

# LEVITON®

## MICROWAVE MOTION SENSOR USER'S MANUAL

Model No.: LEV71916



### Specification

Input	Operating Voltage	108-305V AC 50/60Hz
	DC Input Voltage	N/A
	Rated Voltage	120/277V AC 50/60Hz
	No-load Power	N/A
	Stand-by Power	≤1W
	Surge Test	L--N: 1kV
Output	Working Mode	ON/OFF function, 1-10V step dimming
	Type of Load	Inductive or resistive Load
	Load Capacity	2A @120Vac ,3A@277Vac, 3A@220-240Vac
	Current of Load	N/A
	Max. Surge Capacity	30A (50%I <sub>peak</sub> , t <sub>width</sub> =500uS, 230Vac full load, cold start); 60A (50% I <sub>peak</sub> , t <sub>width</sub> =200uS, 230Vac, full load, cold start)
Dim Interface	1-10V Dimming	1-10Vdimming 20mA Max (Passive 1-10V port)
	Synchronous Control	N/A
	High Low-level	N/A
	PWM Control	N/A
	Interface terminal wiring	N/A
Sensor Parameters	Operating Frequency	5.8 GHz ±75 MHz, ISM Band.
	Transmitting power	0.5mW Max.

### Factory default setting:

Detection area: 100%, Hold Time: 5S, Stand-by Period: 0S, Stand-by dim level:10%, Daylight Sensor: Disable

	Hold time	5S/30S/1min/3min/20min/30min 5s/30s/1min/3min/5min/10min/20min/30min(remote control)
	Stand-by DIM Level	10%(1.4±0.3V)/20%(2.5±0.5V)/50%(5.±1V) (Only DIP Switch)
	Stand-by Period	0S/5S/5min/10min/30min/1h/+∞ 0s/10s/1min/3min/5min/10min/30min/+∞ (Remote control)
	Detection Area	100%/75%/50%/10% 100%/75%/50%/25% (Remote control)
	Daylight Sensor	5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable (Ambient light diffusion) 5lux/15lux/30lux/50lux/100lux/150lux/Disable (Remote control)
	Light control on/off	N/A
	Detecting Radius	See detection pattern
	Mounting Height	12m Max
	Detecting Angle	150°
<b>Operating Environment</b>	Operating Temperature	-25℃...+60℃
	Storage Temperature	Temperature:-40℃...+80℃; Humidity:10%-95% (non-condensing)
<b>Certificate Standards</b>	Safety standards	EN61058-1, UL60703-1
	EMC standards	EN300440; EN301489-1; EN55015; EN61547; EN61000-3-2; EN61000-3-3; EN62479
	Environmental Requirement	Compliant to RoHS
	Certificate	CE, RED,UL,FCC
<b>Others</b>	Input/output specifications terminal	Push-type terminal block; wire diameter: 0.75-1.5mm <sup>2</sup>
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in installation
	Dimension	93.5*45*28.5mm
	Package	Bubble bag + partition + outer box (K=A)
	Net Weight	61.2G
	Lifetime	50,000h @ Ta Full load
<b>Note</b> 1. "N/A" means not available. 2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.		

## Commissioning:

1/ On/Off function /3-step dimming function:

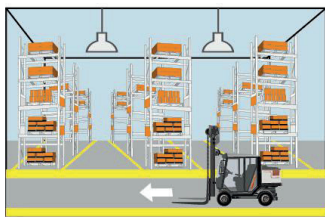
After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it turns off the light. During the initialization, the sensor is not able to detect movement.

2/ 2-step dimming function:

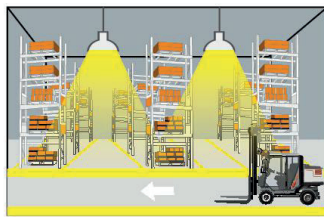
After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low light level (set by stand-by dim level). During the initialization, the sensor is not able to detect movement.

## Operation

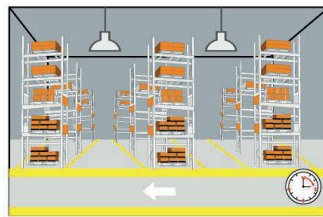
### 1) On/OFF Function (stand-by period to be set to "0"s)



1 With sufficient ambient light, the light will not be switched on even if with motion signal.

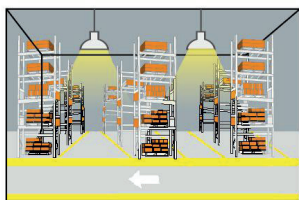


2 With insufficient ambient light, the sensor switches on the light when motion is detected.

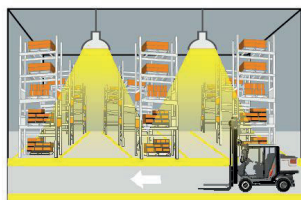


3 After elapse of hold time, the sensor switches off the light when no motion is detected.

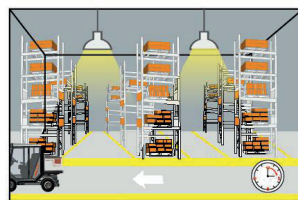
### 2) 2-step dimming function (stand-by period be set to "+∞")



1 If there is no motion detected, the light will be remained at a low light level all the time.

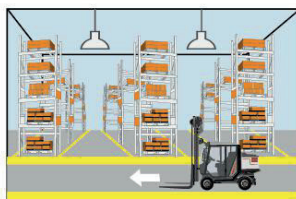


2 When motion is detected, the sensor will switch on the light to 100% brightness

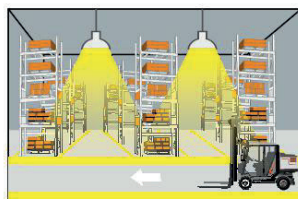


3 After elapse of hold time, the sensor dims the light at the present low light level if no motion is detected.

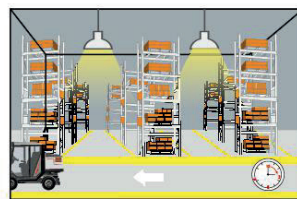
### 3) 3-step dimming function (stand-by period be set to "10s/1min/3min/5min/10min/30min")



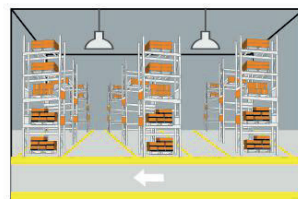
1 With sufficient ambient light, the light will not be switched on even if with motion signal.



