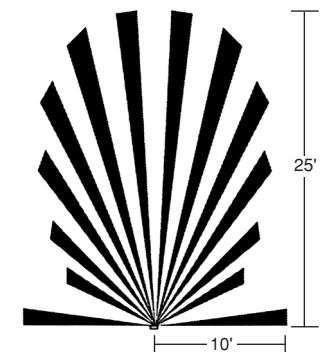
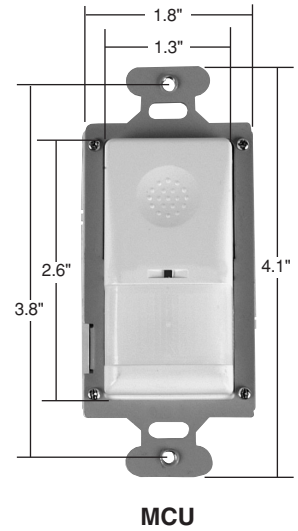


Occupancy Sensors TradeMaster® Motion-Activated Switches



- Features – Motion-Activated Switches**
- Extra-sturdy impact resistant lens is flush with device.
 - Single-pole or three-way application.
 - Glows-when-off LED feature.
 - Exclusive internal screw-pressure-plate back wire terminals, #12 or #14 gauge stranded or solid wire.
 - 5-year warranty.
 - cULus listed.
 - 180° coverage of up to 600 sq. ft.
 - Passive infrared technology.
 - Load range 40-600 watts.
 - Compatible for fluorescent and incandescent lamp applications.
 - Programmed time delays range from 1 minute to 15 minutes.



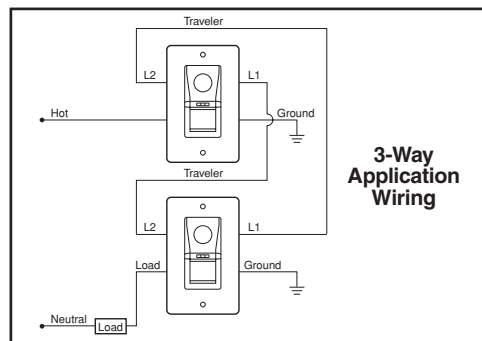
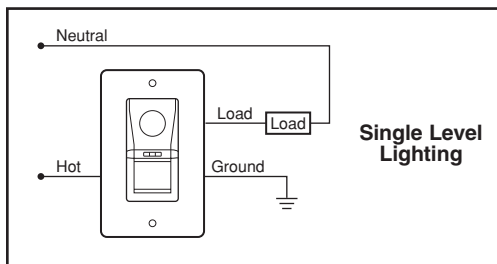
Catalog Number	Application	Voltage	Coverage	Time Delay	Light Level Adjustment	Auto ON	Manual ON	Auto OFF	Manual OFF Override	Color
PIR Motion-Activated Switches										
MCS-IV	Storage Room,	120VAC	180°,	1 min.		•		•	•	Ivory
MCS-WV	Walk-In Closet,	120VAC	up to	1 min.		•		•	•	White
MCS-LAV	and Pantry	120VAC	600 sq. ft.	1 min.		•		•	•	Lt. Almond
PIR Motion-Activated Switches										
MCU-IV	Laundry Room,	120VAC	180°,	5 min.	•	•		•	•	Ivory
MCU-WV	Half Bath,	120VAC	up to	5 min.	•	•		•	•	White
MCU-LAV	Hallways*	120VAC	600 sq. ft.	5 min.	•	•		•	•	Lt. Almond
PIR Motion-Activated Switches										
MCB-IV	Nursery,	120VAC	180°,	15 min.			•	•	•	Ivory
MCB-WV	Bedroom,	120VAC	up to	15 min.			•	•	•	White
MCB-LAV	Basements*	120VAC	600 sq. ft.	15 min.			•	•	•	Lt. Almond

Compatible with incandescent and linear/compact fluorescent electronic ballast; 3-way applications require a 50-watt minimum load.

*Not recommended for all hallways and basements. Contact P&S/L Technical Support for application support.

