24 works with WattStopper power packs.



## CONTRACTOR PANELS

Versatile, code-compliant control for small applications, WattStopper's stand-alone panels offer robust control capabilities at attractive price points.







12:00

TIME-BASED CONTROLS

86

# LP8 Peanut Lighting Control Panels

Simple and effective interior and exterior lighting control

Controls up to eight single-pole lighting circuits

Easy user interface with on-screen help



Compatible with AS-100 Automatic Control Switches for local override control

System clock provides time scheduled or astronomic control

## Description

WattStopper's LP8 Peanut Lighting Control Panels provide simple, effective zone-based control of exterior and interior lighting in small applications. Panels control up to eight channels or zones of lighting. Zones respond to control signals from the system clock (or other signalling device) to turn lighting on and off. LP8 Panels ship pre-assembled in easy-to-install compact packages available for surface and flush mounting. They consist of relays, a system clock, panel intelligence, power supply, tub and cover. The standard enclosure is NEMA 1-rated.

## Operation

For exterior applications, the system clock provides astronomic control (based on sunrise and sunset), or an optional EM Photocell can be added for light-level control. For interior applications, AS-100 Automatic Control Switches or low voltage switches can automate after-hours lighting shutoff while providing manual override control.

PROJECT
LOCATION/TYPE

## System Clock

The LP8 system clock provides automation and features a seven-day format with holiday scheduling. Set-up and programming is simple with an easy-to-navigate keypad, backlit LCD and user-friendly help menus. Preprogrammed control scenarios include: scheduled-on/off and manual-on/scheduled-off. Manual-on/sweep-off is available with an AS-100 switch. Astronomic or photocell on/off, and astronomic or photocell with schedule on/off available by adding an EM Photocell.

## Applications

LP8 Panels save energy by turning lights off when not needed, while providing a secure illuminated space when occupants are present. They are ideal for areas with less than eight loads and a small amount of zones in both interior (i.e., small offices or retail facilities and elevator lobbies) and exterior (i.e., small parking lots, courtyards and driveways) applications. LP8 Panels integrate with a wide range of control devices, such as switches and occupancy sensors to create a flexible lighting shutoff strategy.

## Product Overview

## Features

- Preprogrammed control scenarios; seven-day format with holiday scheduling, astronomic control and automatic daylight savings
- Time retained during power outage; nonvolatile program memory
- Eight universal switch inputs for low voltage switches, occupancy sensors, photocells or other devices to directly control each relay
- Pushbuttons for manual override of each relay
- Uses individually replaceable HDR5P Mechanically Latching Relay with integral manual override
- Optional group of eight switch inputs for pushbutton grouping of relays (Smartwiring™)
- LED for visual indication of relay status
- Accepts most types of switch inputs
- Separate high voltage and low voltage sections for user protection

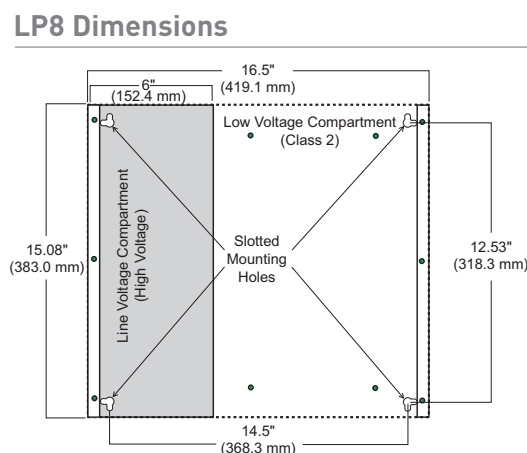
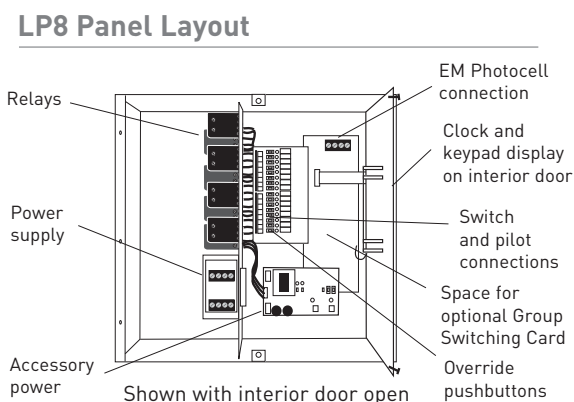




