HIR28/W

PIR Lowbay | Remote controller ON/OFF | Ceiling mounting



Benefits

Simplified installation: Same product dimensions in this product range

Independent: On/off control | 220~240VAC powered

User-Friendly: One-key commissioning with IR controller

Applications

Ceiling or surface mounting (with accessory)

Classrooms with blackboards and student zones

Offices with two zones

Check Out the Complete System Solution on the Website:
https://www.hytronik.com/product/HIR28-W

Product Description

HIR28/W is designed with a low profile aesthetically demanding architectural projects providing a high quality sensor for simple on/off occupancy control or providing semi-automatic (absence detection) control. An intelligent photocell is also included to prevent switching of the lights when natural daylight is availible. Set-up of the sensor is carried out using a remote control handset with program memory allowing one-key commissioning where common settings are used for multiple devices.

Hardware Features

See additional details at the end of datasheet

5-year Warranty

Intelligent Photocell

Manual Override

One-key Commissioning

Semi-auto Mode

Functions and Features

See additional details at the end of datasheet

ON/OFF Control

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Specifications

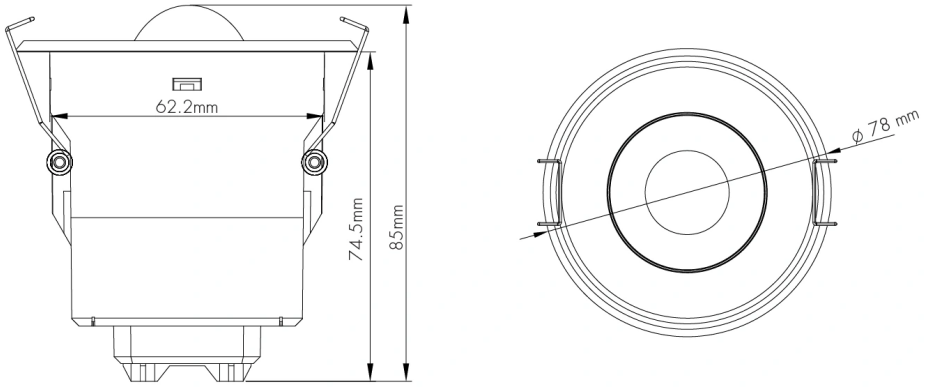
Main Capabilities	
Dimming (Output) Interface	Relay On/Off
Connector Type	Standard 2 cables
Stand-by power	< 0.3 W

Sensor Data	
Detection angle	360°
Max. Detection range (DxH)	18 m
Maximum Mounting Height	6 m
Detection area	254 m²

Electrical Data	
Warming-up	20 s
Operating Voltage	220-240 VAC 50/60 Hz
Max withstandable in-rush current	120A@160µs

Technical	
Product weight	120.0 g
Product height	85.0 mm
Product length	78.0 mm
Product width	78.0 mm
Mounting hole	66.0 mm
Ambient temperature	-20 ~ +50 °C
Storage temperature	-40 ~ +70 °C
Humidity max	10 ~ 90%
IP Rate	IP20

