

# Sensor Kit / Ensemble De Capteurs

Note: Components shown in images are representative only and may vary based on the configuration ordered.

Remarque : les composants présentés dans les images sont uniquement représentatifs et peuvent varier en fonction de la configuration commandée.



**BEFORE YOU BEGIN**, read these instructions completely and carefully.

**AVANT DE COMMENCER**, lisez entièrement et attentivement ces instructions.

## ⚠ WARNING / AVERTISSEMENT

### RISK OF ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- Properly ground electrical enclosure.

### RISK OF FIRE

- Follow all NEC and local codes.
- Use only UL approved wire for input/output connections. Minimum size 18 AWG (0.75mm<sup>2</sup>).
- Do not install insulation within 3 inches (76 mm) of fixture top.

### RISQUES DE DÉCHARGES ÉLECTRIQUES

- Coupez l'alimentation avant d'inspecter, installer ou déplacer le fixture.
- Assurez-vous de correctement mettre à la terre le boîtier d'alimentation électrique.

### RISQUES D'INCENDIE

- Respectez tous les codes NEC et codes locaux.
- N'utilisez que des fils approuvés par UL pour les entrées/sorties de connexion. Taille minimum 18 AWG (0.75mm<sup>2</sup>).
- Maintenir une distance de 76 mm (3 pouces) entre le fixture et l'isolant.

## Save These Instructions / Conservez ces instructions

Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

Utiliser uniquement de la manière prévue par le fabricant. Si vous avez des questions, contactez le fabricant.

## Prepare Electrical Wiring / Préparer le câblage électrique



### Electrical Requirements / Exigences électriques

- The LED fixture must be connected to the mains supply according to its ratings on the product label.
- Class 1 wiring should be in accordance with NEC.
- Le luminaire LED doit être connecté à l'alimentation secteur en fonction de ses caractéristiques sur l'étiquette du produit.
- Le câblage de classe 1 doit être conforme au NEC.



### Grounding Instructions / Instructions de mise à la terre

- The grounding and bonding of the overall system shall be done in accordance with local electric code of the country where the fixture is installed.
- La mise à la terre et la liaison de l'ensemble du système doivent être effectuées conformément au code électrique local du pays où le luminaire est installé.

## Tools and Components Required

- Screwdriver. / Tournevis.
- Conduit and fitting in trade size 1/2" or 3/4". / Conduit et son raccord de dimension 1/2" ou 3/4".
- Wiring connectors. / Connecteurs de câblage.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAN ICES-005(A)/NMB-005(A).

Cet appareil est conforme à la partie 15 des règles de la FCC. Le fonctionnement de cet appareil est assujéti aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence préjudiciable, et (2) cet appareil doit accepter toute autre interférence reçue, y compris les interférences pouvant entraîner un fonctionnement non désiré.

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**REMARQUE:** Cet appareil a été testé et reconnu conforme aux limites établies pour les appareils numériques de classe A, selon la section 15 des règlements de la FCC. Ces limites visent à fournir une protection raisonnable contre l'interférence préjudiciable lorsque l'équipement est utilisé en milieu commercial. Cet équipement produit, utilise et peut émettre de l'énergie radioélectrique et, s'il n'est pas installé et utilisé conformément aux instructions d'installation, il peut causer une interférence préjudiciable aux communications radio. L'utilisation de cet équipement en milieu résidentiel est susceptible de causer une interférence préjudiciable, auquel cas l'utilisateur devra corriger l'interférence à ses frais.

**FCC Caution Statement:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**Déclaration de mise en garde de la FCC:** Tout changement non expressément autorisé par le fabricant peut annuler l'autorisation d'utiliser cet équipement.

**FCC Radiation Exposure Statement:** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20 cm between the radiator and your body.

