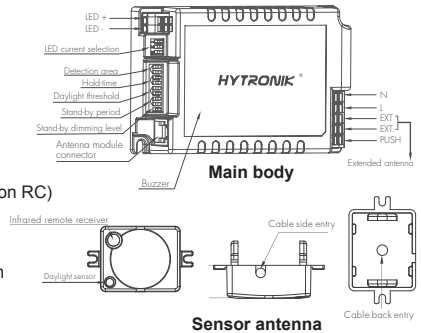


INSTRUCTION MANUAL FOR INTEGRATED SENSOR DIM LED DRIVER DAYLIGHT MONITORING VERSION, MODEL NO.: HEC7030

Technical Specifications

PRODUCT TYPE:	Integrated sensor DIM LED driver
OPERATING VOLTAGE:	220-240VAC 50Hz/60Hz
HF SYSTEM:	5.8GHz CW radar
TRANSMISSION POWER:	<0.2mW
DETECTION ANGLE:	30°~150°
DETECTION RANGE:	Max. 8 meters in diameter, adjustable.
TIME SETTING:	5s ~ 10 min (30s ~ 30min on RC)
LIGHT CONTROL:	5 ~ 50LUX, disable (2 ~ 50LUX, disable on RC)
STAND-BY PERIOD:	0s, 10s ~ 30min, +∞
STAND-BY DIMMING LEVEL:	10% ~ 30%
MOUNTING:	Indoors, ceiling & wall mounted, Max. 5m
WORKING TEMPERATURE:	-20 ~ +50 °C
IP RATING:	IP20



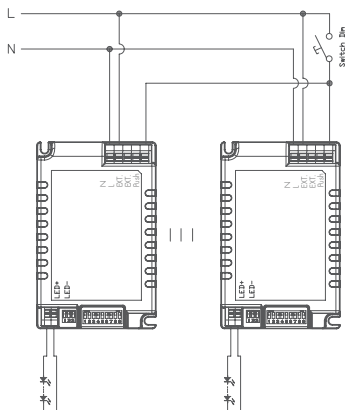
This is a smart integration of microwave motion sensor and multiple current selection LED driver.

With the help of detached sensor antenna, it requires very little space on the LED panel and gives pre-selected constant current to drive the LEDs to work based on movement detection.

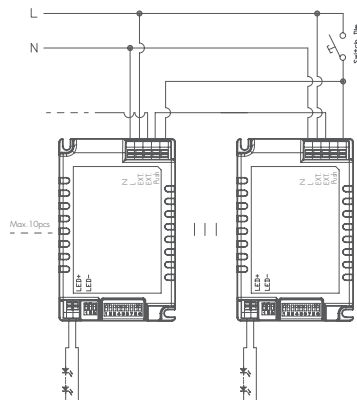
Note: the high-frequency output of this sensor is < 0.2mW, approximately just 1% of the transmission power of a mobile telephone or the output of a microwave oven.

Section 1 Wiring

Wiring Diagram-Push



Wiring Diagram-Push + EXT.




Section 2 Settings

Detection Area

This determines the effective range of the motion detector and is set by DIP switches at the sensor itself, refer to figure. Note that reducing the sensitivity will also narrow the detection range. The following settings are available:

- I – 100%
- II – 75%
- III – 50%
- IV – Sensor OFF

	1	2	
I	●	●	100 %
II	●	○	75 %
III	○	●	50 %
IV	○	○	Sensor OFF



Hold time

This determines the time that the fitting remains at 100% level on motion detection and is set with DIP switches at the sensor itself, refer to figure. The walk test setting is useful when installing the fitting to establish correct operation and range.

The following settings are available:

- I – 5s
- II – 30s
- III – 3min
- IV – 10min

	3	4	
I	●	●	5s
II	●	○	30s
III	○	●	3min
IV	○	○	10min




Daylight sensor

This setting holds off the 100% light output should there sufficient daylight and is set using DIP switches at the sensor, refer to figure. The following settings are available:

- I – Disable
- II – 50Lux
- III – 10Lux
- IV – 5Lux

	5	6	
I	●	●	Disable
II	●	○	50Lux
III	○	●	10Lux
IV	○	○	5 Lux



Stand-by period (corridor function)

This is the time period you would like to keep at the low light output level before it is completely switched off in the long absence of people.

- I – 0s
- II – 10s
- III – 30min
- IV – +∞

	7	8	
I	●	●	0s
II	●	○	10s
III	○	●	30min
IV	○	○	+∞




Note: "0s" means on/off control; "+∞" means bi-level dimming control, fixture never switch off.

Stand-by dimming level

This is the dimmed low light output level you would like to have after the hold-time in the absence of people

- I – 10%
- II – 30%

	9	
I	●	10%
II	○	30%

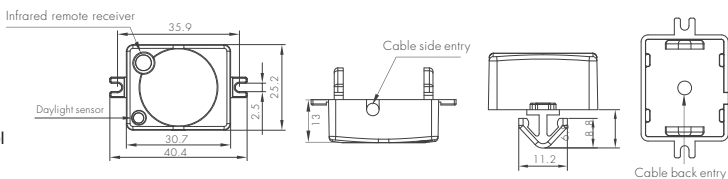


Section 3 Sensor Antenna & RC Settings

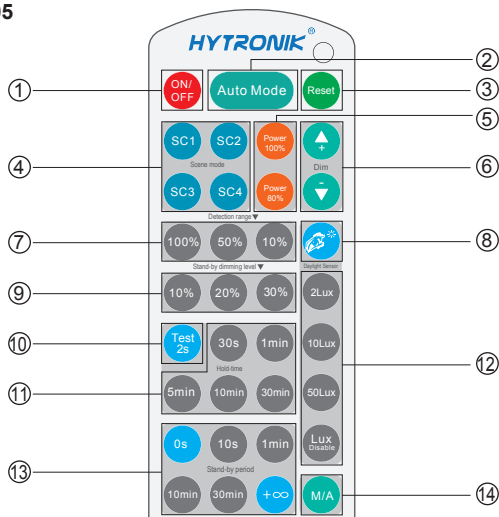
Model SAM5

Super-compact sensor antenna, with optional cable entry (side entry and back entry)

Work with remote control HRC-05.



