

1. Technical Specifications

Product type	On/off control microwave motion sensor
Operating voltage	220~240VAC 50/60Hz
Rated load	Capacitive: 800VA Resistive: 1000W
Power consumption	< 0.5W
Detection angle	360°
Detection area (max.)	Installation Height : 20m (forklift) 15m (person) Diameter (Ø) : 20m
Detection range	10% / 50% / 75% / 100%
Hold time	2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min
Daylight threshold	2 ~ 500Lux, Disable
Warming up time	20s
Operating temperature	-20°C ~ +50°C
IP rating	IP65

Note: We recommend the mounting distance between sensor to sensor should be more than 2m to prevent sensors from false-triggering.

3. Rotary Switch Settings

A rotary switch is built inside the sensor for scene selection / fast programming. Total of 16 channels available:



Rotary switch preset (Please see the location in 2. Installation)

Channel	Detection range	Hold time	Stand-by time	Stand-by dimming level	Daylight threshold
0	100%	5s	10s	10%	Disable
1	100%	1min	5min	10%	2Lux
2	100%	5min	10min	10%	10Lux
3	100%	5min	30min	10%	30Lux
4	100%	5min	0s	Disable	10Lux
5	100%	5min	∞	10%	30Lux
6	100%	5min	∞	30%	Disable
7	100%	10min	10min	10%	2Lux
8	100%	10min	30min	10%	10Lux
9	100%	10min	∞	10%	30Lux
A	100%	10min	∞	30%	Disable
B	75%	10min	∞	10%	30Lux
C	50%	10min	∞	10%	10Lux
D	100%	30min	∞	10%	50Lux
E	100%	30min	∞	30%	Disable
F	100%	5s	10s	10%	2Lux

Note: settings can also be changed by remote control HRC-11. The last action controls.

4. Functions

4.1 On/off Control

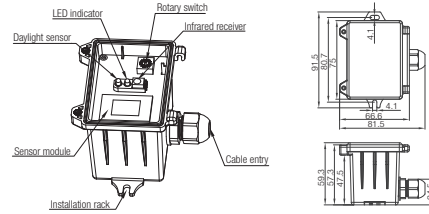
This sensor is a motion switch, which turns on the light upon detection of motion, and turns off after a pre-selected hold-time when there is no movement. A daylight sensor is also built in to prevent the light from switching on when there is sufficient natural light.

2. Installation

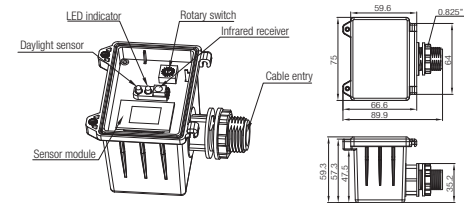
⚠ Warnings:

- Installation of the sensor involves connecting it to the mains supply. This work must be carried out by a specialist in accordance with electrotechnical regulations.
- Disconnect power supply before installing.

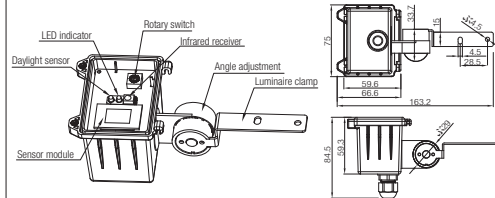
A. Ceiling mount



B. Screw to the Luminaire by conduit

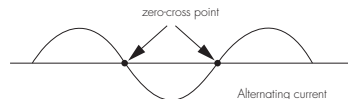


C. Attach to the shade by clamp

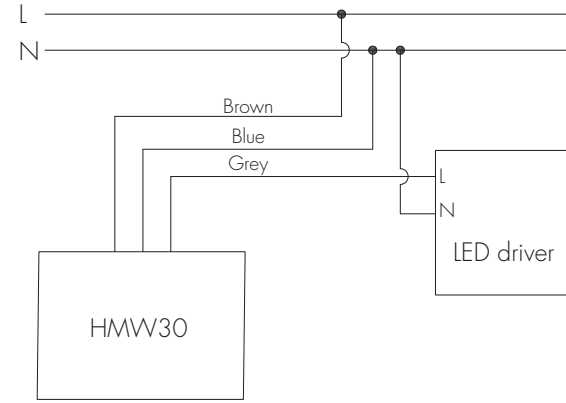


4.2 Zero-cross Relay Operation

Designed in the software, sensor switches on/off the load right at the zero-cross point, to ensure that the in-rush current is minimised, enabling the maximum lifetime of the relay.

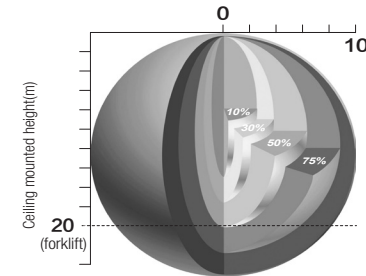


5. Wiring Diagram



— This product should be installed by a qualified electrician.