Catalog Number	Description
MCS	Engineered for storage rooms, walk-in closets, pantries and rooms where people enter and exit quickly. Automatic ON and short time delay to Auto OFF maximize energy savings.
MCU	Engineered for laundry rooms, half baths, hallways and areas where people congregate for short periods of time. Automatic ON and a longer time delay to Auto OFF reflect the longer times people typically use these rooms.
MCB	Engineered for nurseries, bedrooms and basements. Manual ON (No Auto ON) eliminates nuisance of light coming on while people are sleeping. Generous time delay to Auto OFF because people may be idle in these rooms for longer periods of time.

Wiring Diagram



All devices listed on this page conform to NEMA WD-1.

Occupancy Sensors Product Description

Surveys have shown that specific areas in buildings may be unoccupied between 30% and 60% of a typical workday. With conventional switching, occupants rarely turn off lights in rooms or areas which are not being utilized. Pass & Seymour/Legrand® occupancy sensors provide automatic switching of lighting loads in commercial, institutional, and industrial facilities — effectively controlling energy costs and usually paying for themselves within 24 months.

Application and Operation

Pass & Seymour/Legrand occupancy sensors utilize either passive infrared (PIR) or ultrasonic sensor technology. PIR systems detect differences in heat within a specific area, and are best suited for spaces that allow direct line-of-sight viewing or require masked detection in certain areas. Ultrasonic sensors, which operate on the Doppler Principle, emit sound waves well above the range of human hearing to detect occupancy. The best applications for ultrasonic systems are enclosed areas, and partitioned spaces that break the sensor's line of sight.

Passive Infrared Sensors

Using a patented fresnel lens which minimizes optical aberrations, each Pass & Seymour/Legrand PIR sensor breaks its coverage area into zones. Upon detecting an infrared energy change within a zone, one of the elements in the dual-element pyroelectric sensing device generates a positive pulse. Within milliseconds, the other element produces a negative pulse and the lights are turned on.

Passive infrared sensors are unable to detect occupancy around barriers, and are more effective when sensing movement across their field of sight rather than towards or away from it.

All Pass & Seymour/Legrand PIR occupancy sensors feature:

- Patented fresnel lenses with multi-segment design
- Dual-element pyroelectric sensors
- Low-profile design
- Daylight filter systems
- Adjustable settings for time and sensitivity
- Custom ASIC for high immunity to RFI and EMI, and reliability

Ultrasonic Sensors

Ultrasonic sensors use a multi-directional transmitter/receiver system to broadcast ultrasonic sound waves generated by a quartz crystal oscillator, and then measure the amount of time it takes the waves to return. Movement within the area results in the sound waves returning to the sensor at a slower or faster rate, and thus occupancy is detected.

Ultrasonic sensors broadcast in three dimensions, and are therefore able to detect smaller movements than PIR sensors. Proper placement of the sensors is essential as sound waves can escape through open doorways, resulting in false triggering.

While Pass & Seymour/Legrand ultrasonic sensors use special circuitry to filter out air-flow movement caused by HVAC equipment or fans, sensors should be kept away from breezy areas. Also, heavy carpeting and other sound-absorbing materials used in the construction of a room will reduce coverage.

Pass & Seymour/Legrand ultrasonic occupancy sensor features:

- Temperature- and humidity-resistant tuned receivers
- Signal Processing Circuitry
- Solid-state, crystal-controlled transmitter
- Adjustable controls for time and sensitivity

Occupancy Sensors
TradeMaster® Motion-Activated Switches

Ergonomic design is easy to operate. Touch control is comfortable and intuitive, unlike the awkward miniature tilt switches available elsewhere.

Extra-wide 180° sensing angle standard in all models for optimum performance. Provides 600-square-foot coverage, the broadest in the market.

Exclusive, internal screw-pressure-plate back wire terminals speed installation. Use either #12 or #14 gauge wire, stranded or solid. No-wire-lead design eliminates wire nuts – save time, space and money.

