TERALUX

Smart Sensor

Teralux **PIR Induction Dimmer Switch RF/0-10V** User Manual

CE RoHS emc RED

Teralux Office

Komp. Ruko Harmoni Mas, Jl. Jemb. Dua Raya No.15 blok A, RT.1/RW.3, Pejagalan, Penjaringan, North Jakarta City, Jakarta 14450

teraluxliving.com

Teralux Flat Ceiling Human Presence Sensor

The TERALUX PIR Induction Dimmer & Switch (RF/0-10V) EH-R provides smart, energy-efficient lighting control with PIR motion detection and a built-in daylight sensor. It supports 0/1–10V dimmable drivers, includes high-voltage relay output, and can function as an RF 2.4G remote for compatible LED controllers. With adjustable timing, daylight thresholds, and a wide 120° detection zone, it offers reliable and flexible automation for modern lighting setups.

Features

Ensures stable, low-power communication and seamless integration with Tuya, Alexa, and Google Home.

Covers 0.3–9 meters with customizable sensitivity for precise motion detection.

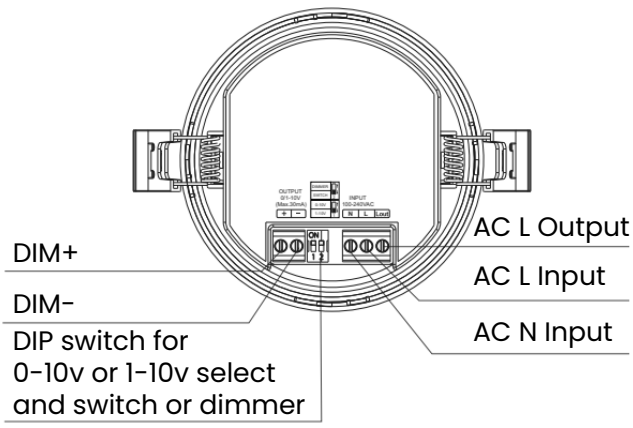
Automatically responds to ambient brightness to improve automation accuracy.

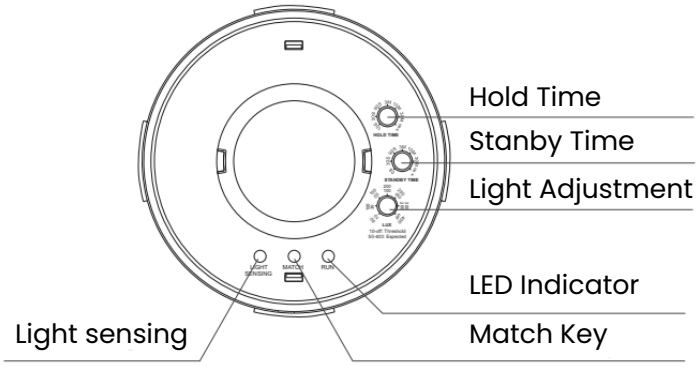
Supports adjustable delays and hold times up to 25 minutes for tailored automation.

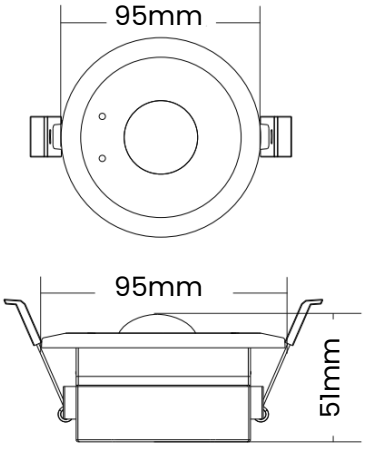
Reliable operation from -20°C to +70°C for various indoor environments.

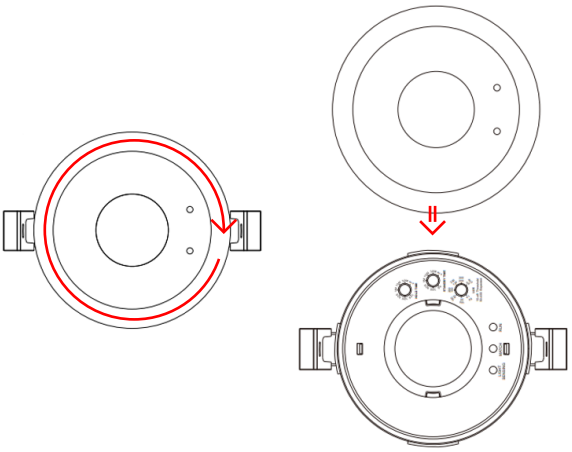
Sleek, unobtrusive installation ideal for modern residential and commercial spaces.