6. Detection Pattern



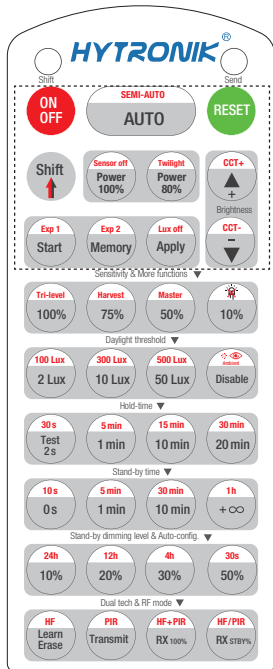
Ceiling mounted detection pattern (m)

* For single person walking across, the detection range is reduced by 1/3.

7. Trouble Shooting

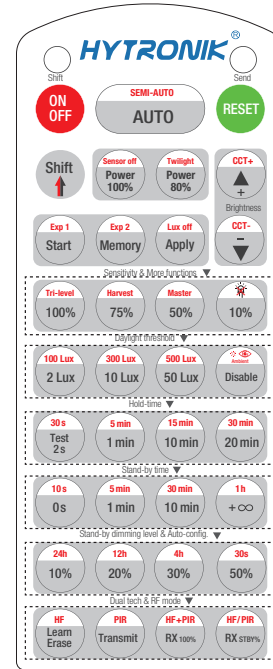
MALFUNCTION CAUSE	REMEDY	
The fixture does not light up	Incorrect daylight threshold setting	Adjust daylight threshold setting
	Faulty fixture	Replace fixture
	No power supply	Check power to sensor
	Detection zone not targeted	Check detection area setting
The fixture is always on	Continuous movement in the detection zone	Check detection area setting
The fixture is on when it should not	Sudden change in temperature due to weather (wind, rain, snow) or air expelled from fans, open windows	Adjust zone, change installation site

8. Description of the Button Functions (remote control HRC-11)



HRC-11

	Press button "ON/OFF" to select permanent ON or permanent OFF mode. * Press button "AUTO"/ "RESET" to exit this mode.
	Press button "RESET", perform DIP Switch/Rotary Switch settings. The default settings are: Auto mode; Detection range 100%; Hold-time 5min; Daylight sensor disable;
	Press button "Shift", the LED on the top left corner is on to indicate mode selection. All values / settings in RED are valid for 20 seconds.
	Press button "AUTO" to initiate automatic mode. The sensor starts working and all settings remain as before the light is switched ON/OFF;
	This key is not applicable on this product.
	This key is not applicable on this product.
	This key is not applicable on this product.
	This key is not applicable on this product.
	<ol style="list-style-type: none"> Press button "Start" to program. Select the buttons in "Detection range", "Daylight threshold", "Hold-time", "Stand-by time", "Stand-by dimming level" to set all parameters. Press button "Memory" to save all the settings programmed in the remote control. Press button "Apply" to set the settings to each sensor unit(s). <p><i>For example, to set detection range 100%, daylight threshold Disable, hold-time 5min, stand-by time +∞, stand-by dimming level 30%, the steps should be: Press button "Start", button "100%", "Disable", "Shift", "5min", "Shift", "+∞", "30%", "Memory". By pointing to the sensor unit(s) and pressing "Apply", all settings are passed on the sensor(s).</i></p>
	<p>The "Lux off" function is activated as default. When the ambient lux level exceeds the target level continuously for more than 5 minutes, the lights will be turned off.</p> <p>In AUTO modes, to disable "Lux off":</p> <ol style="list-style-type: none"> Press "Shift" button first, the red LED on. Press "Lux off" button, the "Lux Off" function will be deactivated. The lights will not turn off even when the ambient lux level exceeds the target lux level but will dim down the brightness to the stand-by time level. <p><i>For Sensor LED indicator references: 1. Fast flash 1s, "Lux off" function activated. 2. Remains on 2s, "Lux off" function deactivated.</i></p>
	"Exp" refer to Expansion, these two buttons are reserved functions and pending future development.



HRC-11

Sensitivity & More functions	
	In AUTO modes, press buttons in zone "Detection range" to set detection range at 100%/75%/50%/10%.
	This key is not applicable on this product.
	This key is not applicable on this product.
Daylight threshold	
	Press buttons in zone "Daylight threshold" to set daylight sensor at 2Lux/ 10Lux / 50Lux / 100Lux / 300Lux/500Lux / Disable. <i>Note: To set daylight sensor at 100Lux / 300Lux/500Lux, press "Shift" button first.</i>
	<ol style="list-style-type: none"> Press button "Shift", the red LED on. Press button "Ambient", the surrounding lux level is sampled and set as daylight threshold / target Lux level.
Hold-time mode	
	<p>In AUTO modes, press buttons in zone "hold-time" to set the hold-time at 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min.</p> <p><i>Note: 1. To set hold-time at 30s / 5min / 15min / 30min, press "Shift" button first. 2. 2s is for testing purpose only, stand-by period and daylight sensor settings are disabled in this mode.</i></p> <p>*To exit from Test mode, press button "RESET" or any button in "Hold-time".</p>
Stand-by time mode	
	This key is not applicable on this product.
Stand-by dimming level & Auto-config.	
	This key is not applicable on this product.
	This key is not applicable on this product.
Dual tech & RF mode	
	This key is not applicable on this product.
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