

FEATURES

- Specially designed tiny PIR .
- Easy remote control.
- 12VDC input, Bi-level dimmable.
- Suitable for Dim-to-Off applications.
- With Daylight Harvesting and Photocell Function.



On/Off Control



Detection Area



Stand-by dimming level



Hold Time



IP Rating



FCC



TECHNICAL DATA

PIR Information

Sensor Type	PIR Sensor
Installation Height	<4M/13ft
Detection Distance	2-4M/6-13ft Radius.
Detection Angle	Fresnel Lens (Ceiling Mounted 360 ° Wall Mounted ≤120 °)

Electrical Specifications

Input Range	10.5-15VDC (Supply Current>30mA)
Current	<10mA
Signal	DIM 0-10V
Working Temp	-20°C~+60°C
Stand-by Power	<0.5W
Storage Temp	-40°C~+80°C Humidity: 85% (non-condensation)
Connection	22AWG/24AWG

Match Emergency Drivers

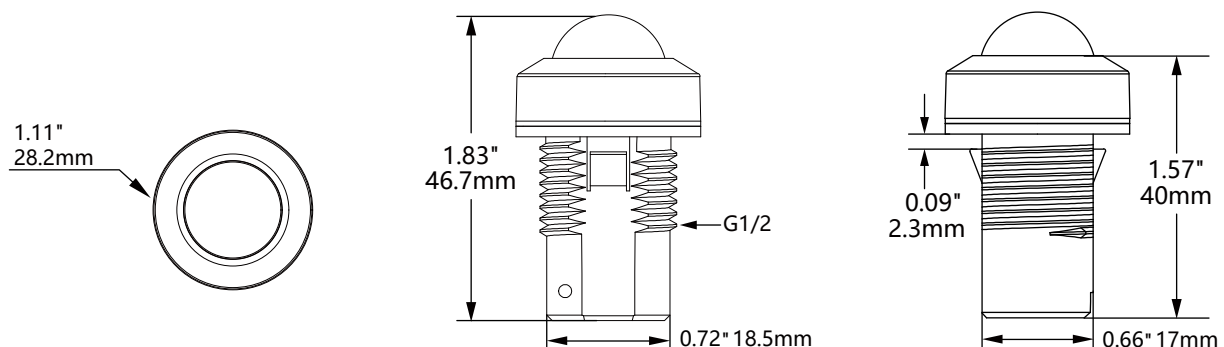
Working compatibly with HAISEN Emergency drivers

1. The driver/power supply DIM+ and DIM- must be 10±0.5V
2. In Mains Supply - sensor working properly
3. In Emergency supply - Sensor doesn' t detect motion at all, remote control or manual quick-setting dials doesn' t control it.

Sensor Parameter

Warming-up Period	About 10S
Control Device	Remote control HD06R
Detection Area	100%
Hold Time	5s/30s/1min/3min/5min/10min/20min/30min
Daylight Threshold	2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/ 200Lux/250Lux/300Lux/350Lux/400Lux/Disable
Standby Dim Level	10%/20%/30%/50%
Standby Period	0s/10s/30s/1min/5min/10min/30min/60min/+∞
Manually Dimming Play	Function supported, 10-100% in manual mode, 60%-100% in sensor mode.
Automatically Dimming (Daylight Harvesting)	1. Stay in SENSOR MODE 2. STANDBY PERIOD as 0S 3. DAYLIGHT as any of 50LUX, 80LUX, 120LUX, 200LUX, 250LUX, 300LUX, 350LUX, 400LUX. 4. Press DAYLIGHT HARVESTING button to ON
Automatically ON/OFF (Photocell)	1. STANDBY DIM LEVEL as any of 10% 20% 30% 2. STANDBY PERIOD as infinite 3. DAYLIGHT as any of 30LUX, 50LUX, 80LUX, 120LUX, 200LUX, 250LUX, 300LUX, 350LUX, 400LUX.

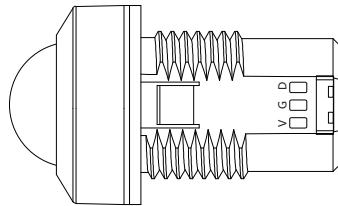
DIMENSIONS



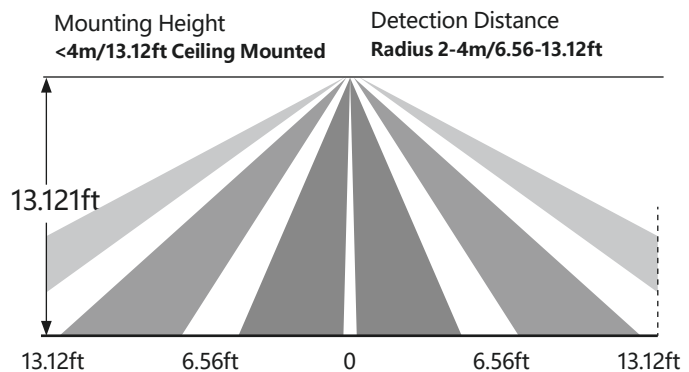
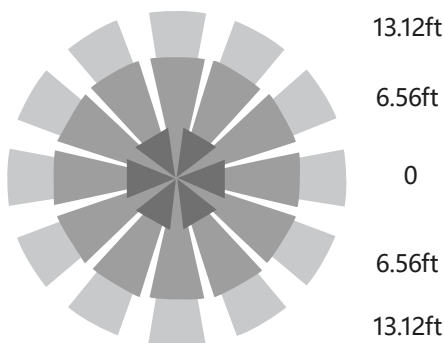
CONNECTION

