

STEP DIMMING SENSOR SPECIFICATIONS



FEATURES



- ULTRA SLIM DESIGN
- PATENTED NEEDLE ANTENNA ENSURES RELIABLE DETECTING
- AVOID FALSE DETECTION WITH SENSOR BUILT INTO BACKSIDE OF METAL LED PLATE
- EASY TO ACHIEVE 2-STEP OR 3-STEP DIMMING WITH 1-10V DIMMABLE LED DRIVER
- WORKS WITH REMOTE CONTROLLER, EASY TO ADJUST SENSOR PARAMETERS

PARAMETER

INPUT	Operating Voltage Range	198-264V AC, 50Hz/60Hz
	DC Input Voltage	N/A
	Rated Voltage	220-240 AC, 50Hz/60Hz
	No-load Power	N/A
	Stand-by Power	≤0.5W
	Surge Test	L-N: 1kV
OUTPUT	Working Mode	ON/OFF function, 1-10V dimming
	Type of Load	Inductive or Resistive
	Load Capacity	400W (Inductive) 800W (Resistive)
	Current of Load	N/A
	Max. Surge Capacity	30A (50% I_{peak} , $t_{width} = 500\mu S$, 230Vac full load, cold start); 60A (50% I_{peak} , $t_{width} = 200\mu S$, 230Vac, full load, cold start)
DIM INTERFACE	1-10V Dimming	20mA Max (Passive interface)
SENSOR PARAMETERS	Operating Frequency	5.8 GHz ± 75 MHz , ISM Band.
	Transmitting power	0.5mW Max.
	Hold time	5S/5min/10min/30min (set by DIP switch)
		5s/30s/1min/3min/5min/10min/20min/30min (set by remote)
	Stand-by DIM Level	25%(2.2-2.5V)/35%(3.5V-4V)/50%(4.5-5.0V) (DIP switch set only)
	Stand-by Period	0S/5min/15min/+ ∞ (set by DIP switch)
		0s/10s/1min/3min/5min/10min/30min/+ ∞ (set by remote)
	Detection Area	100%/75%/50%/25% (set by DIP switch)
		100%/75%/50%/25%(set by remote)
	Daylight Sensor	5lux/25lux/50lux/100lux/Disable(Ambient light diffusion)(set by DIP switch)



STEP DIMMING SENSOR SPECIFICATIONS



		5lux/15lux/30lux/50lux/100lux/150lux/Disable(set by remote)
	Daylight on/off	N/A
	Detecting Radius	4-7m (mounting height 3m)
	Mounting Height	4m Max.
	Detecting Angle	150°
OPERATING ENVIRONMENT	Operating Temperature	-25~+60℃
	Storage Temperature	Temperature: -40℃...+80℃; Humidity: 10%-95% (Non-condensing)
CERTIFICATE STANDARDS	Safety standards	EN61058-1
	EMC standards	N/A
	Environmental Requirement	Compliant to RoHS
	Certificate	CE, RED, SAA
OTHERS	Wiring	Press-in Type Terminals, wire diameter : 0.75-1.5mm ²
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in
	Dimension	193*26*22mm
	Package	Bubble bag +white box+ clapboard +carton(K=A)
	Net Weight	100g
	Lifetime	50,000h @ Ta Full load

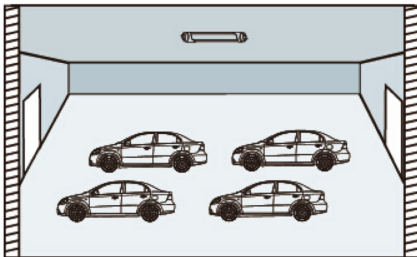
Note

1. "N/A" means not available.
2. Detection area is affected 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.

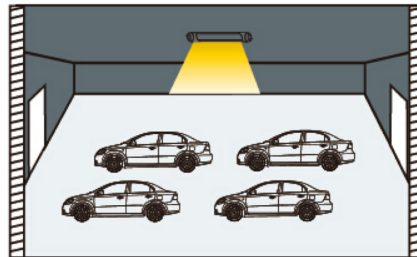


FUNCTION

1) ON/OFF Function (stand-by period set at '0')



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

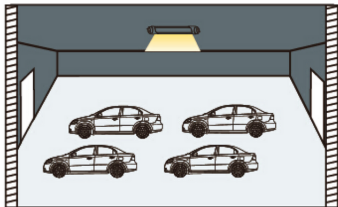


- 2 With insufficient ambient light, the sensor switches on the light when motion is detected.

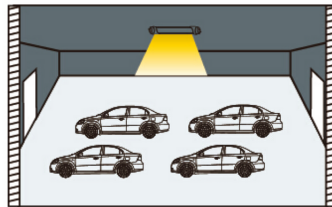


- 3 After elapse of hold time, the sensor switches off the light when no motion is detected.

