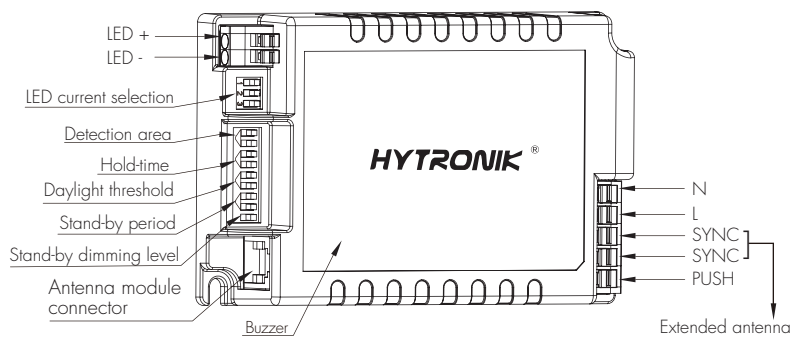
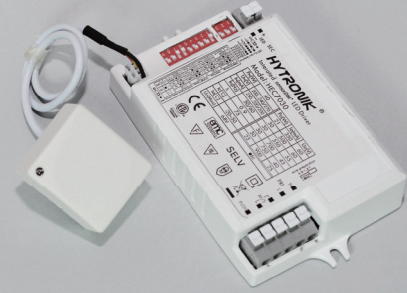
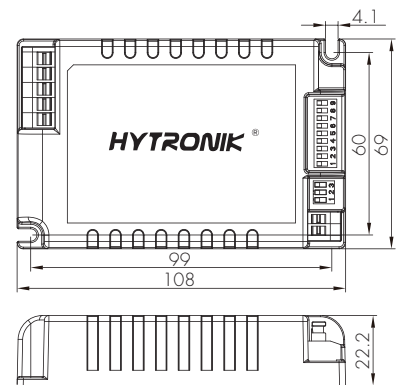


Integrated SensorDIM™ LED Driver Daylight Monitoring Version

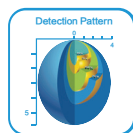
Model: HEC7430 with HRC-05



Model: HEC7430



Mechanical structure (mm)



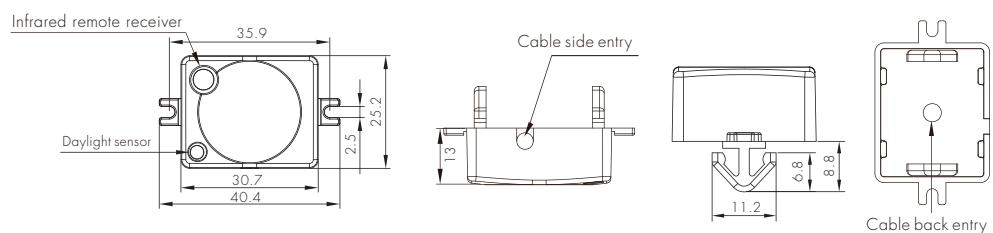
2 in 1 and cost effective! This is a smart integration of HF (microwave) motion sensor and multiple current selection LED driver, which gives pre-selected constant current to drive the LEDs to work based upon movement detection. Designed in the software and thanks to our worldwide patented circuit, the built-in daylight sensor is prior to motion sensor so as to achieve utmost energy saving purpose.

With the detached sensor antenna SAM5, it requires very little space on the LED panel. Only the antenna is installed on the surface, while the main body can be hidden behind the panel. Completely shadow free.

Detached sensor antenna module:

Model SAM5

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



Product Functions and Features

- 1 Daylight monitoring function with threshold control
- 2 Tri-level control (corridor function)
- 3 Synchronization function
- 4 Wall switch manual override (push function)
- 5 Semi-auto function(Absence detection)
- 6 Further 20% saving @ initial 10,000 hours
- 7 LED current multi-selections



| | | | | |
|-----|---|---|---|---------|
| I | ● | ● | ● | 900mA |
| II | ○ | ● | ● | 750mA |
| III | ● | ● | ○ | 700mA |
| IV | ○ | ○ | ○ | 550mA |
| V | ● | ○ | ○ | 500mA |
| VI | ○ | ○ | ○ | 350mA |
| | 1 | 2 | 3 | Current |



The current can be easily configured by choosing the correct combination of the DIP switches (see table on the left).

