



HYTRONIK HIR21 Flush Mount Pir Motion Sensor Instruction Manual

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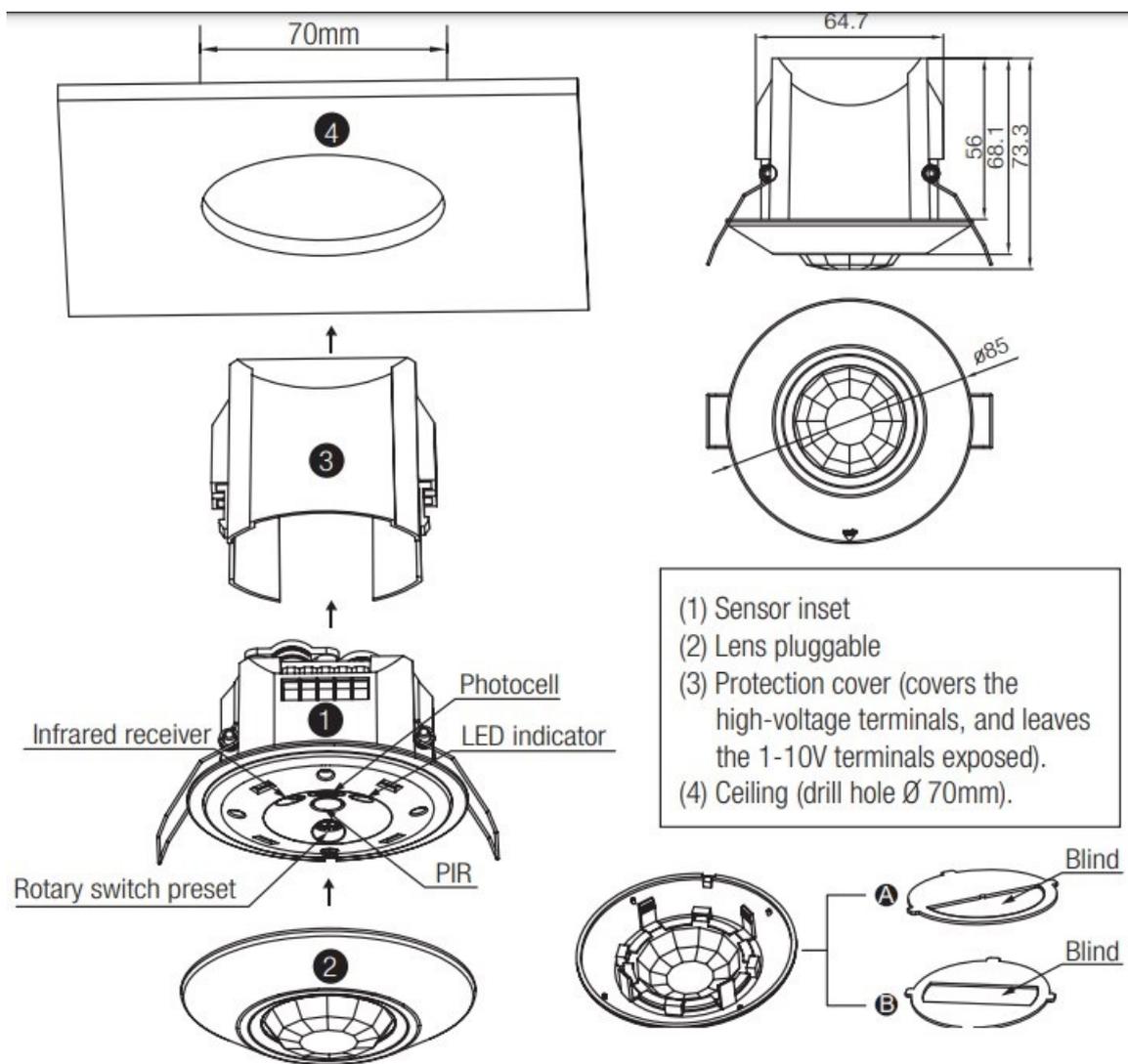
Technical Specifications

- **Product type** Tri-level control PIR motion sensor
- **Operating voltage** 220~240VAC 50/60Hz
- **Rated load** 1600W (resistive); 800VA (capacitive)
- **Power consumption** < 0.5W
- **Detection angle** 360°
- **Detection area** (Max.)*
- **Detection range** 10% / 50% / 75% / 100%
- **Hold time** 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min
- **Stand-by time** 0s / 10s / 1min / 5min / 10min / 30min / 1h / +∞
- **Stand-by dimming** level 10% / 20% / 30% / 50%
- **Daylight threshold** 2 ~ 500Lux, Disable
- **Warming up time** 30s
- **Operating temperature** -20° C ~ +50° C

Installation

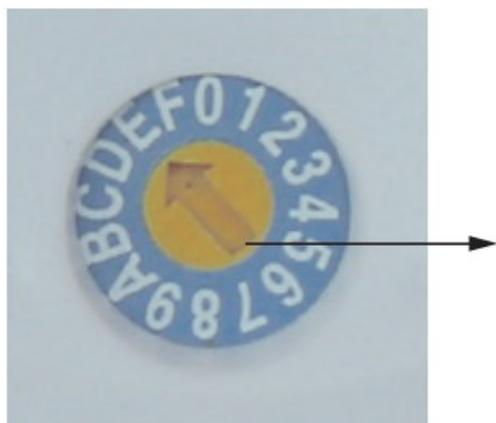
Warnings:

1. 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.
2. Disconnect supply before installing.