Remote Control HRC-05



Note: The buzzer beeps one time when RC receives signal successfully.

Permanent ON/OFF [button ①]

1. Press button ①, the light goes to permanent on or permanent off mode, sensor is disabled.
2. Press button ② ③ ④ to quit from this mode.

Sensor Mode [button ②]

Press button ②, the sensor starts to work and all settings remain the same as the latest status before the light was switched on/off.

Reset Function [button ③]

Press button ③, all settings go back to the value of IDP setting.

Scene Mode [button ④]

There are 4 scene modes fixed program built-in the remote control to choose for different applications:

Scene options	Detection range	Hold time	Stand-by period	Stand-by dimming leve	Daylight sensor
SC1	100%	1min	10min	10%	2Lux
SC2	100%	5min	10min	10%	2Lux
SC3	100%	10min	30min	10%	10Lux
SC4	100%	10min	+∞	10%	50Lux

Note: End-user can adjust the settings by pressing buttons ⑦ ⑨ ⑩ ⑪ ⑫ ⑬. The latest setting stays in validity.

Power Output [button⑤]

Press button⑤, the output shifts between 80% (at initial 10,000 hours) and 100%, for energy saving purpose.

Dim +/- [button⑥]

Long press “Dim +” or “Dim-” to adjust the brightness of the lamp between 10%~100% during hold time. “+” means dimming up, “-” means dimming down.

Ambient Daylight Threshold [button⑧]

Press button⑧, the latest surrounding lux value overwrites previous lux value learned, and is set as the daylight threshold. This feature enables the fixture to function well in any real application circumstance.

Test Mode [button⑩]

The button⑩ is for only testing purpose after commissioning. Pressing this button, the sensor goes to test mode (hold time is only 2s) automatically, and stand-by period and daylight sensor are disabled.

* This mode can be ended by pressing button③④⑪. The sensor setting is changed accordingly.

Manual Override / Absence Detection [button⑭]

Press button⑭, the sensor goes to manual override or absence detection function.

Note: The buzzer beeps twice if it's manual override function, and beeps once if shifts to absence detection function.

Detection Range [button⑦]

Press buttons⑦ to set detection range at 10% /50% /100%.

Hold-time [button⑪]

Press button⑪ to set hold time at 30s / 1min / 5min / 10min / 30min.

Daylight sensor [button⑫]

Press button⑫ to set daylight sensor at 2Lux / 10Lux / 50Lux / Lux Disable.

Stand-by Period [button⑬]

Press button⑬ to set stand-by period at 0s / 10s / 1min / 10min / 30min / +∞.

Note: “0s” means on/off control; “+∞” means bi-level dimming control, light never switches off.

Stand-by Dimming Level [button⑨]

Press buttons⑨ to set the stand-by dimming level at 10% / 20% / 30%.

Section 4 Functions

4.1 Master / Slave Group Control

Maximum 10pcs HEC7030 can be connected in parallel by interconnecting the “EXT” terminals of the units, no matter which one detects the movement, all HEC7030 connected in the group turn on the lights at the same time (as long as natural light is below daylight threshold), as if the sensor antenna is shared and extended (see wiring diagram). The detection area can be widely enlarged in this way. Nevertheless, other settings such as hold time, stand-by period, stand-by dimming level and daylight threshold on each individual sensor stays the same, not affected by the extended sensor.

4.2 Manual Override

This sensor reserved the access of manual override function for end-users to switch on/off, or adjust the maximum brightness during motion hold-time with the push-switch, which makes the product more user-friendly and offers more options to fit for extra-ordinary demands.

* Short push (<1s): on/off function;

ON → OFF: the light turns off immediately and cannot be lighten for a certain time (equals to hold time preset) even there is movement is detected. After this period, the sensor goes back to auto sensor mode.

OFF → ON: the light turns on 100% and goes to auto sensor mode, even when ambient LUX level exceeds the daylight threshold.

* Long push (>1s): adjust the maximum brightness (between 10% and 100%) during hold-time.

* If customers do not want to have this manual override function, we can just leave this “push” terminal alone, not connected to any wire.

Note: If the detection area is set at “Sensor OFF”, it becomes a dimmable LED driver which can be dimmed (1% ~ 100%) by push-switch.

Section 5 Trouble Shooting

MALFUNCTION CAUSE REMEDY	CAUSE	REMEDY
The load will not work	Incorrect light-control setting selected	Adjust setting
	Load faulty	Replace load
	Mains switch OFF	Switch ON
The load is always on	Continuous movement in the detection zone	Check zone setting
The load is on without any identifiable movement	The sensor is not mounted for reliably detecting movement	Securely mount enclosure
	Movement occurred, but not identified by the sensor (Movement behind wall, movement of small object in immediate lamp vicinity etc.)	1. Reduce sensitivity. 2. Check the movement behind walls to avoid facilities such as water pipe, fan, which may mis-trigger the sensor.
The load will not work despite movement	Rapid movements are being suppressed to minimize malfunctioning or the detection radius is too small.	Check zone setting