**Déclaration de la FCC sur l'exposition aux radiations:**

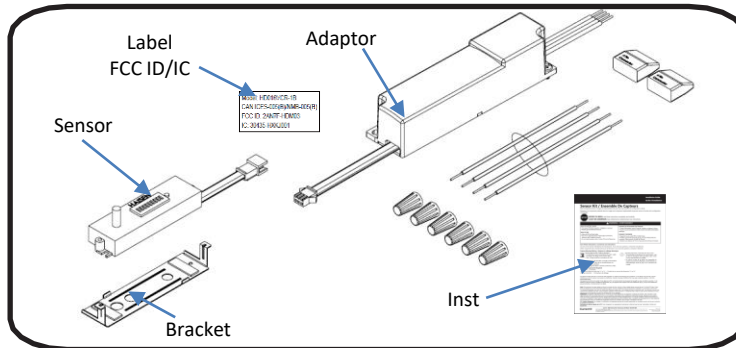
Cet équipement est conforme aux limites d'exposition aux radiations fixées par la FCC pour un environnement non-contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre la source de rayonnement et votre corps.

**ISED Radiation Exposure Statement:**

This equipment complies with RSS-102 radio frequency radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

**ISDE Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition CNR-102 aux radiofréquences établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.



Component identification / Identification des composants

## Installation Steps for Wrap and Strip Fixtures Étapes d'installation pour les luminaires Wrap et Strip

① Set the sensor DIP switch to the desired mode, then tear off the paper carriers of the sticky tape. Install the sensor to the spring bracket with the correct position. See below fig1 or fig2.

Réglez le commutateur DIP du capteur sur le mode souhaité, puis déchirez les supports en papier de la bande adhésive. Installez le capteur sur le support de ressort avec la position correcte. Voir ci-dessous fig1 ou fig2.

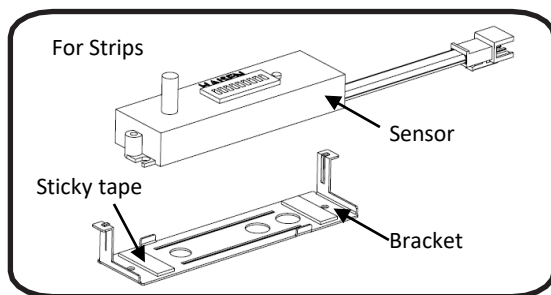


Fig 1

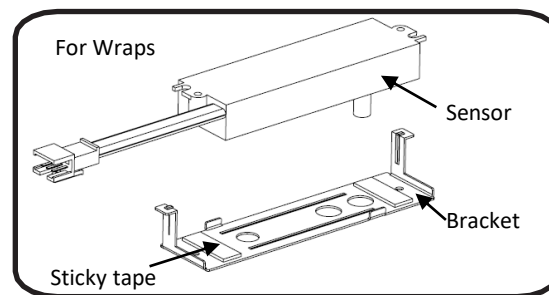


Fig 2

② For Wrap, open the lens according to its installation guide. Then install Adaptor with screws and insert the hooks of bracket into the opening of housing. See Fig3.

For Strip, open the Lens and LED tray together according to the instruction, Then install Adaptor with screws and insert the hooks of bracket into the opening of LED tray. See Fig 4 and Fig 5.

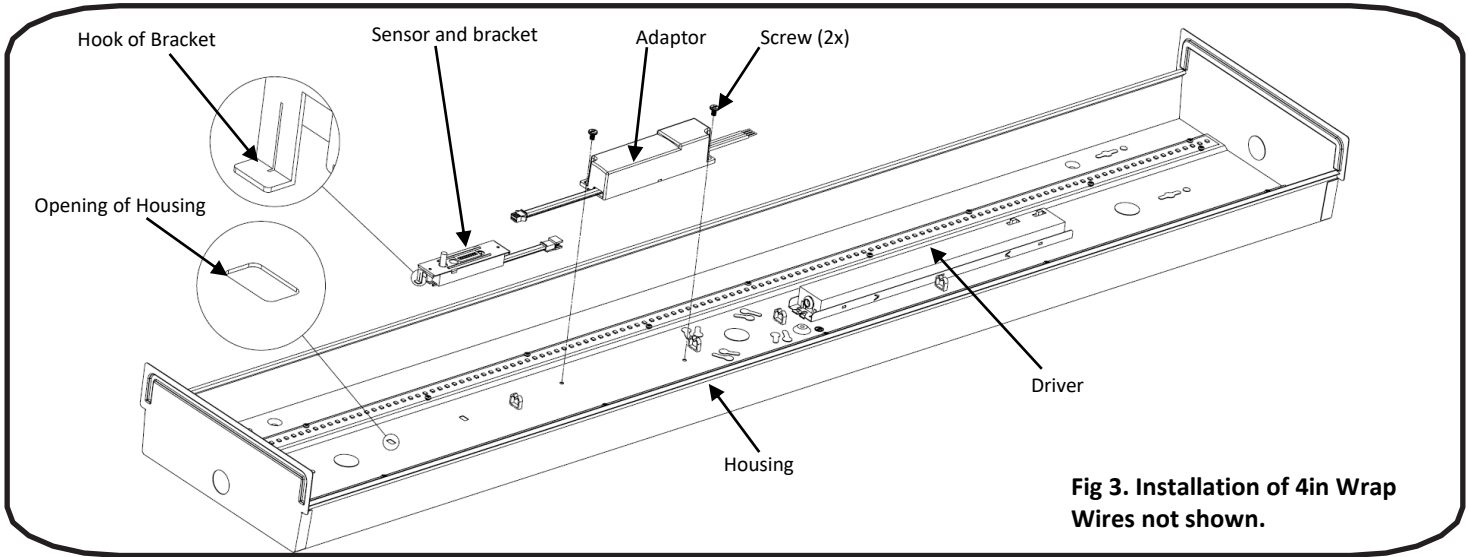
Pour Wrap, ouvrez l'objectif conformément à son guide d'installation. Ensuite, installez l'adaptateur avec des vis et insérez les crochets du support dans l'ouverture du boîtier. Voir Fig3.