Product Dimmension & Attributes









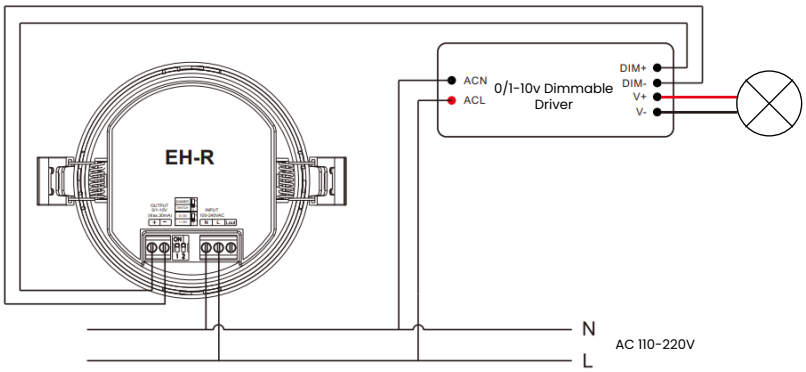
Technical Parameter

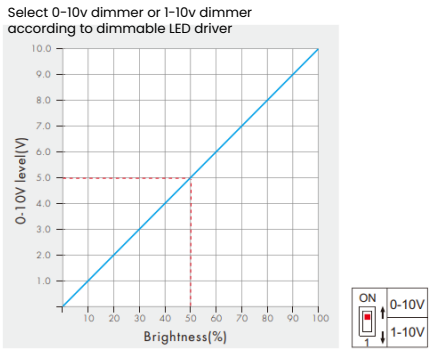
Parameter	Specification
Working voltage	100-240VAC
Output signal	0/1-10V (Max.30mA), RF 2.4GHz
Output current	Max 4A (AC)
Power consumption	<1.3W(Operation)
Detection zone	Max.(DxH) 10 x 5m
Hold time	10s/30s/90s/3min/10min/30min/+∞
Stand-by time	0s/30s/90s/3min/10min/30min/+∞
Daylight threshold	10lux/30lux/50lux/100lux/150lux/200lux/Disable
Expected light	50lux/100lux/150lux/200lux/250lux/300lux/400lux
Mounting height	5m Max
Detection angle	120°(ceilling installation)
Operation temperature	Ta: -20°c~+50°c
IP rating	IP20

Wiring Diagram & Dimming Setting

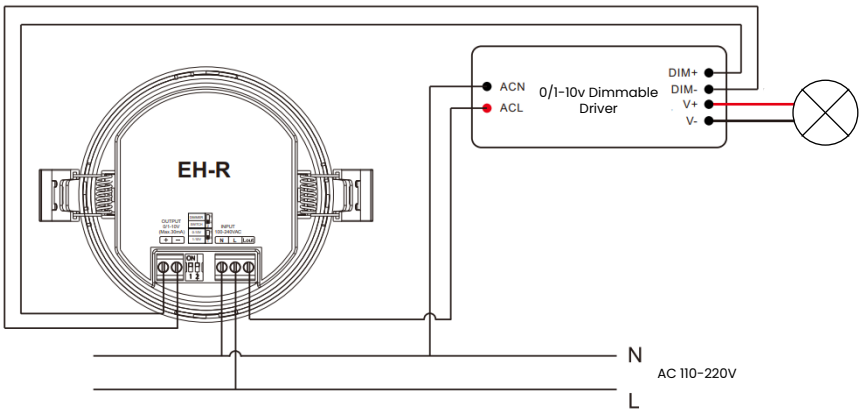
These wiring diagrams show how to properly connect the TERALUX PIR Induction Dimmer & Switch with 0/1–10V dimmable drivers, with or without using the AC output. They provide a clear visual guide for safe installation and help you understand how voltage relates to brightness for accurate dimming adjustment. Use this as a quick reference to set up and optimize your PIR-based lighting control.

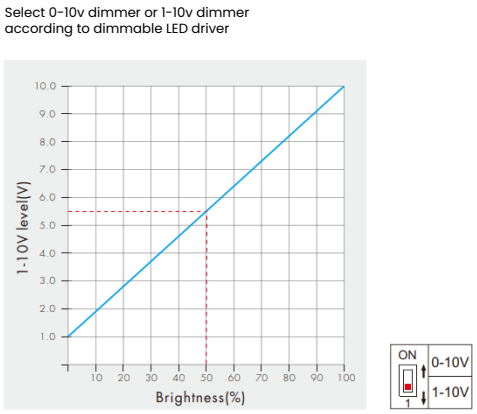
- Used as dimmer switch, connect with 0/1-10v dimming driver (no use AC out)