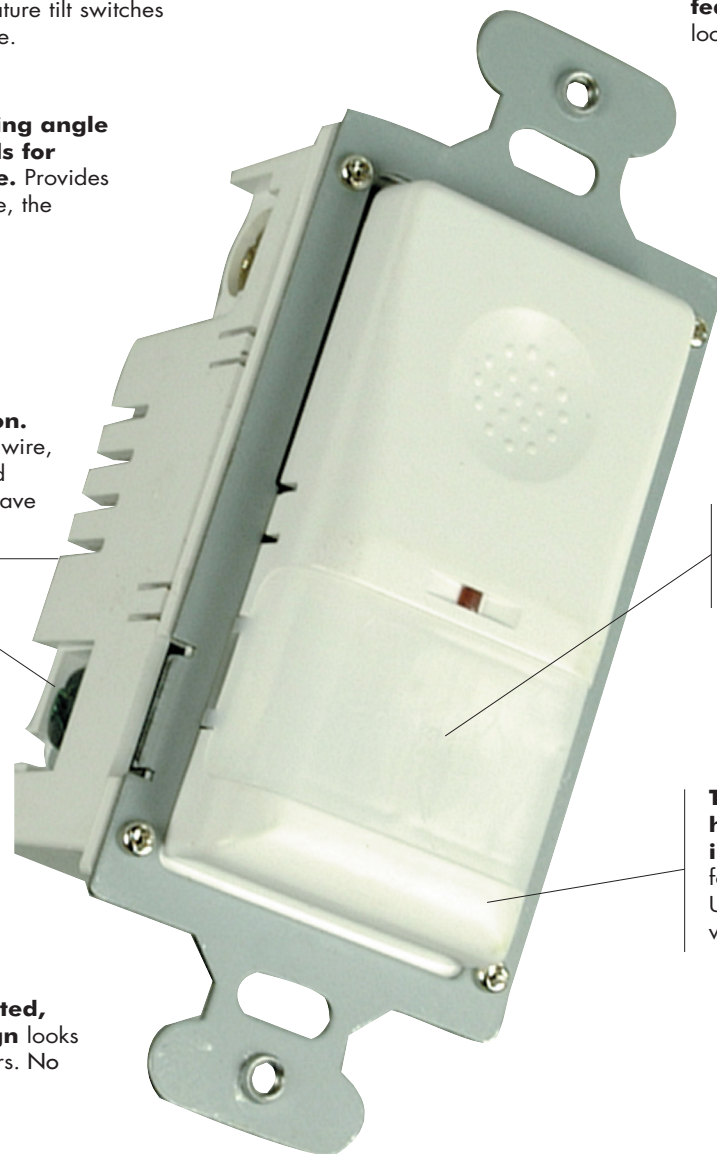
Sophisticated, sculpted, contemporary design looks best with today's decors. No dirt-catching crevices.

Glows-when-off LED feature makes it easy to locate in dark rooms.

Extra-sturdy, impact-resistant lens – rugged lens won't dent or break and remains flush with device.

Tough, thermoplastic housing shrugs off impacts, making it perfect for residential applications. Unbreakable TradeMaster wall plate included.

Single-pole/three-way and fluorescent/incandescent installation versatility is built in. All models rated 600 watts for more versatile, hassle-free application. Fewer catalog numbers mean simplified ordering.



MCU-LA

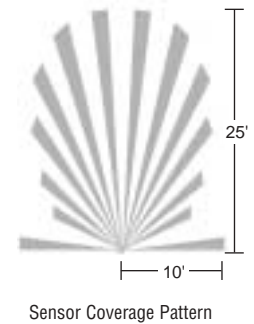
P&S Motion-Activated Switches

Catalog Number	Time Delay	Rating	Auto On/Off	Color
1-Minute Delay (for storage room, walk-in closet, or pantry)				
MCSWV	1 Minute	600 Watt	Auto On/Off	White
MCSIV	1 Minute	600 Watt	Auto On/Off	Ivory
MCSLAV	1 Minute	600 Watt	Auto On/Off	Lt. Almond
5-Minute Delay (for laundry room, half bath, hallway, or utility areas*)				
MCUWV	5 Minutes	600 Watt	Auto On/Off	White
MCUIV	5 Minutes	600 Watt	Auto On/Off	Ivory
MCULAV	5 Minutes	600 Watt	Auto On/Off	Lt. Almond
15-Minute Delay (for nursery and bedrooms)				
MCBWW	15 Minutes	600 Watt	Auto Off	White
MCBIV	15 Minutes	600 Watt	Auto Off	Ivory
MCBLAV	15 Minutes	600 Watt	Auto Off	Lt. Almond

