

FEATURES

- Newest design with 5 manual switches for easy programming.
- 12VDC input, 0-10V dimming, daylight harvesting and photocell functionality.
- Elegant and classic round design with rotators for easy programming.
- Rotator & remote control.



On/Off Control



Detection Area



Stand-by dimming level



Hold Time



IP Rating



Certificate



Warranty

**HD09VR-PH5****HD09VR-PH5-1****TECHNICAL DATA****PIR Information**

Infrared Wavelength	5-14um
Output Signal Peak	≥3500mV
PIR Sensitivity	3200V/W
Installation Height	≤12m/39.37ft
Detection Distance	3-7m/9.84-22.96ft
Detection Angle	<120° Fresnel Lens
Working Temp	-20°C~+60°C

Electrical Specifications

Input Range	12-24VDC
Stand-by Power	<15mA
Warm-up Period	50s
Output control	NO/OFF 0-10V DIM

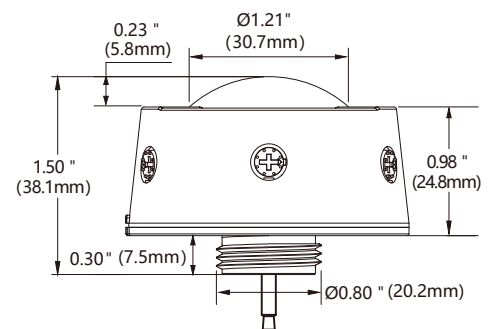
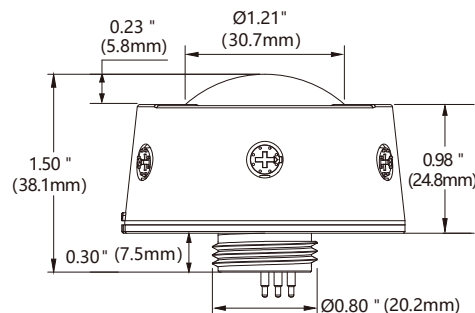
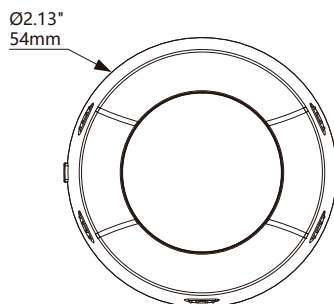
Match Emergency Drivers

*Works with EM driver. Please make sure it follows the conditions below:

1. Switching capacity <1mA
2. LED driver's OFF voltage at 1mA is 0.25-0.3V
3. Single fixture connected.

Sensor Parameter

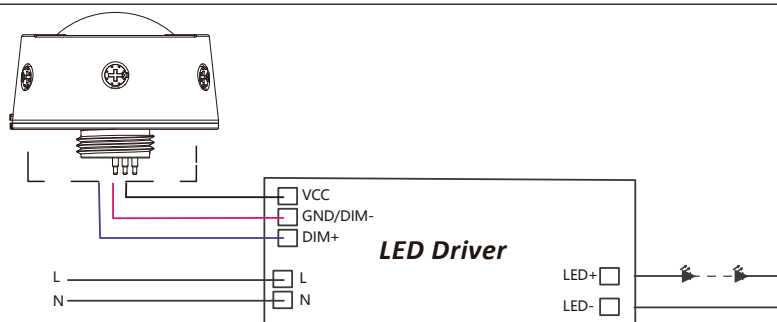
Control Device	Remote Control #HD06R(purchase separately) Manual Switches
Detection Area	Remote Control : 25% / 50% / 75% / 100% Rotating switch: 25% / 50% / 75% / 100%
Holdtime	Remote Control: 5s / 30s / 1min / 3min / 5min / 10min / 20min / 30min Rotating switch: 5s/1min/ 5min/10min
Daylight Threshold	Remote Control: 2lux / 10lux / 30lux / 50lux / 80lux / 120lux / 200Lux / 250Lux / 300lux / 350Lux / 400Lux / Disable Rotating switch: 50Lux / 200Lux / 400Lux / Disable
Standby Period	Remote Control: 0s / 10s / 30s / 1min / 5min / 10min / 30min / 60min / +∞ Rotating switch: 0s / 10min / 30min / +∞
Standby Dimming Level	Remote Control: 10% / 20% / 30% / 50% Rotating switch: 10% / 20% / 30% / 50%
Automatically Dimming (Daylight Harvesting)	1. Stay in SENSOR MODE 2. STANDBY PERIOD 0s 3. DAYLIGHT as any of 50Lux / 80Lux / 120Lux / 200Lux / 250Lux / 300Lux / 350Lux / 400Lux 4. Set 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