## Specifications

- Multiple power supplies available: 115/277 VAC, 220-240 VAC, 115/347 VAC; 50/60 Hz
- Relay: Mechanically latching
  - Integral manual override
  - Individually replaceable
  - Ratings: 20 Amp tungsten @ 120 VAC
  - 30 Amp ballast @ 277 VAC
  - 20 Amp ballast @ 347 VAC
  - 30 Amp resistive @ 347 VAC
  - 1.5 hp @ 120 VAC
- Accessory power 800 mA at 24 VDC/VAC/VACR
- Eight universal switch inputs; compatible with 3-wire momentary or maintained, 2-wire momentary or maintained, or 24 VDC input
- Eight universal group switch inputs that allow pushbutton grouping of relays (optional)
- Ambient temperature 32-139°F (0-60°C); 5-95% RH non-condensing
- Dimensions: 15.08" x 16.5" x 4.62" (383.0mm x 419.1mm x 117.3mm) L x W x D
- UL and cUL listed; one-year warranty

## Wiring & Installation



## Ordering Information

Catalog No.	Description	Door Mounting	# Relays	Group Switching Card	Voltage
<input type="checkbox"/> LP8S-8-115	LP8 Peanut Lighting Control Panel	Surface	8 Relays	none	115/277 VAC
<input type="checkbox"/> LP8S-8-G-115	LP8 Peanut Lighting Control Panel	Surface	8 Relays	included	115/277 VAC
<input type="checkbox"/> LP8F-8-115	LP8 Peanut Lighting Control Panel	Flush	8 Relays	none	115/277 VAC
<input type="checkbox"/> LP8F-8-G-115	LP8 Peanut Lighting Control Panel	Flush	8 Relays	included	115/277 VAC
<input type="checkbox"/> LP8S-4-115	LP8 Peanut Lighting Control Panel	Surface	4 Relays	none	115/277 VAC
<input type="checkbox"/> LP8F-4-115	LP8 Peanut Lighting Control Panel	Flush	4 Relays	none	115/277 VAC
<input type="checkbox"/> LP8S-8-347	LP8 Peanut Lighting Control Panel	Surface	8 Relays	none	115/347 VAC
<input type="checkbox"/> LP8S-8-G-347	LP8 Peanut Lighting Control Panel	Surface	8 Relays	included	115/347 VAC
<input type="checkbox"/> LP8F-8-347	LP8 Peanut Lighting Control Panel	Flush	8 Relays	none	115/347 VAC
<input type="checkbox"/> LP8F-8-G-347	LP8 Peanut Lighting Control Panel	Flush	8 Relays	included	115/347 VAC
<input type="checkbox"/> LP8S-8-240	LP8 Peanut Lighting Control Panel	Surface	8 Relays	none	240 VAC
<input type="checkbox"/> LP8S-8-G-240	LP8 Peanut Lighting Control Panel	Surface	8 Relays	included	240 VAC
<input type="checkbox"/> LP8F-8-240	LP8 Peanut Lighting Control Panel	Flush	8 Relays	none	240 VAC
<input type="checkbox"/> LP8F-8-G-240	LP8 Peanut Lighting Control Panel	Flush	8 Relays	included	240 VAC
<b>Optional system enhancements:</b>					
<input type="checkbox"/> EM-24A2	Exterior Photocell, low voltage				24VAC
<input type="checkbox"/> AS-100-W	Automatic Control Switch, White				120/277 VAC, 50/60 Hz
<input type="checkbox"/> AS-100-A	Automatic Control Switch, Light Almond				120/277 VAC, 50/60 Hz
<input type="checkbox"/> AS-100-I	Automatic Control Switch, Ivory				120/277 VAC, 50/60 Hz

# LP24 Peanut Plus Lighting Control Panels

Simple and effective interior and exterior lighting control

Controls up to eight zones

System clock provides time scheduled or astronomic control



Compatible with AS-100 Automatic Control Switches for local override control

DIN rail accommodates up to 12 four-pole contactors

PROJECT

LOCATION/TYPE

## Description

WattStopper's LP24 Peanut Plus Lighting Control Panels provide simple, effective zone-based control of exterior and interior lighting in small applications. Panels control up to eight channels or zones of lighting. Zones respond to control signals from the system clock (or other signalling device) to turn lighting on and off. LP24 Panels ship pre-assembled in easy-to-install packages. They consist of relays, a system clock, panel intelligence, power supply, large tub with DIN rails for mounting up to twelve contactors (shipped separately) and cover.