Pour Strip, ouvrez la lentille et le plateau LED ensemble selon les instructions, puis installez l'adaptateur avec des vis et insérez les crochets du support dans l'ouverture du plateau LED. Voir Fig 4 et Fig 5.

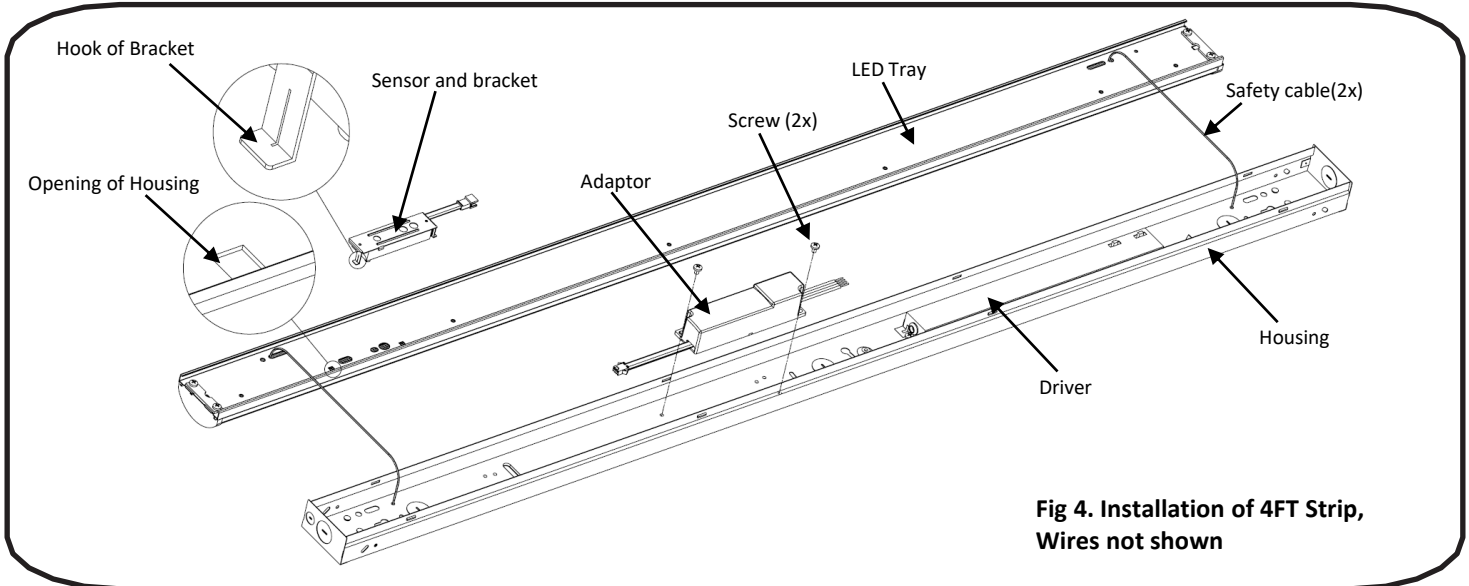
③ Connect all wires according to Fig 6 or Fig 7. Connectez tous les fils selon la Fig 6 ou la Fig 7

For 8FT Strip fixture, use wire-nuts and provided wires to extend the wires of adaptor. For Wrap, pull all wires outward to avoid the caused shadow by wires.