HD09VR-PH5/HD09VR-PH5-1

WIRING DIAGRAM

-  +12V 12VDC input
 GND 0/1-10V DIM
 DIM+ 0/1-10V DIM+



PROGRAMMING

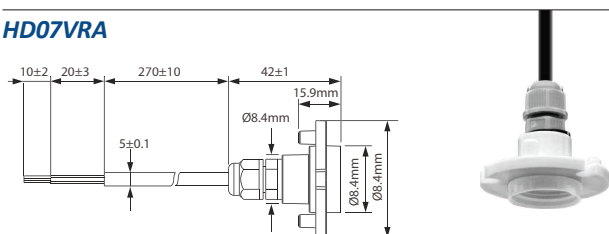
- ① Detection Area
25% / 50% / 75% / 100%
- ② Holdtime
5s/1min/ 5min/10min
- ③ Daylight Threshold
50Lux / 200Lux / 400Lux / Disable
- ④ Standby Period
0s / 10min / 30min / +∞
- ⑤ Standby Dimming Level
10% / 20% / 30% / 50%



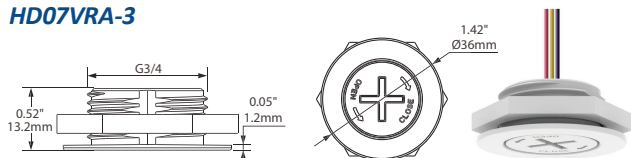
RECEPTACLE OPTIONS

Type	Name	Wire color	Length
3 Pogo-pin Connection	HD07VRA	Black/White, Pink, Purple	330mm
	HD07VRA-3	Yellow, Pink, Purple	200mm
	HD07VRB	Black/White, Pink, Purple	330mm

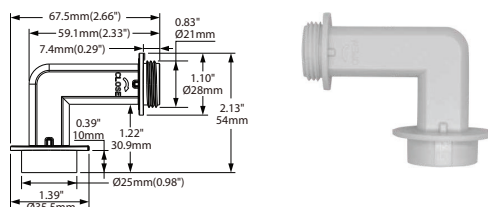
HD07VRA



HD07VRA-3

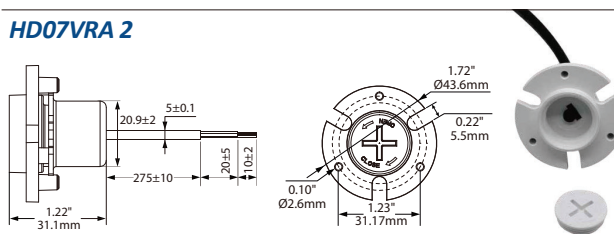


HD07VRB

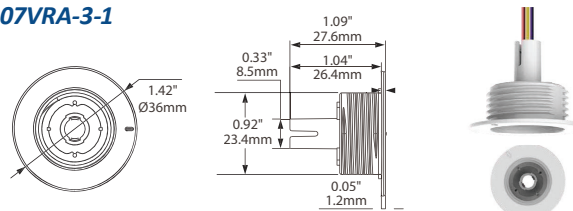


Type	Name	Wire color	Length
Audio Jack Connection	HD07VRA 2	Black/White, Pink, Purple	330mm
	HD07VRA-3-1	Yellow, Pink, Purple	300mm
3 Pogo-pin Connection	HD07VRC	Yellow, Pink, Purple	300mm

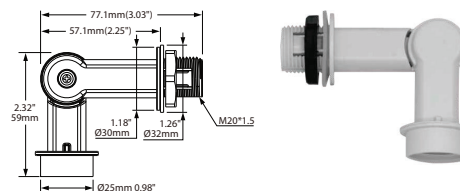
HD07VRA 2

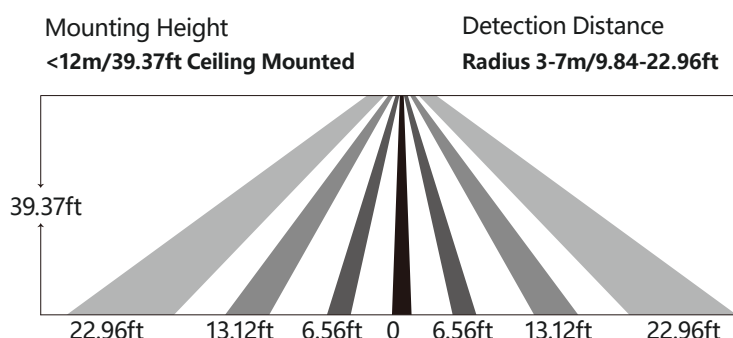
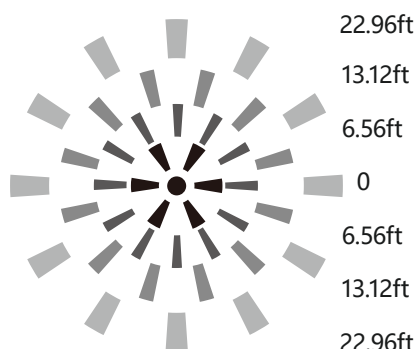