## Operation

For exterior applications, the system clock provides astronomic control (based on sunrise and sunset), or an optional EM Photocell can be added for light-level control. For interior applications, AS-100 Automatic Control Switches or other low voltage switches can automate after-hours lighting shutoff while providing manual override control.

## System Clock

The LP24 system clock provides automation and features a seven-day format with holiday scheduling. Set-up and programming is simple with an easy-to-navigate keypad, backlit LCD and user-friendly help menus. Preprogrammed control scenarios include: scheduled-on/off and manual-on/scheduled-off. Manual-on/sweep-off is available with an AS-100 switch. Astronomic or photocell on/off, and astronomic or photocell with schedule on/off available by adding an EM Photocell.

## Applications

LP24 Panels save energy by turning lights off when not needed, while providing a secure illuminated space when occupants are present. They are ideal for areas with two-pole loads and a small amount of zones in both interior (i.e., gymnasiums, elevator lobbies, commercial warehouses and parking garages) and exterior (i.e., parking lots, courtyards, sports fields and driveways) applications. LP24 Panels integrate with a wide range of control devices such as switches and occupancy sensors to create a flexible lighting shutoff strategy.

## Product Overview

## Features

- Preprogrammed control scenarios; seven-day scheduling with holiday, astronomic control and automatic daylight savings
- Time retained during power outage; nonvolatile program memory
- Eight universal switch inputs for low voltage switches, occupancy sensors, photocells or other devices to directly control each relay
- Uses individually replaceable HDR5P Mechanically Latching Relay with integral manual override
- Controls single and multiphase loads
- Optional group of eight universal switch inputs for pushbutton grouping of relays (Smartwiring™)
- Pushbuttons for manual override of each relay
- LED for visual indication of relay status
- Accepts most types of switch inputs
- Separate high and low voltage sectors for user protection
- DIN rail accepts up to 12 four-pole contactors



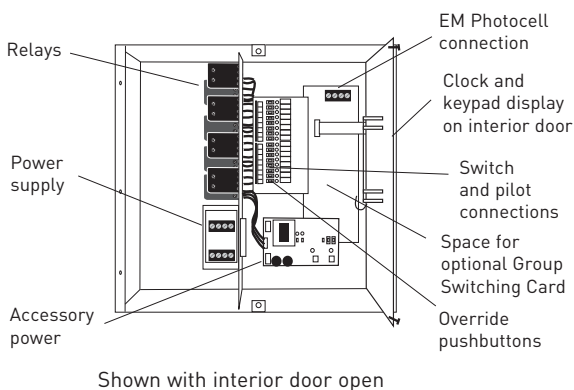


## Specifications

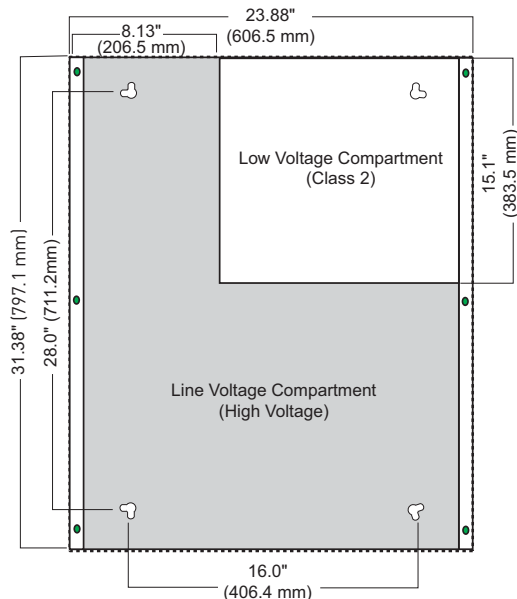
- Multiple power supplies available: 115/277 VAC, 220-240 VAC, 115/347 VAC; 50/60 Hz
- Relay: Mechanically latching  
Integral manual override  
Individually replaceable  
Ratings: 20 Amp tungsten @ 120 VAC  
30 Amp ballast @ 277 VAC  
20 Amp ballast @ 347 VAC  
30 Amp resistive @ 347 VAC  
1.5 hp @ 120 VAC
- Eight universal switch inputs; compatible with 3-wire momentary or maintained, 2-wire momentary or maintained, or 24 VDC input
- Contactor Ratings for LP24: Ballast load 30Amp @ 600 V (magnetic, electronic, HID ballasts); Tungsten load 20 Amp @ 277 V; Resistive load 30 Amp @ 480 V; Motor load 5 hp @ 460 V, 3 phase
- Accessory power 800 mA at 24 VDC/VAC/VACR
- Four universal group switch inputs; allows pushbutton grouping of relays
- Ambient temperature 32-139°F (0-60°C); 5-95% RH noncondensing
- Dimensions: 31.38" x 23.88" x 4.62" (797.1mm x 605.5mm x 117.3mm) L x W x D
- UL and cUL listed; one-year warranty