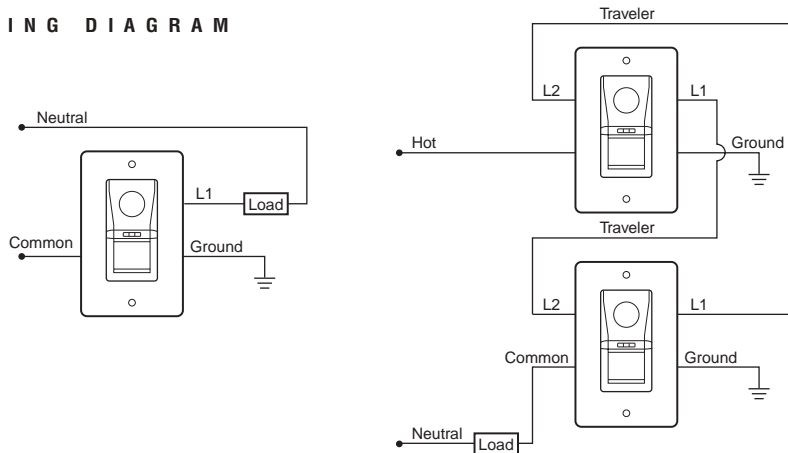


Compatible with incandescent and linear/compact fluorescent electronic ballast; 3-way applications require a 50-watt minimum load.

* Not recommended for all hallways and basements. See sensor coverage pattern information or contact P&S Technical Support at 800-223-4185 for application assistance.



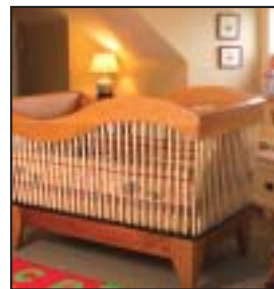
WIRING DIAGRAM



MCS. Ideal for storage rooms, walk-in closets, and pantries. Auto ON means lights come on automatically — adding convenience to “quick in and out” areas. And the one-minute auto OFF time is perfect for maximum energy savings in places where people don’t linger.

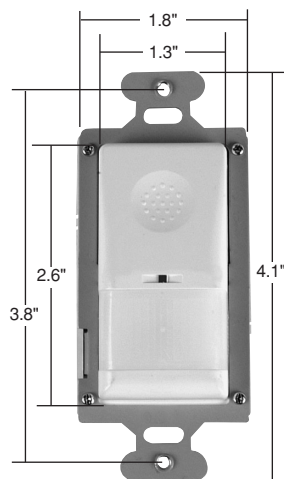


MCU. Perfect for utility rooms, laundries, and half-baths. No manual ON required here, either. But this model provides five minutes to auto OFF, reflecting the longer use of these rooms.

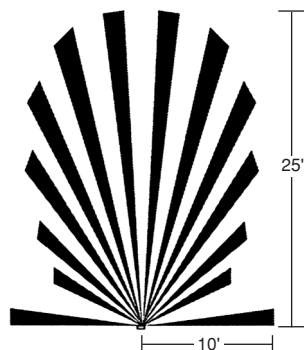


MCB. Maximum convenience for bedrooms and nurseries. Auto ON’s a nuisance in bedrooms — so this model eliminates it. There’s a generous auto OFF time, as people are likely to be going in and out of the room first thing in the morning or when getting ready for bed. And there’s a manual OFF override for maximum convenience.

Decorator Devices TradeMaster® Motion-Activated Switches



MCU



Features – Motion-Activated Switches

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MCU-WV	Half Bath,	120VAC	up to	5 min.	•	•		•	•	White
MCU-LAV	Hallways*	120VAC	600 sq. ft.	5 min.	•	•		•	•	Lt. Almond
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MCB-WV	Bedroom,	120VAC	up to	15 min.			•	•	•	White
MCB-LAV	Basements*	120VAC	600 sq. ft.	15 min.			•	•	•	Lt. Almond

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Wiring Diagram