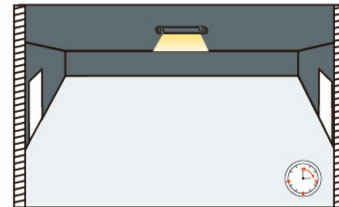
2) 2-step dimming function (stand-by period set at "+∞")



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

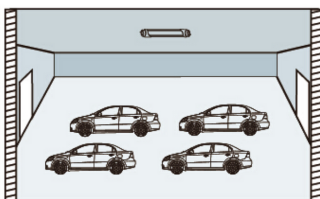


- 2 When motion is detected, the sensor will switch on the light to 100% brightness

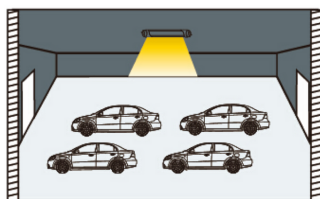


- 3 After elapse of hold time, the sensor dims the light at the present low light level if no motion is detected.

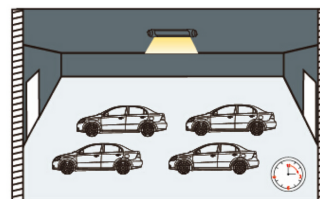
3) 3-step dimming function (stand-by period set at "5min" or "15min")



- 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.



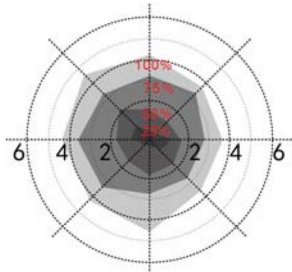
- 4 After elapse of standby period, the sensor switches off the light if no motion is detected in the detection zone.



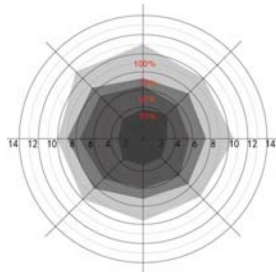
RADIATION PATTERN

Ceiling mounting

Ceiling mounted height: 3m
Sensitivity: 100%/75%/50%/25%

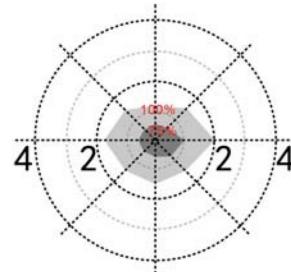


Normal moving (Speed:1m/s)

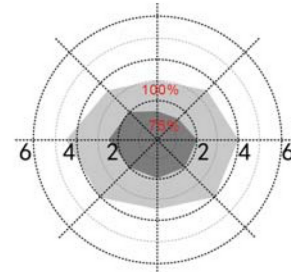


Slow moving (Speed 0.3m/s)

Ceiling mounted height: 4m(*)
Sensitivity:100%/75%



Normal moving (Speed:1m/s)

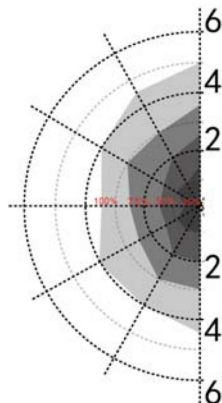


Slow moving (Speed: 0.3m/s)

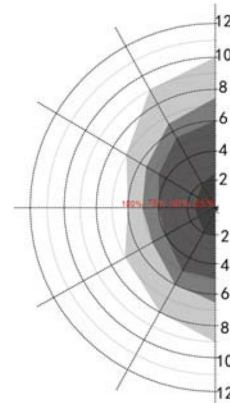
*Only 100% /75%detection sensitivity is workable when installed at 4m mounting height. 25%/50%sensitivity is not able to detect motion signal.

Wall mounting:

Horizon mounted height: 2m
Sensitivity: 100%/75%/50%/25%



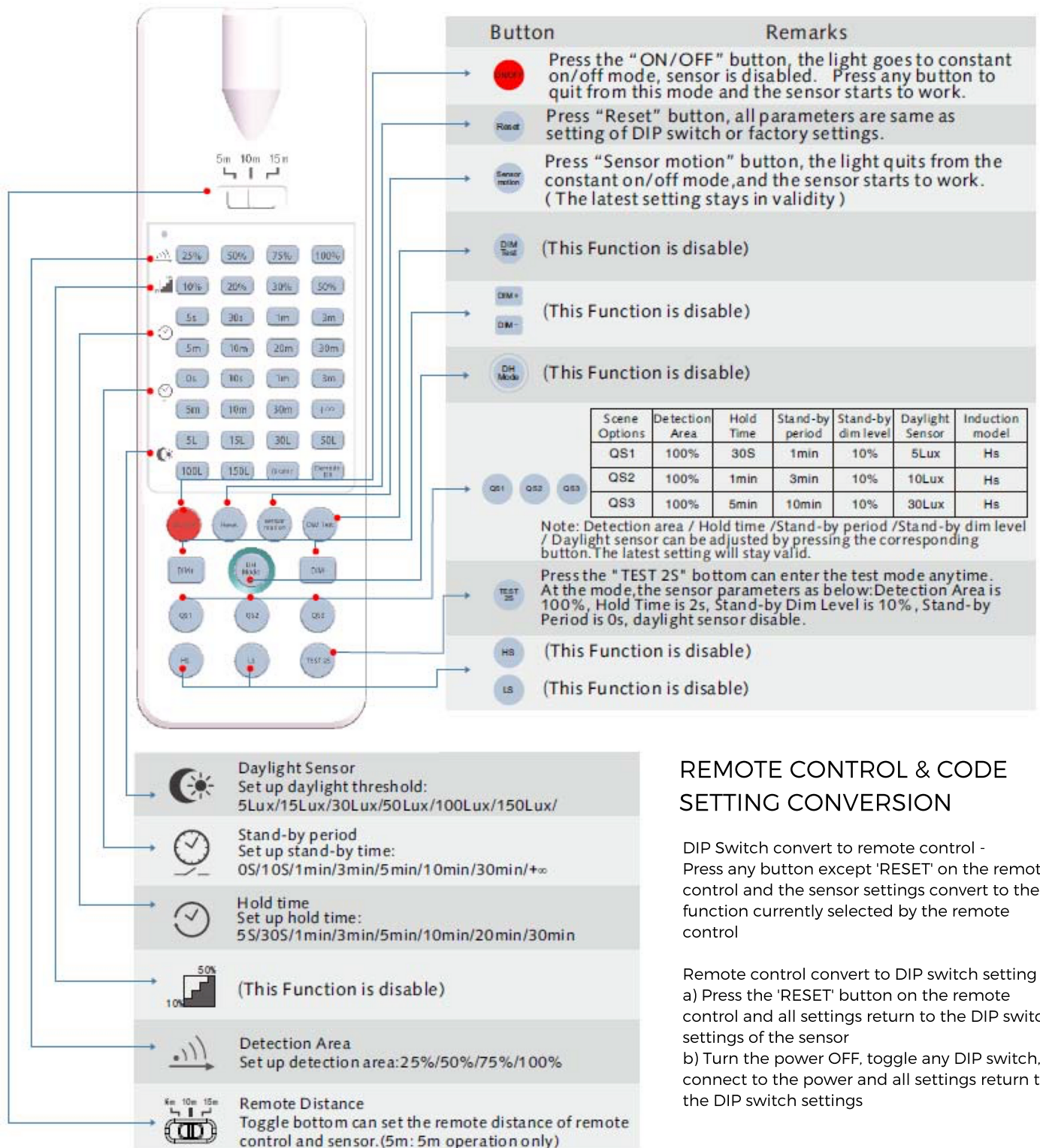
Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)



REMOTE CONTROL



REMOTE CONTROL & CODE SETTING CONVERSION

DIP Switch convert to remote control -
Press any button except 'RESET' on the remote control and the sensor settings convert to the function currently selected by the remote control

Remote control convert to DIP switch setting -
a) Press the 'RESET' button on the remote control and all settings return to the DIP switch settings of the sensor
b) Turn the power OFF, toggle any DIP switch, connect to the power and all settings return to the DIP switch settings



DIP SWITCH SETTING



DETECTION AREA (SENSITIVITY)

	1	2	
I	ON	ON	100%
II	-	ON	75%
III	ON	-	50%
IV	-	-	25%

HOLD TIME

	3	4	
I	ON	ON	5S
II	-	ON	5min
III	ON	-	10min
IV	-	-	30min

STANDBY PERIOD

	8	9	
I	ON	ON	0S
II	-	ON	5min
III	ON	-	15min
IV	-	-	+∞

STANDBY DIM LEVEL

	1	2		Voltage of 1-10V Interface
I	ON	ON	50%	5-5.5V
II	ON	-	35%	3.5-4V
III	-	-	25%	2.2-2.5V



DAYLIGHT SENSOR

	5	6	7	
I	ON	ON	ON	5Lux
II	ON	ON	-	25Lux
III	ON	-	ON	50Lux
IV	-	ON	ON	100Lux
V	-	-	-	Disable*

*Disable means the daylight sensor does not work. The sensor will turn on the light once motion is detected regardless of ambient light level.

OVERRIDE SENSOR

Quick switch ON/OFF 3 times within 2sec to override sensor function. Lights will switch on all the time. Power off and on again to recover sensor function.

INITIALISATION

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.

FACTORY SETTING

Detection Area: 100%, Hold Time: 5S, Stand-by Period: $+\infty$, Stand-by dim Level: 25%, Daylight Sensor: Disable

APPLICATION NOTES

1)The product's dimming function must work with active 1-10V dimmable LED driver.

2)1-10V stand-by Dim level can not be set by remote controller.