Rotary Switch Settings

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



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

Channel Detection rang Hold time

0	100	5s
1	100	1min
2	100	5min

3	100	5min
4	100	5min
5	100	5min
6	100	5min
7	100	10min
8	100	10min
9	100	10min
A	100	10min
B	100	5min
C	100	5min
D	100	5min
E	100	30min
F	100	5s

Functions

Tri-level Control (Corridor Function)

Hytronik builds this function inside the motion sensor to achieve tri-level control, for some areas require a light change notice before switch-off. It offers 3 levels of light: 100%→dimmed light→off; and 2 periods of selectable waiting time: motion hold-time and stand-by period; Selectable daylight threshold and freedom of detection are

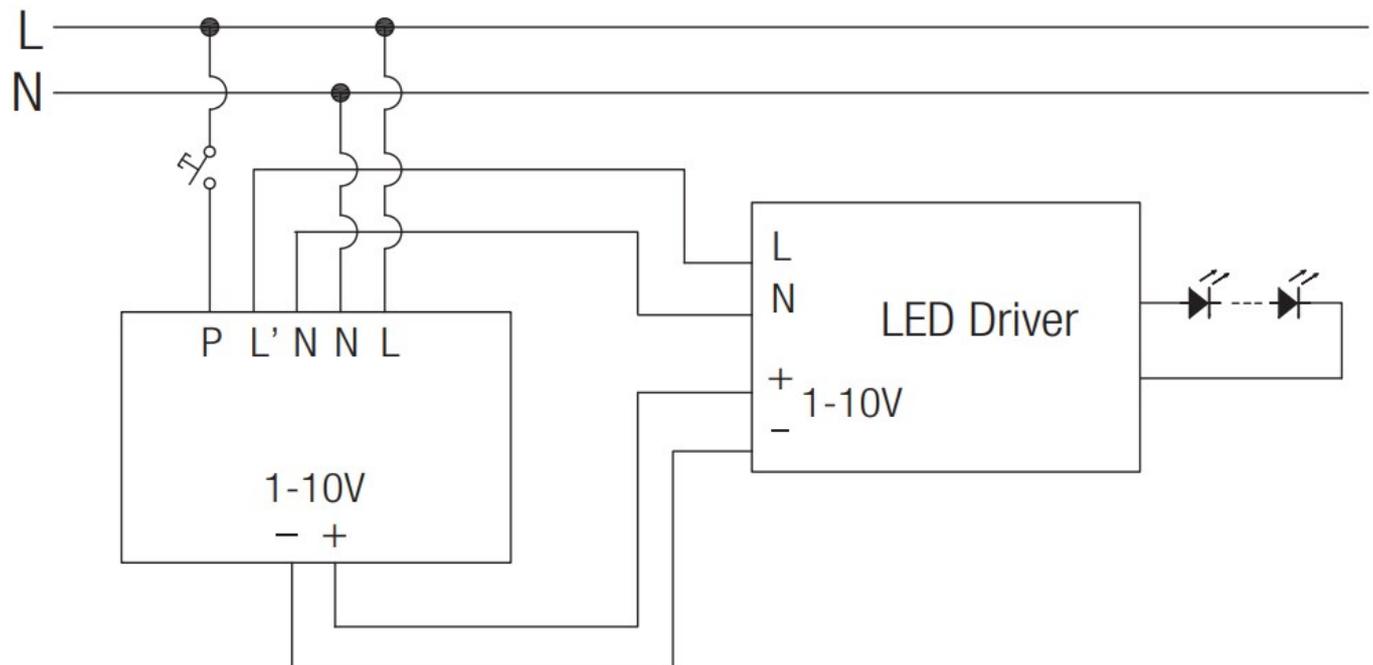
Lux Off Function

The built-in daylight sensor can read ambient natural light and switch off the fixture automatically whenever artificial light is unneeded (natural light lux level exceeds daylight threshold). Note: if the stand-by time is preset at “+∞”, the fixture never switches off even when natural light is sufficient.