Technical Drawing



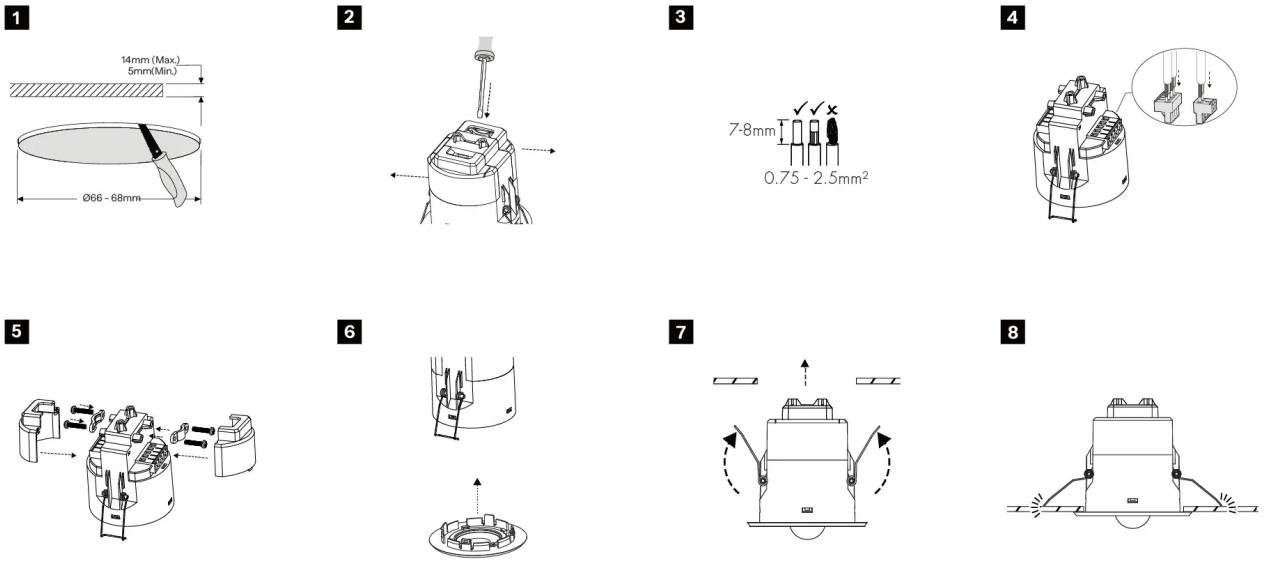
Picture Application Example



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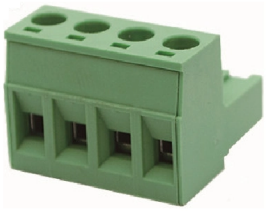
Installation Process

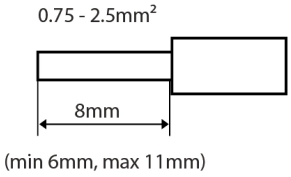


Detailed Installation Instructions

1. Ceiling (drill hole Ø 66~68mm).
2. Carefully prise off the Back Caps.
3. Install the cable correctly.
4. Make connections to the pluggable terminal blocks.
5. Secure the cables with screws for better stability.
6. Fit desired lens as required.
7. Clip fascia to body.
8. Bend back springs and Insert into ceiling.

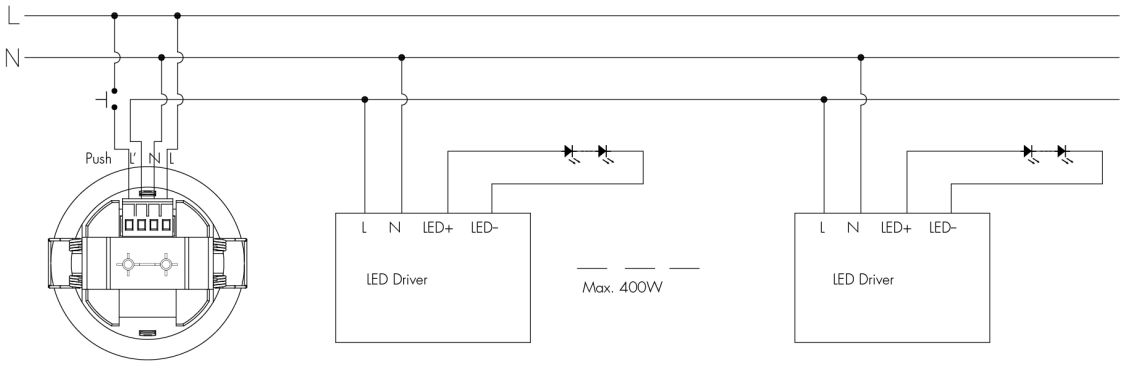
Wire Preparation





Pluggable screw terminal. It is recommended to make connections to the terminal before fitting to the sensor

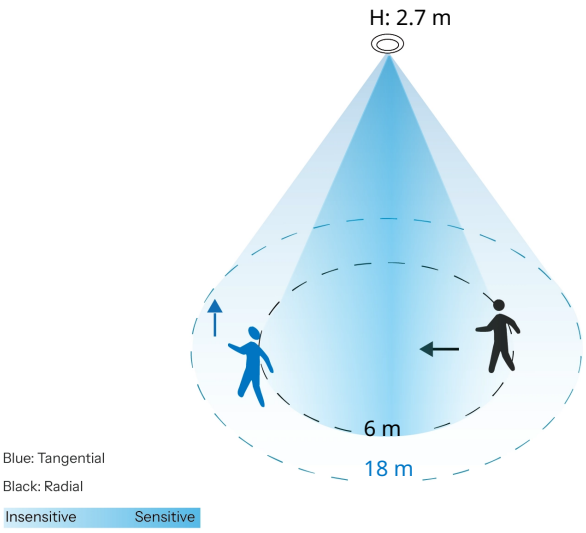
Wiring Diagram



Detection Range

Person

Mounting Height: 2.5 m



Tangential					
H[m]	2.5	3	4	5	6
Ø[m]	18	18	14	12	10

Radial					
H[m]	2.5	3	4	5	6
Ø[m]	6	6	6	6	6

The data is tested under following conditions:

- Single person walking
- Sensor not connected to any driver that may have soft-on period
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

Commissioning Instructions and Precautions

1. This product should be installed by a qualifed electrician.

2. The device retains its last operational state after a power interruption, ensuring that all settings remain unchanged when power is restored.