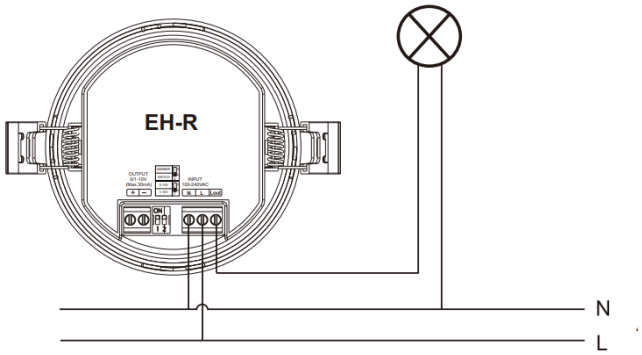


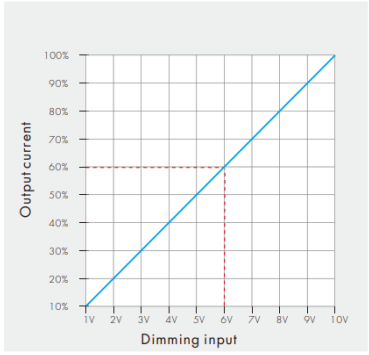
- Used as dimmer switch, connect with 0/1-10v dimming driver (Use AC out)





- Used as dimmer switch, connect with 0/1-10v dimming driver (Use AC out)





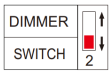
Application Method

- Used as A Switch

With sufficient ambient light, the sensor does not turn on the light.

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

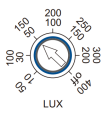
After hold time, the light turns off if no human motion detected.



Select the DIP Switch 2 OFF to set as SWITCH type firstly, then select the combination on knob potentiometer for each specific application

Hold Time: Refers to the time period remains light on state after no motion detected.

Stand-by time: Refers to the time period remains light on and dim to 20% brightness state after elapse of hold time if no new motion is detected. For the application of switches, must be 0s.



Daylight sensor: The sensor can be set to only allow the lamp to illuminate when below a defined ambient brightness threshold. When set to off(Disable)mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.

50lux: twilight operation. 30 lux: evening operation. 10 lux: darkness operation.

Note that daylight sensor is active only when lamp totally switches off, and the ambient lux level refers to internal light reaching the sensor.

Setting on this demonstration:
Hold time: 90S Stand-by time: 0S Daylight sensor: 50lux

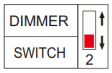
- Used as A Switch With Two-step Dimming

With sufficient ambient light, the sensor does not turn on the light.

With insufficient ambient light, the sensor turns on the light and dim to 100% brightness when human motion is detected.

After elapse of hold time, the sensor dim to 20% brightness if no new human motion detected.

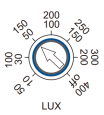
After elapse of stand-by time, the sensor turns off the light if no human motion detected.



Select the DIP Switch 2 OFF to set as SWITCH type firstly, then select the combination on knob potentiometer for each specific application.

Hold time: Refers to the time period remains light on and 100% brightness state after no motion is detected. For two-step dimming switch application, must be not +∞.

Stand-by time: Refers to the time period remains light on and dim to 20% brightness state after elapse of hold time if no new motion is detected. For two-step dimming switch application, must > 0s. If set +∞, the lights will stay on with 20% brightness.



Daylight sensor: The sensor can be set to only allow the lamp to illuminate when below a defined ambient brightness threshold. When set to off(Disable) mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.

50lux: twilight operation. 30 lux: evening operation. 10 lux: darkness operation.

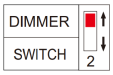
Note that daylight sensor is active only when lamp totally switches off, and the ambient lux level refers to internal light reaching the sensor.

Setting on this demonstration:
Hold time: 90S Stand-by time: 3 min Daylight sensor: 50lux

- Used as A Dimmer

The sensor turns on the light and dim up to expected brightness level when human motion is detected.

After hold time, the light turns off if no human motion detected.



Select the DIP Switch 2 OFF to set as SWITCH type firstly, then select the combination on knob potentiometer for each specific application.

Hold time: Refers to the time period remains light on state after no motion detected. If set +∞, the lights will stay on.

Stand-by time:
Refers to the time period remains light on and dim to 20% brightness state after elapse of hold time if no new motion is detected. For dimmer application, must be 0s.

Daylight sensor: The sensor can be set to allow the lamp to illuminate to expected brightness level. If the detected brightness is less than the expected brightness, the output will dim up to full brightness(100%). If the detected brightness is larger than the expected brightness, the output will dim down to min brightness(1%).

Note that daylight sensor is active only when lamp switches on, and the ambient lux level refers to internal light reaching the sensor.

Setting on this demonstration:
Hold time: 90S Stand-by time: 3 min Daylight sensor: 50lux

TERALUX

Teralux Office

Komp. Ruko Harmoni Mas, Jl. Jemb. Dua Raya No.15 blok A, RT.1/RW.3, Pejagalan, Penjaringan, North Jakarta City, Jakarta 14450

teraluxliving.com