2 With insufficient ambient light, the sensor switches on the light when motion is detected.



3 After elapse of hold time, the sensor dims the light at a low light level if no new motion is detected.



4 After elapse of standby period, the sensor switches off the light if no motion is detected in the detection zone.

## DIP Setting

### 1) Detection Area

	1	2	
I	ON	ON	100%
II	ON	-	75%
III	-	ON	50%
IV	-	-	10%

### 2) Hold Time

	3	4	5	
I	ON	ON	ON	5s
II	-	ON	ON	30s
III	ON	-	ON	1min
IV	-	-	ON	3min
V	ON	ON	-	20min
VI	-	-	-	30min

### 3) Stand-by Period

	6	7	8	
I	ON	ON	ON	0s
II	-	ON	ON	5s
III	ON	-	ON	5min
IV	-	-	ON	10min
V	ON	ON	-	30min
VI	-	ON	-	60min
VII	-	-	-	+∞

### 4) Daylight Sensor

	1	2	3	4	5	
I	ON	ON	ON	ON	ON	5lux
II	-	ON	ON	ON	ON	15lux
III	ON	-	ON	ON	ON	30lux
IV	ON	ON	-	ON	ON	50lux
V	ON	ON	ON	-	ON	100lux
VI	ON	ON	ON	ON	-	150lux
VII	-	-	-	-	-	Disable*

### 5) Detection mode

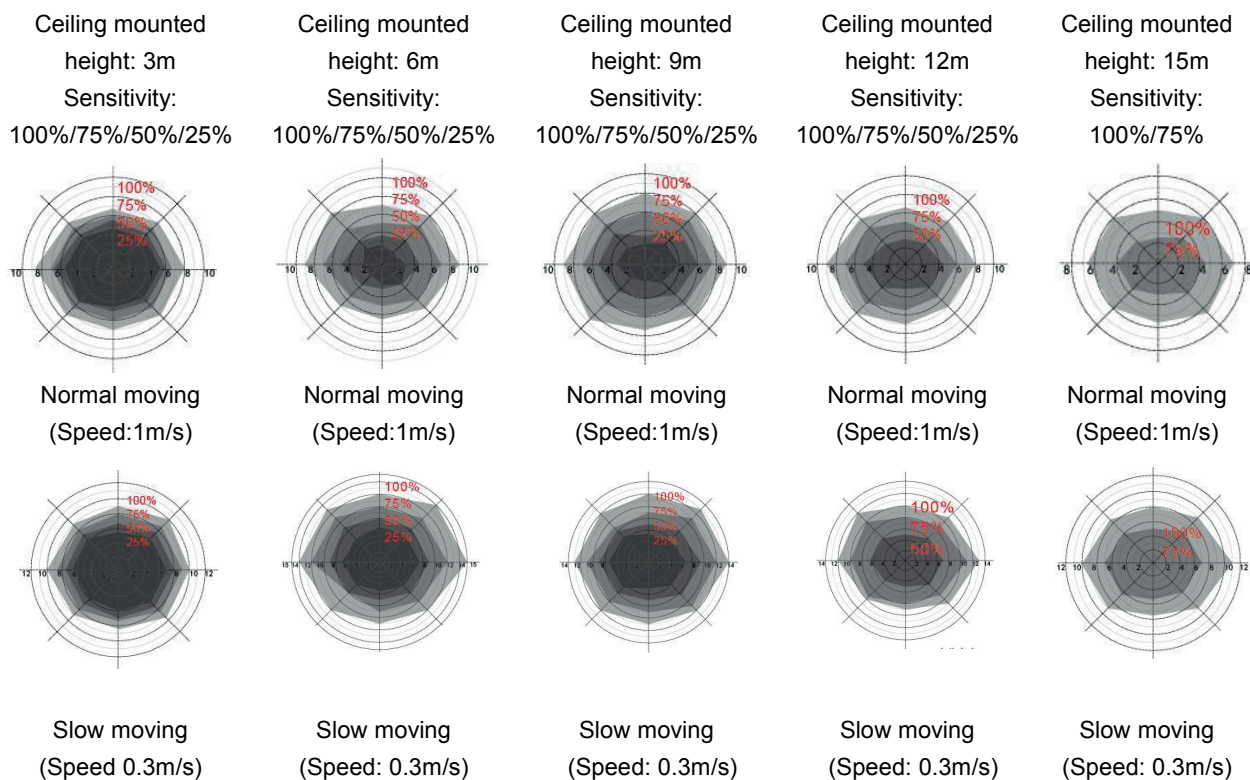
	6	
I	ON	HS
II	-	LS

### 6) Stand-by dim Level

	1	2	
I	-	ON	50%
II	ON	-	20%
III	-	-	10%

## 8. Detection Pattern

### Ceiling mounting



\*Only 100%/75%/50% detection sensitivity is workable when installed at 10m & 15m mounting height. 25% sensitivity is not able to detect motion signal.

### Wall mounting