Quick Connector

V : VCC 12V
G: GND
D: DIM+/0-10V



DETECTION COVERAGE

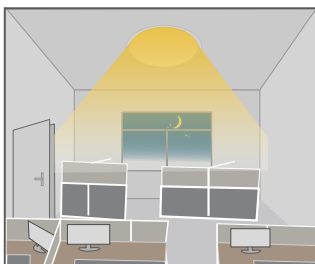
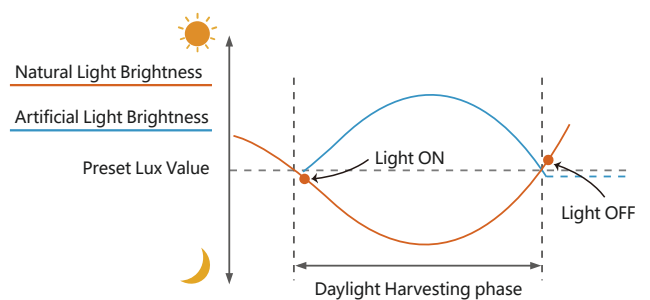


PERFORMANCE

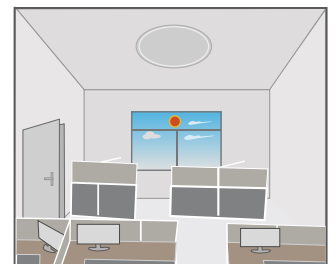
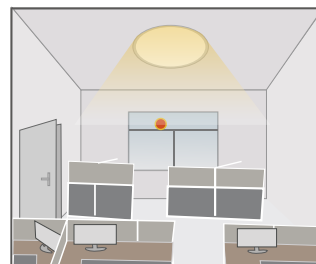
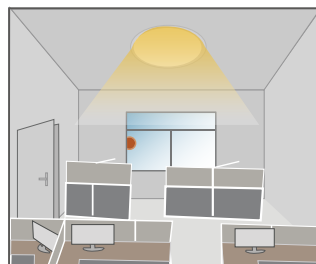
1. Daylight Harvesting

Please follow below setting steps to perform this function:

1. Stay in SENSOR MODE
2. STANDBY PERIOD as 0S
3. DAYLIGHT as any of 50LUX, 80LUX, 120LUX, 200LUX, 250LUX, 300LUX, 350LUX, 400LUX.
4. Press DAYLIGHT HARVESTING button to ON



When ambient brightness is lower than preset lux level, sensor will turn on light automatically and keep dimming according to the change of the ambient brightness; when outside is getting darker, the inside will be brighter, and brighter darker.



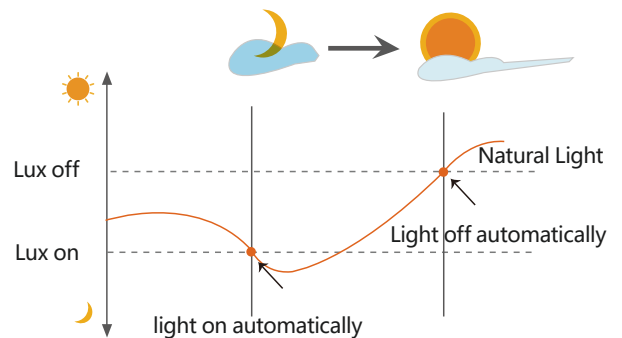
Light OFF when ambient brightness becomes higher than the preset lux level.

2. Dusk/Dawn function

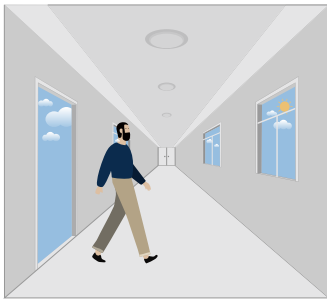
HD09VR is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

Please follow below setting steps to perform this function:

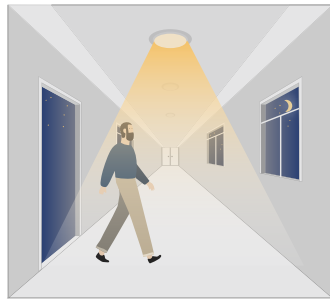
1. STANDBY DIM LEVEL as any of 10% 20% 30%
2. STANDBY PERIOD as infinite
3. DAYLIGHT as any of 30LUX, 50LUX, 80LUX, 120LUX, 200LUX, 250LUX, 300LUX, 350LUX, 400LUX.