## Wiring & Installation

### LP24 Panel Layout



### LP24 Dimensions



## Ordering Information

Catalog No.	Description	Door Mounting	# Relays	Group Switching Card	Voltage
<input type="checkbox"/> LP24S-8-115	LP24 Peanut Plus Lighting Control Panel	Surface	8 Relays	none	115/277 VAC
<input type="checkbox"/> LP24S-8-G-115	LP24 Peanut Plus Lighting Control Panel	Surface	8 Relays	included	115/277 VAC
<input type="checkbox"/> LP24S-8-347	LP24 Peanut Plus Lighting Control Panel	Surface	8 Relays	none	347 VAC
<input type="checkbox"/> LP24S-8-G-347	LP24 Peanut Plus Lighting Control Panel	Surface	4 Relays	included	347 VAC
<input type="checkbox"/> LP24F-8-115	LP24 Peanut Plus Lighting Control Panel	Flush	4 Relays	none	115/277 VAC
<input type="checkbox"/> LP24F-8-G-115	LP24 Peanut Plus Lighting Control Panel	Flush	8 Relays	included	115/277 VAC
<input type="checkbox"/> LP24F-8-347	LP24 Peanut Plus Lighting Control Panel	Flush	8 Relays	none	347 VAC
<input type="checkbox"/> LP24F-8-G-347	LP24 Peanut Plus Lighting Control Panel	Flush	8 Relays	included	347 VAC
<input type="checkbox"/> LP24S-4-115	LP24 Peanut Plus Lighting Control Panel	Surface	4 Relays	none	115/277 VAC
<input type="checkbox"/> LP24S-4-347	LP24 Peanut Plus Lighting Control Panel	Surface	4 Relays	none	347 VAC
<input type="checkbox"/> LP24F-4-115	LP24 Peanut Plus Lighting Control Panel	Flush	4 Relays	none	115/277 VAC
<input type="checkbox"/> LP24F-4-347	LP24 Peanut Plus Lighting Control Panel	Flush	4 Relays	none	347 VAC
Optional system enhancements:					
<input type="checkbox"/> EM-24A2	Exterior Photocell, low voltage				24VAC
<input type="checkbox"/> AS-100	Automatic Control Switch				120/277VAC
<input type="checkbox"/> DCC2	Decorator Low Voltage Momentary Switch				12 VAC/VDC, 24 V Rectified, 24 VAC/VDC

# LC8-120/277 Volt Modular Contractor Panel

Versatile panel for simple control of indoor and outdoor lighting

Easy-to-use touchscreen interface with onscreen help

Accommodates single-pole and two-pole relay modules



Astronomic system clock with 16 schedules for flexibility

Compatible with low voltage switches, occupancy sensors and photocells

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The LC8 panel provides zone-based control of up to eight channels, or zones, of interior and exterior lighting. Zones respond to control signals from the system clock, or an accessory photocell, to automatically turn lighting on and off. The LC8 panel uses interchangeable relay modules, available separately, that can be selected to suit project needs. Relay options include the LCSP-2 dual single-pole module and LCDP-1 double-pole module.