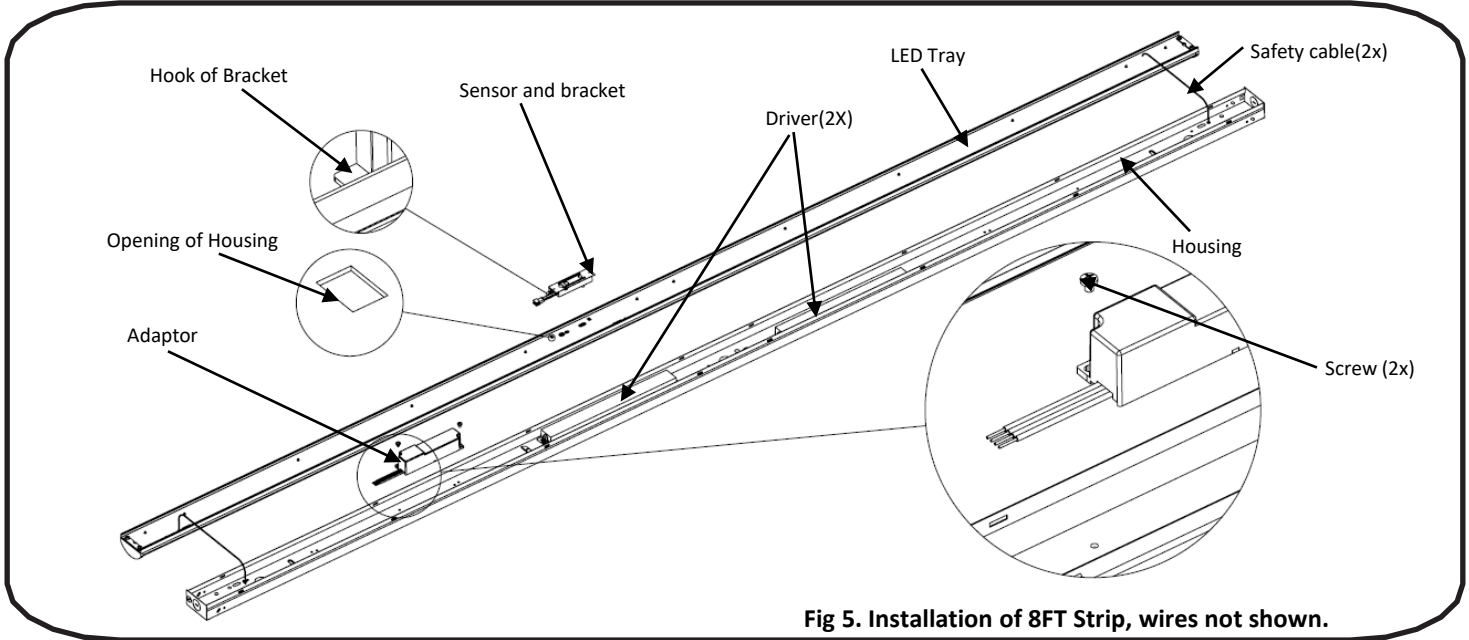
Pour le luminaire à bande de 8 pieds, utilisez des serre-fils et les fils fournis pour rallonger les fils de l'adaptateur. Pour Wrap, tirez tous les fils vers l'extérieur pour éviter l'ombre causée par les fils



**Fig 3. Installation of 4in Wrap  
Wires not shown.**



**Fig 4. Installation of 4FT Strip,  
Wires not shown**



**Fig 5. Installation of 8FT Strip, wires not shown.**

Wiring Diagram / Schéma de câblage

Note: Cap all wires with wire-nuts or connectors.

Remarque: Capuchonnez tous les fils avec des serre-fils ou des connecteurs.