HD07VRA-3-1



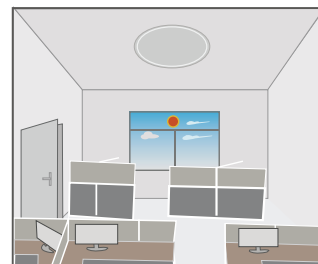
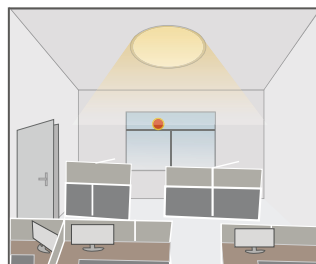
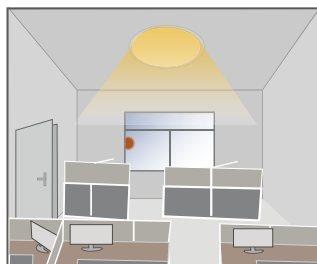
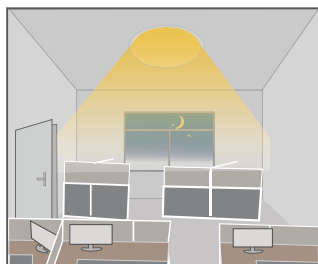
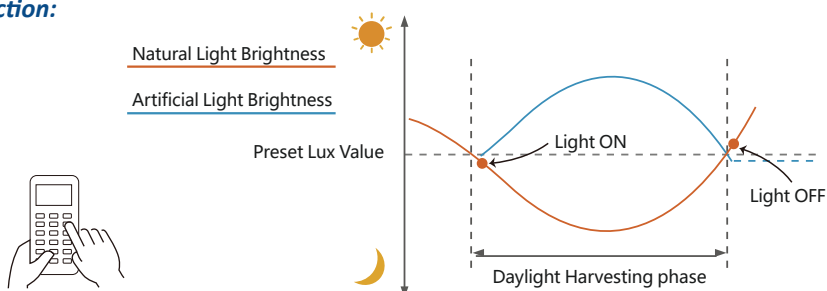
HD07VRC



DETECTION COVERAGE**PERFORMANCE****1. Daylight Harvesting**

Please follow the steps below to perform this function:

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



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

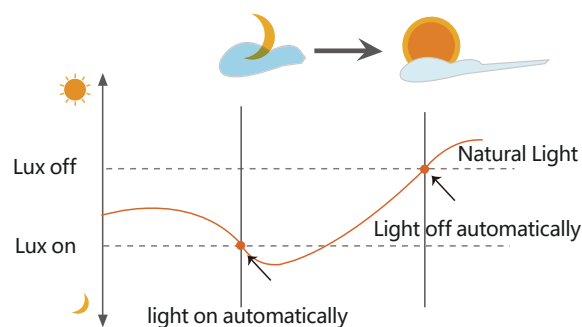
Light turns off when ambient brightness becomes higher than the preset lux level.

2. Dusk/Dawn function

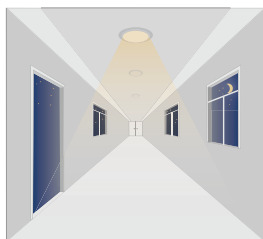
HD09VR is able to differentiate artificial light brightness from natural light after installation, and automatically turns off the light when ambient brightness exceeds preset lux level.

Please follow the steps below to perform this function:

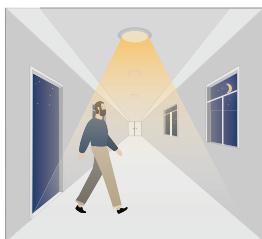
1. STANDBY DIM LEVEL as any of 10% 20% 30%
2. STANDBY PERIOD as infinite
3. DAYLIGHT as any of 30Lux / 50Lux / 80Lux / 120Lux / 200Lux / 250Lux / 300Lux / 350Lux / 400Lux



2. With Dusk/Dawn Function



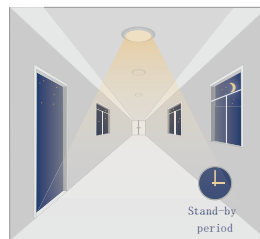
With insufficient ambient brightness, sensor turns on the light and keeps it at standby dimming level even if there is no motion or presence.