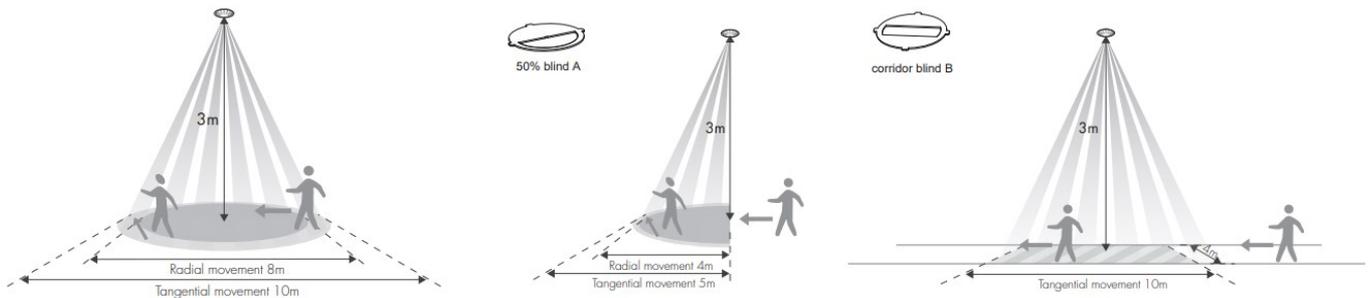
Semi-auto Function (Absence Detection)

The motion sensor is employed, but only activated on the manual press of the push switch, light keeps on in the presence, and dims down in the absence, and eventually switches off automatically in the long absence.

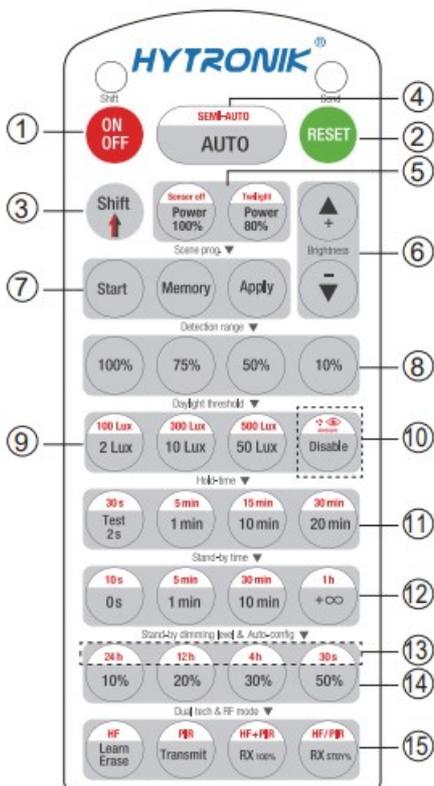
Wiring Diagram



Detection Pattern



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



Permanent ON/OFF []

Press button to select permanent ON or permanent OFF mode. * Press button / to resume automatic operation. The mode will change to AUTO Mode after power failure.

RESET [button]

Press button , all settings go back to the rotary switch settings.

Shift [button]

Press button , the LED on the top left corner is on for indication. All values / settings in RED are in valid for 20 seconds

Auto Mode [button]

Press button to initiate automatic mode. The sensor starts working and all settings remain as before the light was switched ON/OFF

Semi-auto Mode [button &]

1. Press button Shift (the red LED is on for indication),
2. press button to initiate semi-auto mode. The fixture is manually on by push-switch and automatically off in semi-auto mode

Power output [button]

Press button , the light output shifts between 80% and 100%. Note: the function of “Sensor off” and “Twilight” are disabled.

Detection range [zone]

Press buttons in zone to set detection range at 100% / 75% / 50% / 10%

Daylight threshold [zone]

Press buttons in zone to set the daylight sensor at 2Lux / 10Lux / 50Lux / 100Lux / 300Lux / 500Lux or Disable. Note: To set daylight sensor at 100Lux / 300 Lux / 500Lux, press button Shift at first.

Ambient daylight threshold [button]

1. Press button Shift, the red LED is on for indication.
2. Press button , the ambient lux level is sampled and set as the new daylight threshold

Stand-by time [zone]

Press buttons in zone to set the stand-by period at 0s / 10s / 1min / 5min / 10min / 30min / 1h / +∞. Note: “0s” means on/off control; “+∞” means bi-level control, 100% on when motion detected, and remains at the stand-by dimming level when no presence after hold-time.

Trouble Shooting

MALFUNCTION CAUSE REMEDY

- The fixture does not light up
- The fixture is always on
- The fixture is on when it should not

CAUSE

- Incorrect daylight threshold setting
- Faulty fixture
- No power supply
- Detection zone not targeted
- Continued movement in the detection zone

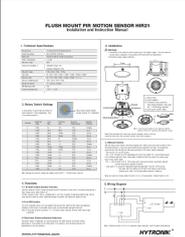
REMEDY

- Adjust daylight threshold setting
- Replace fixture
- Check power to sensor
- Check detection area setting
- Check detection area setting

SUPPORT

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Documents / Resources

	<p>HYTRONIK HIR21 Flush Mount Pir Motion Sensor [pdf] Instruction Manual HIR21 Flush Mount Pir Motion Sensor, HIR21, Flush Mount Pir Motion Sensor, Motion Sensor, Sensor</p>
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References

-  [Microwave sensor Microwave motion sensor Hytronik Electronics Co., Ltd.](#)

[Manuals+](#)