### Operation

The LC8 features a touchscreen interface for all programming and status feedback, and unique pre-programmed scenarios simplify setup. Exterior lighting can be controlled based on sunrise and sunset via the astronomic clock, or based on ambient light with an optional EM24-D2 photocell. Interior lighting can be configured for manual-on/auto-off to maximize energy savings. Accessory switches provide manual control or after-hours override in conjunction with a blink warn feature.

## Features

- Nonvolatile program memory retains all programming during power outages
- Interchangeable single-pole and double-pole relay modules
- Manual override of relays and channels via touchscreen interface
- Eight universal switch inputs for low voltage switches, occupancy sensors or other devices to directly control each relay
- Pilot light output for each switch input
- Accepts most types of switch inputs
- Compatible with LVSW-100 Series Low Voltage Switches and AS-100 Automatic Wall Switch

### System Clock

Users can setup and program the LC8 for up to 16 unique seven-day schedules, plus a holiday schedule, via the backlit touchscreen interface that offers context-sensitive on-screen help. Pre-programmed control scenarios include: schedule- and/or astronomic-on/off, or manual-on/schedule-off. Manual-on/sweep-off is available using the optional AS-100 automatic wall switch. Photocell- and/or schedule-on/off are also available with the optional EM24-D2 photocell.

### Applications

LC8 lighting control panels save energy by turning lighting off when it is not required, yet providing secure illumination when people are present. The LC8 is ideal for smaller applications with eight circuits of lighting, or less, such as small free-standing retail, library or bank buildings, or lobbies, corridors, public spaces or exteriors of larger buildings. LC8 panels integrate with a range of accessory control devices including low voltage switches, occupancy sensors or photocells to create a flexible lighting shutoff strategy.

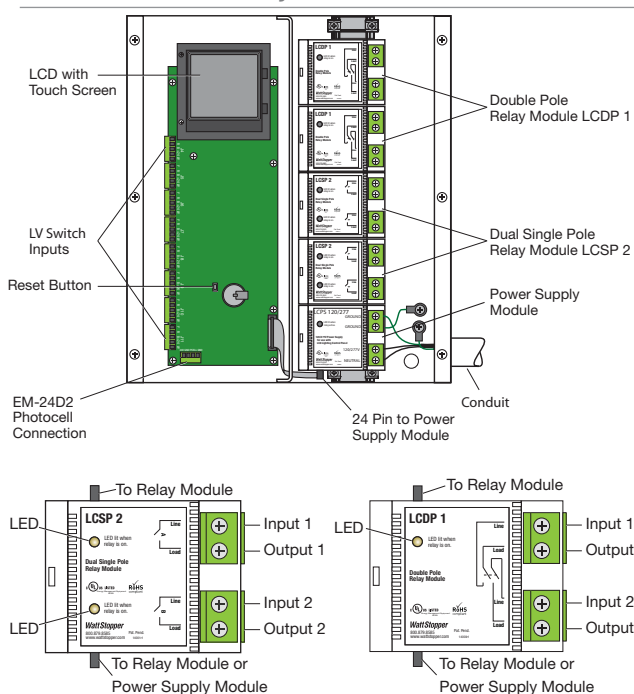


## Specifications

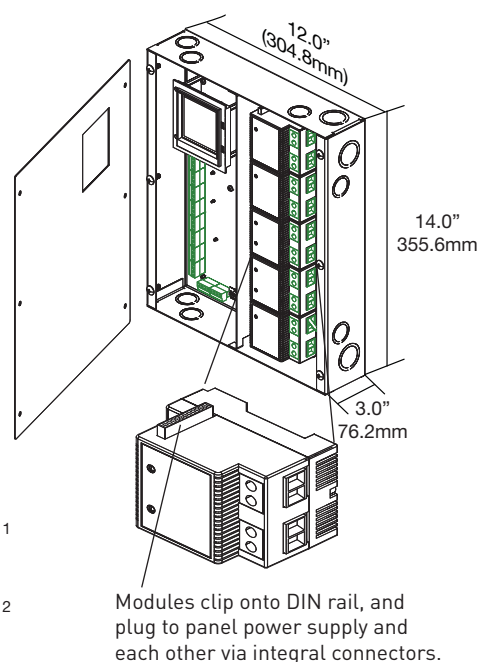
- Power input: 120/277 VAC; 50/60 Hz
- Accessory power: 500 mA at 24 VDC
- Switch inputs with screw terminals; compatible with 3-wire momentary, 2-wire momentary or maintained with pilot light output
- Relay grouping: configurable to switches through touchscreen user interface
- Panel weight: 8.1 lbs. (without relays)
- Relays: modular; dual 1-pole or single 2-pole
- Relay weight (module):
  - LCDP-1: 0.49 lbs.
  - LCSP-2: 0.37 lbs.
- LCSP-2 module relay ratings:
  - 20 amp tungsten @ 120 VAC
  - 20 amp ballast @ 120 or 277 VAC
  - 0.5 hp @ 120 VAC
- LCDP-1 module relay ratings:
  - 20 amp ballast @ 208, 240 or 480 VAC
  - 1 hp @ 208, 240 or 480 VAC
- SCCR (short circuit current rating): 14,000 amps
- Operating conditions: for indoor use only; 32-139°F (0-60°C); 5-95% RH noncondensing
- UL and cUL listed
- One year warranty