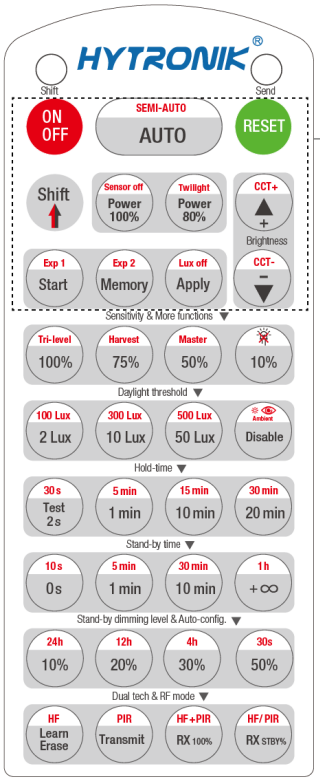
3. The device stores the last command applied, regardless of the input method, with the most recent setting overriding any previous ones and being saved in the MCU memory. For example, if the hold-time is set to 5s via dip-switch, then changed to 10s with the remote controller, the 10s setting will be stored in memory.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to the official downloads.

https://hytronik.com/service/downloads

Commissioning via Remote Control - Page 1

Settings (Remote Control HRC-11)

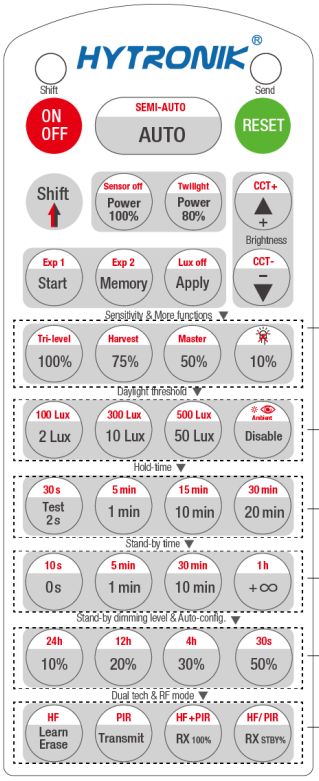


HRC-11

ON OFF	Press button "ON/OFF" to select permanent ON or permanent OFF mode. * Press button "AUTO"/ "RESET" to exit this mode.
RESET	Press button "RESET", all settings go back to default. The default settings are: Auton mode; Detection range 100%; Hold-time 5min; Daylight threshold disable; Lux off activated;
Shift	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.
AUTO	Press button "AUTO" to initiate automatic mode. The sensor starts working and all settings remain as before the light is switched ON/OFF;
SEMI-AUTO	1. Press button "Shift" ,the red LED on. 2. Press button "SEMI-AUTO" to initiate Semi-auto mode. The sensor is only activated with the manual press of push switch. To exit this mode, simply press button "AUTO". *For Sensor LED indicator references: Remains on 2s, initiate "Semi-auto" mode from "Auto" mode.*
Power 100% 80%	This key is not appliable on this product.
Sensor off Twilight	This key is not appliable on this product.
▲ ▼	This key is not appliable on this product.
CCT+ CCT-	This key is not appliable on this product.
Start Memory Apply	1. Press button "Start" to program. 2. Select the buttons in "Detection range", "Daylight threshold", "Hold-time", "Stand-by time", to set all parameters. 3. Press button "Memory" to save all the settings programmed in the remote control. 4. Press button "Apply" to set the settings to each sensor unit(s). *For example, to set detection range 100%, daylight threshold Disable, hold-time 5min, stand-by time +∞, the steps should be:* *Press button "Start", button "100%", "Disable", "Shift", "5min", "Shift", "+∞", "Memory".* *By pointing to the sensor unit(s) and pressing "Apply", all settings are passed on the sensor(s).*
Lux off	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. In AUTO /SEMI-AUTO/Twilight modes, to disable "Lux off": 1. Press "Shift" button first, the red LED on. 2. 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. *For Sensor LED indicator references: 1.Fast flash 1s, "Lux off" function activated.* *2.Remains on 2s, "Lux off" function deactivated.*
Exp 1 Exp 2	"Exp" refer to Expansion, these two buttons are reserved functions and pending future development.