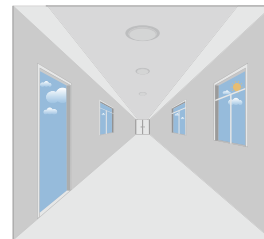
When the sensor detects motion or presence it will bring the light level up to 100%.



After motion is no longer detected, the fixture remains at 100% for hold time.

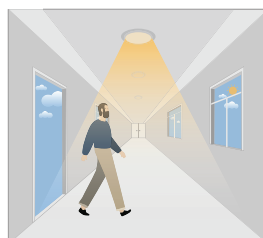


After the pre-set hold time period, it will dim the light to standby dimming levels again and maintain it.

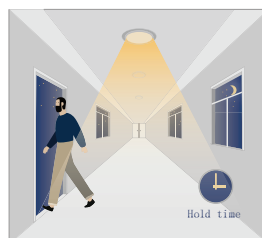


With sufficient ambient brightness, the sensor will turn the light off automatically.

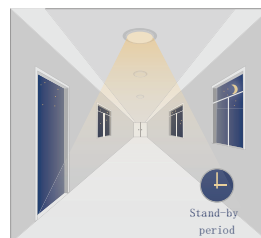
3. Without Daylight Disabled



Sensor turns the light on when motion is detected.



Sensor maintains light for a hold time period after motion stops.

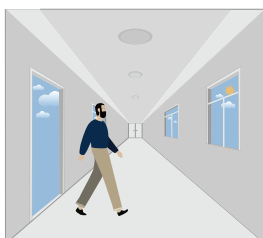


Sensor dims light to standby dimming level after hold time if there is still no motion.

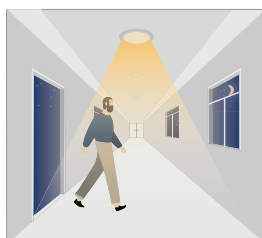


Sensor turns the light off after standby period ends.

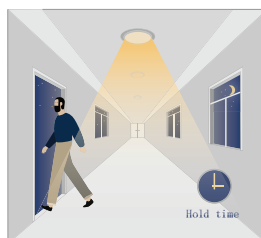
4. With Daylight Threshold



With sufficient daylight, the sensor keeps the light off even if motion is detected.



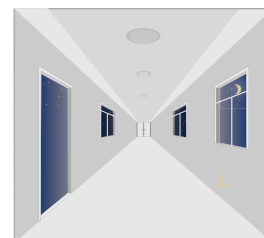
With insufficient daylight, the sensor turns the light on when motion is detected.



If there is no motion detected, the sensor maintains the light at 100% for the holdtime.



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



The sensor turns the light off automatically after the standby period if there is no motion detected.

FACTORY SETTINGS

1. Detection Area - 100%
2. Holdtime - 5s
3. Daylight Threshold - Disabled
4. Standby Period - 0s
5. Standby Dimming Level - 10%



Attention

1. The sensor should be installed by a qualified electrician. Ensure power is OFF before installation.
2. Please read the instructions carefully before using the product and keep them for other users to read any time.
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 average human body temperature range (36°C~37°C/96.8~98.6°F), the PIR sensor's detecting performance will significantly weaken or become non-responsive.
- When ambient temperature stays higher than 40°C/104°F, the PIR sensor's detecting performance will significantly weaken.

APPLICATION NOTES

1. Suitable for indoor applications. Half/completely outdoor environmental conditions might trigger the sensor.
2. Suitable for ceiling mount installations. Adjust sensitivity properly if installed on walls.
3. The sensor should not be placed inside any material. The fresnel lens must completely exposed in air.
4. Fresnel lens of the PIR sensor must be lower than light fixture.
5. Not suitable for use if there is a sudden change of temperature or airflow around the PIR sensor.
6. Not suitable for use if there are obstructions between the sensor and presence area.
7. Detection distance performance works better when moving parallel rather than moving towards the sensor.
9. Daylight testing delivered in sunlight without shadow or specially designed lampshade or lens.
10. Dimming performance differs when connected to different drivers. If the driver can't completely turn off, the sensor can't either.
11. Input power voltage must be stable with float less than 10%.
12. The first time the sensor is powered on, the light will be on at 100% brightness for about 45s, then dim to standby level or off.
13. Distance detection is delivered by testing movement about 165cm in an open area as reference. The result differs by the size and speed of moving objects, mounting height and real-life situations.