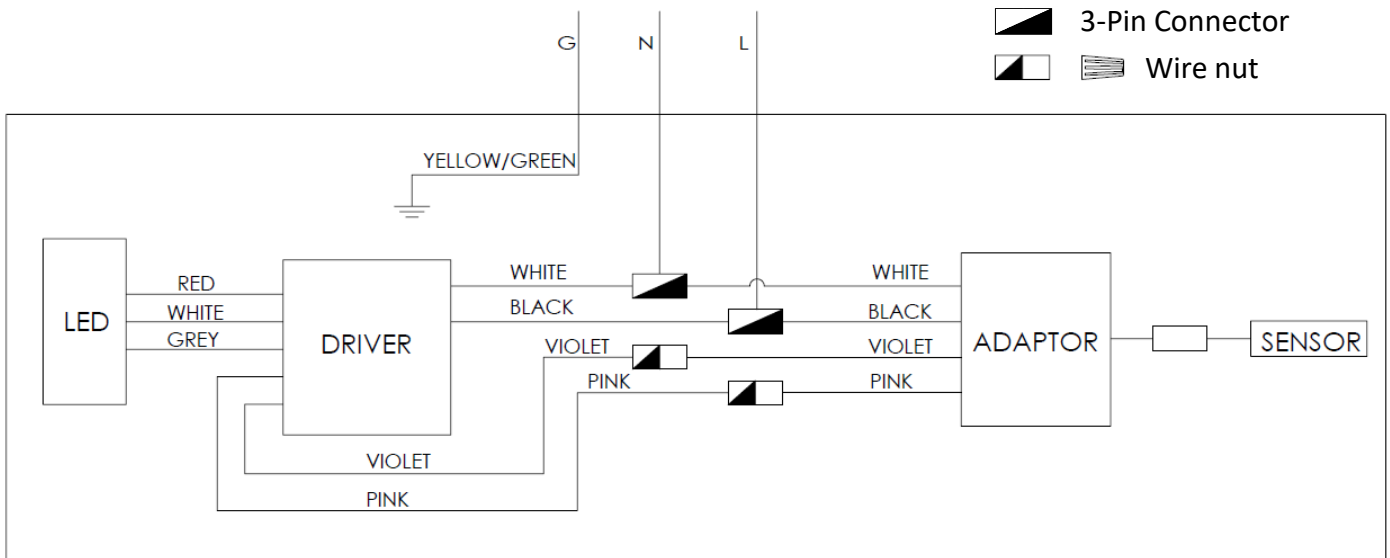


Fig 6. Diagram for 4FT fixtures

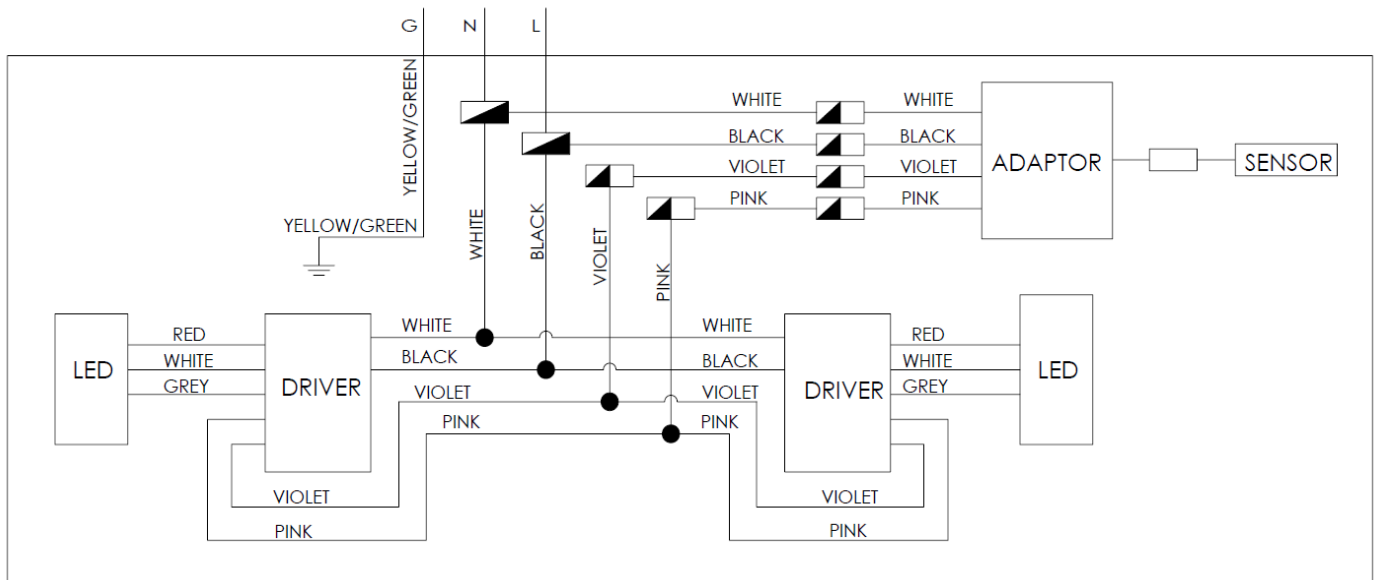


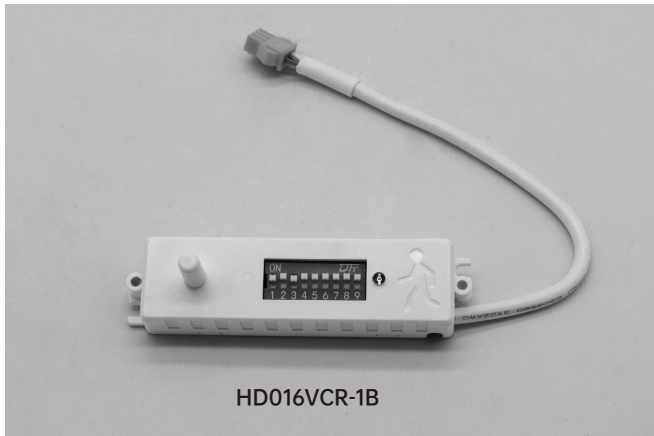
Fig 7. Diagram for 8FT fixtures

- ④ Take out the FCC ID label from kit and stick it at the back of fixture or next to sensor.

Retirez l'étiquette d'identification FCC du kit et collez-la à l'arrière du luminaire ou à côté du capteur.

- ⑤ After finish the wiring connection, select the desired CCT and Lumen level, then install Lens or LED-tray back to Housing.

Après avoir terminé la connexion du câblage, sélectionnez le CCT et le niveau de luminosité souhaités, et réglez le commutateur DIP sur le mode souhaité, puis réinstallez l'objectif ou le plateau LED sur le boîtier.



DC input , Rod antenna



HD016VCR-1B HD016VCR-2B

- Automatic On/off control with Daylight sensor. DC input
- Compact sized particularly suitable for Tri-proof light
- 5 year warranty.



On/Off Control



Detection Area



