GE Lighting Controls

GE Aware[™]

Dual Technology Dual Relay Wallbox Occupancy Sensor (Ground Required)

WDT-10-DR-G-D

Overview

The WDT-10-DR-G-D Occupancy Sensing Wall Switch is a Passive Infrared (PIR) and Ultrasonic (US) motion sensing lighting control and conventional Wall Switch all-in-one, used for energy savings and convenience. The sensor combines PIR and US technologies to monitor a room for occupancy.

PIR Technology

The sensor's segmented lens divides the field of view into sensor zones, and detects the changes in temperature that are created when a person, or part of a person as small as a hand, passes into or out of a sensor zone.

US Technology

The sensor produces a low intensity, inaudible sound. It detects occupancy from changes in the acoustic waves caused by motion, such as reaching for a telephone, turning a page in a book, walking into a room, turning in a swivel chair, etc. The sensor does not respond to audible sound.

Dual Technology sensors ensure the greatest sensitivity and coverage for tough applications thus saving additional energy. PIR is used to turn the lights ON and then either or both technologies are used to keep the lights ON. The WDT-10-DR-G-D allows the control of two separate loads with one occupancy sensor switch. The sensor can be configured to enhance energy savings by setting the unit for manual ON operation.

In Automatic ON Mode, the lights turn ON automatically when a person enters the room. In Manual ON Mode, the lights are turned ON by pressing the pushbutton. In either mode, the lights stay ON as long as the sensor detects motion in the room. When the room is vacated, the lights turn OFF automatically after a preset Time Delay interval.

The sensor includes self-adaptive technology that continually adjusts to conditions by adjusting sensitivity and Time Delay in Real-time. By adjusting sensitivity and Time Delay automatically, the sensor is maximizing the potential energy savings that are available in the particular application. The Daylighting feature prevents lights from turning ON, when the room is adequately illuminated by natural light.

Walk-Through feature maximizes energy savings by not leaving the lights ON after a momentary occupancy. The sensor will switch the lights ON when it detects a person entering the area. If the sensor does not continue to detect motion 20 seconds following the initial activation, it will automatically go to a shorter 2 minute Time Delay.

Ordering

	Product Code	Description	Color	Coverage	Voltage
Î	63308	WDT-10-DR-G-D-W	White		
	63309	WDT-10-DR-G-D-V	lvory		
	63313	WDT-10-DR-G-D-A	Light Almond	1000 sq.ft., 180°	120/277VAC, 50/60Hz
	63314	WDT-10-DR-G-D-G	Gray		
	63315	WDT-10-DR-G-D-B	Black		



Specifications

Technology: Passive Infrared (PIR) and Ultrasonic (US)

Electrical Ratings(per relay): 120 VAC:

Incandescent/Tungsten – Max. load: 6.7A, 800W, 50/60 Hz Fluorescent/Ballast – Max. load: 10A, 1200W, 50/60 Hz Motor Load: 1⁄4 HP @ 125 VAC 277 VAC:

Fluorescent/Ballast – Max. load: 9.8A, 2700W, 50/60 Hz No minimum load requirements

Time Delays: Self-Adjusting, 15 seconds/test (10 min Auto), Selectable 5, 15, 30 minutes

Operating Environment:

Temperature: 32° F – 104° F (0° C – 40° C) Relative Humidity: 20% to 90% non-condensing For indoor use only

Coverage: Major Motion - 1000 sq. ft. Minor Motion - 300 sq. ft.

Light Level Sensing: 0 to 200 foot-candles

Housing: Durable, injection-molded housing. Polycarbonate resin complies with UL94V0.

Size:

 Mounting Plate Dimensions:

 4.195" H × 1.732" W (106.553 mm × 44 mm)

 Product Housing Dimensions:

 2.618" H × 1.752" W × 1.9" D (66.5 mm × 44.5 mm × 48.26 mm)

LED Indicators: Red indicates PIR detection; Green LED indicates Ultrasonic detection.

Operating Modes:

Automatic ON/Automatic OFF Manual ON/Automatic OFF





Wiring Diagram (consult instruction sheet for other wiring options)

WDT-10-DR-G-D WARNING \bigcirc Risk of electric shock Turn power off before servicing Install per National Electric Code (120/277 VAC BLACK BLUE \square RED RED 77 7 D1 1 11 GREEN LOAD 2 LOAD 1 GROUND ŧ ($\overline{\bigcirc}$ NEUTRAL Coverage 20 Minor Motion, IR Major Motion, IR 15' 8 Minor Motion, Ultrasonic Major Motion, Ultrasonic 8 10 Maximum coverage area may vary somewhat according to room shape and the presence of obstacles. The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns. 15' ·20

Settings

	Time Delay		Activiation			PIR Sensitivity	Walk Through Mode		Not Used	Override		Not Used	Not Used	(Dayligl	ghting			
			Relay 1		Relay 2			,								Relay 1		Relay 2	
DIP Switch	1	2		3		4		5		6	7		8	9	10		11		1
Auto*	▼	•	Auto	•	Auto	▼	Full	•	Disable	•		Disable	•			Disable	•	Disable	
5 Minutes	▼		Manual		Manual		50%		Enable			Enable				Enable		Enable	-
15 Minutes		▼															1		
30 Minutes																TT T			
*Self-Adjusts to 10 min. user mode		Def	ault =															DIP Swit	tcł