Commissioning via Remote Control - Page 2

Settings (Remote Control HRC-11)



HRC-11

Sensitivity & More functions	
100% 75% 50% 10%	In AUTO /SEMI-AUTO modes, press buttons in zone "Detection range" to set detection range at 100%/75%/50%/10%.
Tri-level Harvest	This key is not appliable on this product.
Master	This key is not appliable on this product.
Daylight threshold	
2 Lux 100 Lux 10 Lux 300 Lux 50 Lux 500 Lux Disable	Press buttons in zone "Daylight threshold" to set daylight sensor at 2Lux/ 10Lux / 50Lux / 100Lux / 300Lux/500Lux / Disable. *Note: To set daylight sensor at 100Lux / 300Lux/500Lux , press "Shift" button first.*
Ambient	1. Press button "Shift", the red LED on. 2. Press button "Ambient", the surrounding lux level is sampled and set as daylight threshold / target Lux level.
Hold-time mode	
Test 2s 30 s 1 min 5 min 10 min 15 min 20 min 30 min	In AUTO /SEMI-AUTO modes, press buttons in zone "hold-time" to set the hold-time at 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min. *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.* *To exit from Test mode, press button "RESET" or any button in "Hold-time".
Stand-by time mode	
0s 10 s 1 min 5 min 10 min 30 min +∞ 1h	Press buttons in zone "stand-by time", the stand-by period time can be extended by overlaying the time in the "hold-time" zone with the time in"stand-by time" zone. For example, press button "5 min" in "hold-time" zone + button "30 min" in "stand-by time" zone, the stand-by period time is total of 35 minutes. *Note: 1. To set stand-by time at 10s/ 5min / 30min / 1h, press "Shift" button first.* *2. When "Lux off" is activated as default, press button"+∞", the product is a daylight sensor and will be turned off when the ambient lux level exceeds the target lux level, no longer motion detected. When "Lux off" function be deactivated, "+∞" means the fixture will remains on.*
Stand-by dimming level & Auto-config.	
10% 20% 30% 50%	This key is not appliable on this product.
24h 12h 4h 30s	This key is not appliable on this product.
Dual tech & RF mode	
Learn Erase	This key is not appliable on this product.
Transmit	This key is not appliable on this product.
HF PIR HF+PIR HF/PIR	This key is not appliable on this product.

Options

Included Accessories



Deep-reaching rear covers HA08 and HA08/S

Accessories



Metal Mount Box | Surface Mounting | Grey Color — HA09/G — www.hytronik.com/product/HA09-G



Metal Mount Box | Surface Mounting | Black Color — HA09/B — www.hytronik.com/product/HA09-B



Metal Mount Box | Surface Mounting | White Color — HA09/W — www.hytronik.com/product/HA09-W

Compatible products (for full functionality)



HRC-11

Sensor remote controller | Diverse function | White color
www.hytronik.com/product/HRC-11

Functions and Features

5-year Warranty

All Hytronik products are supplied with a 5-year warranty against defect in design or manufacture. The warranty applies to all electronic control gears supplied by Hytronik and is applicable to the party to which the sale was made. The warranty is not transferable to a 3rd party and compatibility with external components are the responsibility of the finished goods manufacturer. With today's multi-national sourcing strategies, we offer an unrivalled universal warranty with support available in regions where Hytronik has its own of ce or authorized representation, regardless of where the Hytronik product was purchased. Furthermore, we operate a 24-hour response policy to any claim. The full warranty policy is available upon request or from our website.

Intelligent Photocell

The built-in photocell will also automatically turn off the light when the ambient natural light exceeds the programmed lux level for more than 5min, regardless of whether motion is detected or not.

Manual Override

With the help of push-switch, this sensor can be over-ridden by the end-user to manually switch on/off the light, which makes the product more user-friendly and offers more options to fit some extra-ordinary demands:

One-key Commissioning

It simplifies complex processes with a single click for users to complete the commissioning. Saves time and effort, operates systems or devices smoothly, boosts productivity and user experience.

Semi-auto Mode

Absence detector: motion sensor is employed, but only activated on the manual press of the push-switch, the light keeps being ON in the presence, and switches off in the long absence.

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.

Check out for further explanation of features

https://www.hytronik.com