Hold Time



Daylight Sensor



Stand-by period



Stand-by dimming level



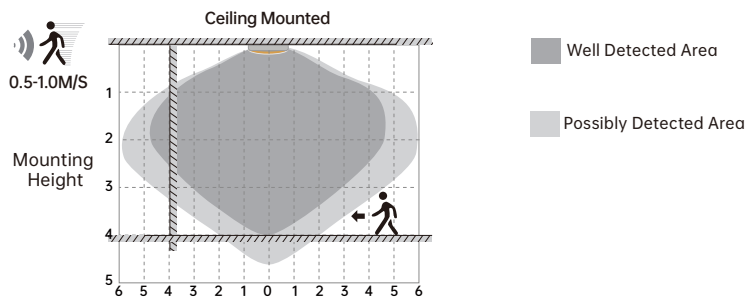
Warranty

## Technical Data

Operating Voltage <b>12VDC</b>	Detection Area <b>50%/100%</b>	Control <b>DIP Switch Control</b>
Operating Current <b>≤30mA</b>	Hold Time <b>5s/30s/1min/10min</b>	Mounting Height <b>2.5-4m/8.2-13.12ft Ceiling Mounted</b>
Output <b>0-10V</b>	Daylight Threshold <b>2Lux/10Lux/50Lux/Disable</b>	Detection Range <b>∅6-12m/19.68-39.37ft Ceiling Mounted</b>
Stand-by power <b>≤0.5W</b>	Stand-by Period <b>0s/30s/20min/+∞</b>	Motion Detection <b>0.5~1.5m/s</b>
Microwave Frequency <b>5.8GHz±75MHz</b>	Stand-by dimming level <b>10%/20%/30%/50%</b>	IP Rating <b>IP20</b>
Microwave Power <b>&lt;0.3mW</b>	Operating Temperature <b>-20°C~+60°C</b>	Warranty <b>5 Years</b>

Factory Default Setting: Detection area 100%/ Hold time 5s/ Daylight threshold Disable/Stand-by period 0s/Stand-by dimming level 10%. Can be customized default programming.