3. Automatically ON/OFF function



With sufficient daylight, even when motion detected, light remains OFF.

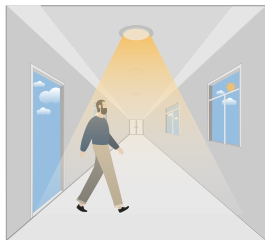


With insufficient daylight, the sensor turns light ON when motion gets detected.

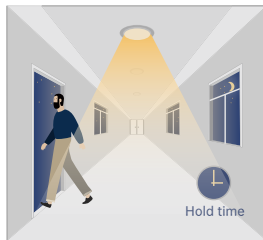


The sensor turns OFF light automatically after the holdtime when there's no motion detected.

4. Without daylight disabled



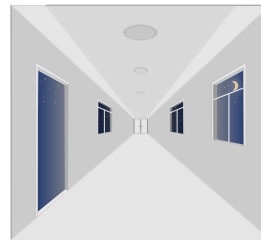
Sensor turns ON light when motion is detected.



Sensor keeps for a hold time period after motion leaves

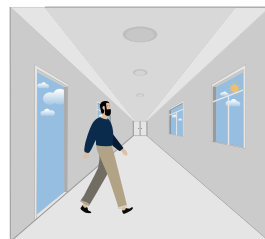


Sensor dims light to standby dimming level after hold time if there is still no motion

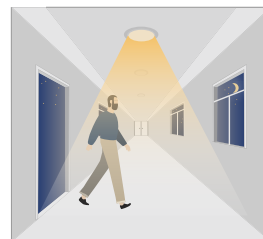


Sensor turns OFF light after standby period

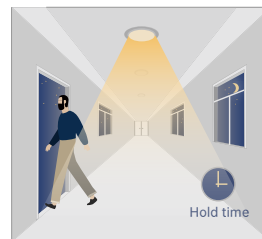
5. With Daylight Threshold



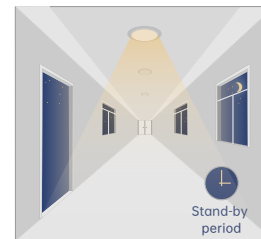
With sufficient daylight, the sensor keeps light OFF even motion gets detected



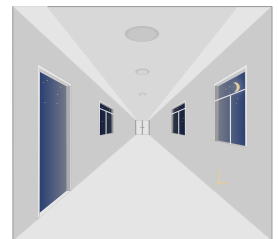
With insufficient daylight, the sensor turns light ON when motion gets detected



After there's no motion detected, the sensor keeps light ON 100% for holdtime.



After holdtime, sensor dims light to standby dimming level for standby period. if the standby period has been set as 0s, sensor turns light OFF automatically after holdtime.



The sensor turns OFF light automatically after the standby period when there's no motion detected.

FACTORY SETTING

1. Detection Area - 100%
 2. Hold Time - 20min
 3. Daylight Threshold - disable
 4. Standby Period - 60S
 5. Standby Dimming Level - 20%
 6. Max Dim Level: 80%
-



Attention

1. The sensor should be installed by a qualified electrician. Make sure the power is OFF before installation
 2. Please read the instruction carefully before using the product and save it for future reference.
 3. We reserve the right to modify any incorrect text, image and technical parameters.
 4. Any unauthorized modification is forbidden. Otherwise all guarantees will be immediately invalid..
 5. Product could be optimized without prior notice.
- When ambient temperature approaches the human body classic temperature range(36°C~37°C/96.8~98.6°F), PIR sensor's detecting performance will significantly weaken or non-responsive.
 - When ambient temperature stays higher then 40°C/104°F, PIR sensor's detecting performance will significantly weaken.

APPLICATION NOTES

1. Suitable for indoor application, half/completely outdoor environment conditions might trigger the sensor.
2. Suitable for installations where the sensor is facing to the ground. There will be increased sensitivity if installed in a side wall or perpendicular to the ground. Adjust the sensitivity accordingly.
3. PIR sensor cannot be placed inside any material, fresnel lens must completely exposed in air.
4. Fresnel lens of the PIR sensor must be lower than light fixture.
5. Not suitable environment if there's sudden changed temperature of airflow for PIR sensor.
6. Not suitable environment if there's shelves blocking between the sensor and presence area.
7. Detection area options may NOT working obviously because it works depends on fresnel lens, it's physically defined.
8. Detection distance performance works better when moving parallelly than moving towards to the sensor.
9. Daylight testing delivered in bright day without shadow or specially designed lampshade or lens.
10. Dimming performance differs when connected to different drivers; If the driver cannot completely turn OFF, sensor cannot either.
11. Input power voltage must be stable within a 10% tolerance.
12. When powering ON the sensor for the first time, light will be ON 100% for about 45S then dims to standby level or OFF.
13. Detection distance is determined with a 5.5ft test subject in open area as reference. Results may differ based on size and speed of moving objects, mounting height, and environmental conditions.