## Panel Layout & Wiring

### LC8 Panel and Relay Modules



### LC8 Dimensions



Relay modules can be mixed and matched to configure the LC8 for a variety of single-pole and double-pole lighting control applications.

## Ordering Information

Catalog No.	Description	Voltage
<input type="checkbox"/> LC8-120/277	LC8 panel with LCPS-120/277 volt power supply, space for 4 relay modules	120/277 VAC
<input type="checkbox"/> LCSP-2	Dual single-pole relay module, two 20 amp relays	120/277 VAC
<input type="checkbox"/> LCDP-1	Double-pole relay module, one 20 amp relay	208, 240 or 480 VAC
Optional system enhancements:		
<input type="checkbox"/> EM-24D2	Exterior photocell with integral lens shade light adjustment	24 VDC

# LVSW-100 Series Low Voltage Switches

Low voltage pushbutton switches for on/off control of one or more loads

Compatible with LC8, LP8 and LI Series lighting control panels

LED pilot light on each button



Customizable, field replaceable buttons

Single gang devices, compatible with standard decorator style face plates

Appearance matches DLM Series digital wall switches

PROJECT

LOCATION/TYPE

## Product Overview

### Description

LVSW-100 Series Low Voltage Switches are lighting control devices that use conventional point-to-point low voltage wiring for control of single or multiple loads. Each button provides a momentary contact that is intended for use with compatible low voltage relay panels or similar lighting control panels or devices. Each button has an LED indicator that can serve as a status indicator or as a locator light.

### Operation

LVSW-100 Series switches are totally passive and contain no active electronics or power supply. The buttons are single pole momentary contact and all share a common return. Operation is dependent upon a Class 2 connection to a compatible relay panel or other device that can react to a momentary contact signal. The LED indicators associated with each switch button are reliant on a 24 VDC source originating from the lighting control panel.

### LED and button options

Switches are available with one, two, three, four and eight buttons. If the connected panel supports the feature, the blue LED associated with each button can be used to indicate the state of the controlled lighting load. Alternately, the LED indicators can be lighted continuously and serve as locator lights to help users find the switch in the dark. Each switch may be personalized in the field with custom-engraved buttons.

### Applications

The LVSW-100 Series Low Voltage Switches are perfect for use with LC8 Series lighting control panels, as well as Lighting Integrator panels or LP8 Series "Peanut" panels. They are ideal for applications that do not require, or do not accommodate, digital switch control yet would benefit from the styling that matches the appearance of Digital Lighting Management (DLM) digital wall switches, such as projects combining DLM controls and small panels.