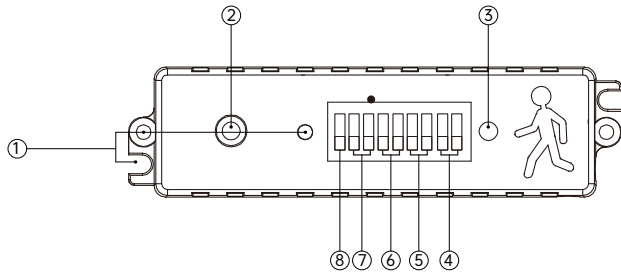
## Detection Patterns



Highest mounting height is 4m

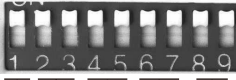
This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

## Mechanical Structure



- ① Installation Hole
- ② Antenna module
- ③ Daylight Sensor
- ④ Stand-by dimming level
- ⑤ Stand-by Period
- ⑥ Daylight Threshold
- ⑦ Hold Time
- ⑧ Detection Area

## DIP Switch Setting



● Switch UP

○ Switch DOWN

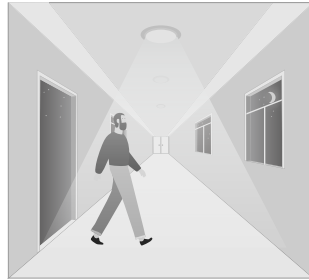
Stand-by dimming level	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr><td>●</td><td>●</td><td>10%</td></tr> <tr><td>●</td><td>○</td><td>20%</td></tr> <tr><td>○</td><td>●</td><td>30%</td></tr> <tr><td>○</td><td>○</td><td>50%</td></tr> </table>	●	●	10%	●	○	20%	○	●	30%	○	○	50%	The definition of low output in the standby period.
●	●	10%												
●	○	20%												
○	●	30%												
○	○	50%												
Stand-by period	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr><td>●</td><td>●</td><td>0s</td></tr> <tr><td>●</td><td>○</td><td>30s</td></tr> <tr><td>○</td><td>●</td><td>20min</td></tr> <tr><td>○</td><td>○</td><td>+ ∞</td></tr> </table>	●	●	0s	●	○	30s	○	●	20min	○	○	+ ∞	The period of light keeping low output before it's completely switched off. When it's preset as "∞", the light always keep at low output if no movement in the detection area and doesn't turn off.
●	●	0s												
●	○	30s												
○	●	20min												
○	○	+ ∞												
Daylight Threshold	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr><td>●</td><td>●</td><td>Disable</td></tr> <tr><td>●</td><td>○</td><td>50lux</td></tr> <tr><td>○</td><td>●</td><td>10lux</td></tr> <tr><td>○</td><td>○</td><td>2lux</td></tr> </table>	●	●	Disable	●	○	50lux	○	●	10lux	○	○	2lux	Definition of the ambient brightness; only when the ambient brightness is lower than the preset specific lux amount; the sensor will work; when it's preset as "disable", the sensor works everytime it detects motion regardless the ambient brightness.
●	●	Disable												
●	○	50lux												
○	●	10lux												
○	○	2lux												
Hold-Time	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr><td>●</td><td>●</td><td>5s</td></tr> <tr><td>●</td><td>○</td><td>30s</td></tr> <tr><td>○</td><td>●</td><td>1min</td></tr> <tr><td>○</td><td>○</td><td>10min</td></tr> </table>	●	●	5s	●	○	30s	○	●	1min	○	○	10min	The period of light keeping 100% brightness after moving objects leave the detection area.
●	●	5s												
●	○	30s												
○	●	1min												
○	○	10min												
Detection Area	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr><td>●</td><td>100%</td></tr> <tr><td>○</td><td>50%</td></tr> </table>	●	100%	○	50%	In this area, movement will be detected and able to trigger the sensor. 100% detection area is also known as the strong sensitivity.								
●	100%													
○	50%													