## Features

- Sleek single gang devices fit decorator wall plates (not supplied); 1-, 2-, 3-, 4-, and 8-button models
- Blue LED indicator on each button can be used as a locator light or as a status indicator
- Five color options and custom engraving options; standard buttons may be replaced in the field
- RoHS compliant

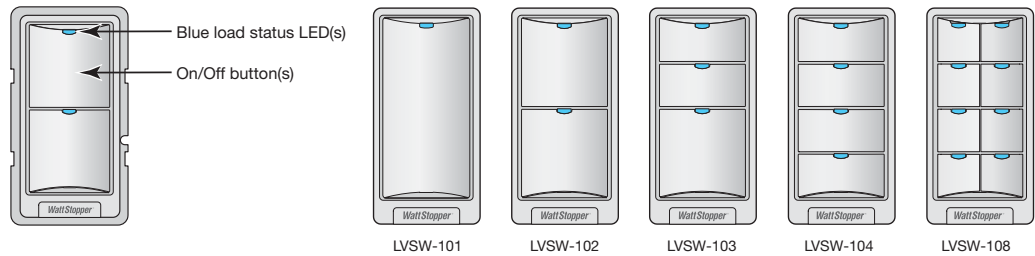


# Specifications

- Input voltage: 24 VDC maximum, from panel
- Maximum contact operating current: 50 mA
- Maximum operating current (per LED): 30 mA
- Wire connections; removable terminal blocks
  - one terminal per button
  - one terminal per LED
  - two common terminals; shared with all buttons and LEDs
- Operating conditions: for indoor use only; 32-130°F (0-55°C), 5-95% RH noncondensing
- UL and cUL listed
- Five year warranty

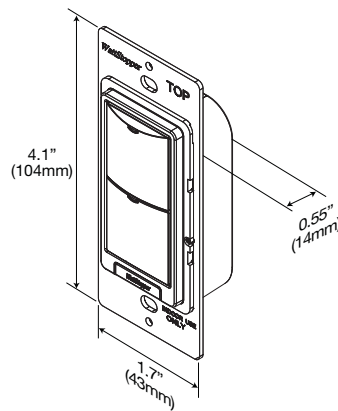
## Product Controls

### Product Controls and Models

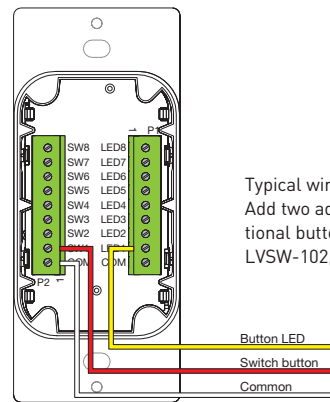


## Dimensions & Wiring

### Dimensions



### Wiring



Typical wiring for one button and LED. Add two additional wires for each additional button and LED (e.g. 5 wires for LVSW-102, 7 wires for LVSW-103, etc.).

## Ordering Information

Catalog No.	Color	Product Description	Catalog No.	Color	Product Description
<input type="checkbox"/> LVSW-101-W	White	1-Button Low Voltage Wall Switch	<input type="checkbox"/> LVSW-104-W	White	4-Button Low Voltage Wall Switch
<input type="checkbox"/> LVSW-101-LA	Light Almond		<input type="checkbox"/> LVSW-104-LA	Light Almond	
<input type="checkbox"/> LVSW-101-I	Ivory		<input type="checkbox"/> LVSW-104-I	Ivory	
<input type="checkbox"/> LVSW-101-G	Grey		<input type="checkbox"/> LVSW-104-G	Grey	
<input type="checkbox"/> LVSW-101-B	Black		<input type="checkbox"/> LVSW-104-B	Black	
<input type="checkbox"/> LVSW-102-W	White	2-Button Low Voltage Wall Switch	<input type="checkbox"/> LVSW-108-W	White	8-Button Low Voltage Wall Switch
<input type="checkbox"/> LVSW-102-LA	Light Almond		<input type="checkbox"/> LVSW-108-LA	Light Almond	
<input type="checkbox"/> LVSW-102-I	Ivory		<input type="checkbox"/> LVSW-108-I	Ivory	
<input type="checkbox"/> LVSW-102-G	Grey		<input type="checkbox"/> LVSW-108-G	Grey	
<input type="checkbox"/> LVSW-102-B	Black		<input type="checkbox"/> LVSW-108-B	Black	
<input type="checkbox"/> LVSW-103-W	White	3-Button Low Voltage Wall Switch			
<input type="checkbox"/> LVSW-103-LA	Light Almond				
<input type="checkbox"/> LVSW-103-I	Ivory				
<input type="checkbox"/> LVSW-103-G	Grey				
<input type="checkbox"/> LVSW-103-B	Black				

Note: Switches do not include face plates. Order decorator style plate separately.