## Performance

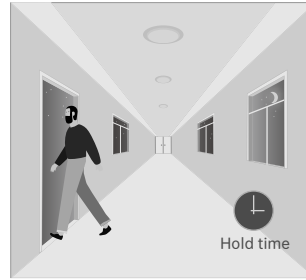
### 1. Automatically ON/OFF function



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



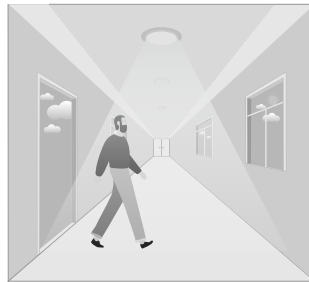
With insufficient daylight, the sensor turns light ON when motion gets detected.



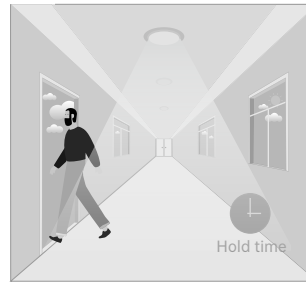
The sensor turns OFF light automatically after the holdtime when there's no motion detected.

### 2. Daylight Disable

When daylight threshold is preset as "disable", the sensor turns light ON when motion gets detected, and OFF after hold-time.



The sensor turns light ON when motion gets detected.

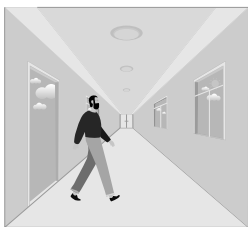


The sensor keeps light ON for holdtime period after motion leaves.

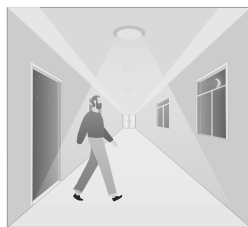


The sensor turns OFF light automatically after the holdtime.

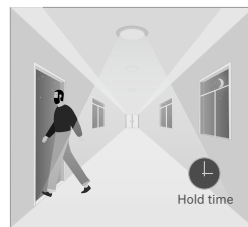
### 3. Corridor Function, Bi-level Dimmable



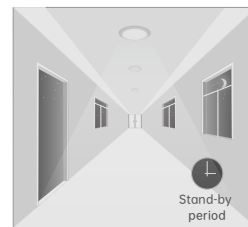
With sufficient daylight, the sensor keeps light OFF even motion gets detected.



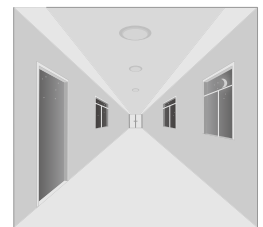
With insufficient daylight, the sensor turns light ON when motion gets detected.



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.



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



## Attention

1. Please read the instructions carefully before using this product and keep it well for all users to read at any time.
2. The sensor should be installed by qualified electrician and ensure power is off before the installation.
3. We reserve the right to modify any incorrect text, image and necessary technical parameters.
4. Any unauthorized modification is forbidden, otherwise all guarantees will be immediately invalid.

### Installation precautions

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1. Microwave sensor can be installed in any lamp except the one with full metal shell.
2. The detected surface cannot be shielded by metal objects.
3. Make sure the microwave module is completely exposed outside.
4. The detection surface of the sensor module shall be installed facing the detection area.
5. Should be kept away from the driver to avoid interference generation and lamp flashing.
6. Wiring must be strictly in accordance with the wiring diagram to avoid short circuit.

### Application Environment

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1. Suitable for indoor installation to avoid false triggering due to external factors such as rain, wind or tree swing.
2. Shall not be installed in the place with all four metal shelters and small space (such as galvanized-iron roof).
3. Shall note be mounted installation, so as to avoid false trigger caused by the lamp itself shaking.
4. Shall not be installed next to large operating machines such as ventilator/ceiling fan to avoid false triggering caused by machine vibration.

### User Notes

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1. Microwave can penetrate walls or glass thinner than <20mm and attenuate if thicker than < 20mm.
2. The driver voltage shall be stable and float within 10%.
3. Detection area will be affected by speed of motion, mounting height and movement volume.
4. Conduct test on sunny days without the lampshade which will affect the tested lux value.