8 LED maximum load and voltage

This multiple current LED driver has a wide range of loading capacity:

Maximum load @ different currents:

3.5~17.5W (350mA)

5~25W (500mA)

5.5~26W (550mA@277V) / 5.5~25W (550mA@120V)

7~30W (700mA@277V) / 7~25W (700mA@120V)

7~30W (750mA@277V) / 7~25W (750mA@120V)

9~23W (900mA)

Maximum voltage @ different currents:

10~50V (350mA)

10~50V (500mA)

10~48V (550mA@277V) / 10~45V (550mA@120V)

10~43V (700mA@277V) / 10~36V (700mA@120V)

10~40V (750mA@277V) / 10~33V (750mA@120V)

10~25V (900mA)

Settings (Remote Control HRC-05)



Permanent ON/OFF function

Press the "ON/OFF" button, the light goes to permanent on or permanent off mode, sensor is disabled.

* Press "Auto Mode", "RESET" or "Scene mode" buttons to quit from this mode.

Auto Mode

Sensor mode

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



Reset function

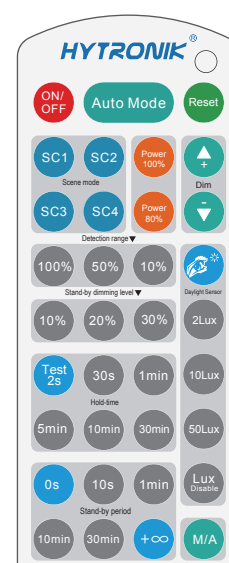
Press "RESET" button, all settings go back to the value of DIP switch settings.



Dim +/-

Long press "Dim +" or "Dim -" to adjust the light brightness between 10%~100% during hold-time.

"+" means dimming up, "-" means dimming down.



HRC-05

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



Test mode

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

* This mode can be ended by pressing "reset", or any button of "scene mode" and "hold time". The sensor setting is changed accordingly.



Manual override / absence detection

By pressing this button, the sensor goes to manual override or absence detection / semi-auto function.

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



Power output

Press these buttons to select full output level. 80% button allows for energy saving and reverse dimming to compensate for LED lumen depreciation over time. Supports fluorescent 10,000 hr initial burn-in.



Lux disable

Press this button to disable the daylight sensor for threshold control. When motion is detected, the fixture will always turn ON, regardless of ambient light level.



Ambient daylight threshold

Press this button, 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.

Scene mode

There are four scene modes fixed programs built-into the remote control. Select as appropriate. Each scene can be modified using the remote. The sensor will remember updates even after power outage. The green "RESET" button on remote reverts to original defaults.

| Scene options | Detection range | Hold-time | Stand-by period | Stand-by dimming level | 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 of detection range/hold-time/stand-by period/stand-by dimming level/daylight sensor. The latest setting stays in validity.

Detection range

Select as appropriate to adjust/reduce sensor sensitivity, detection range from 100%.

Typical 100% sensor motion detection range is 9m. Please refer to detection pattern below.

Hold-time

Hold-time is time fixture remains at programmed full power level AFTER no motion is detected.

Daylight sensor

Select daylight sensor threshold level at 2 LUX / 10Lux / 50LUX. Ambient light must below this LUX threshold for sensor to turn fixture ON. Press Blue button to sample ambient light. Press Lux Disable button for fixture to always turn On when motion is detected.

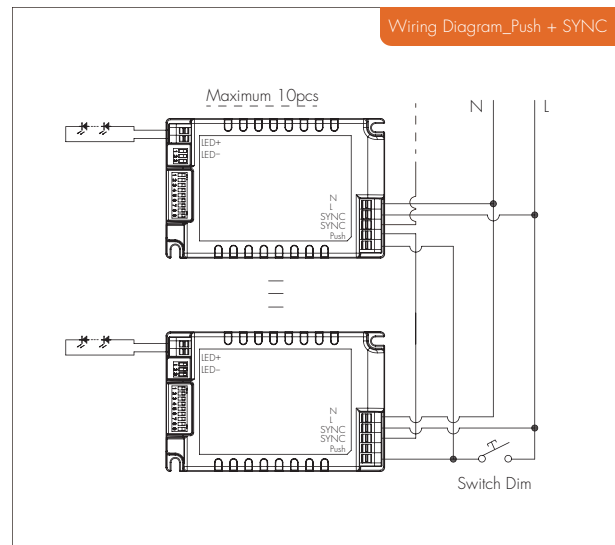
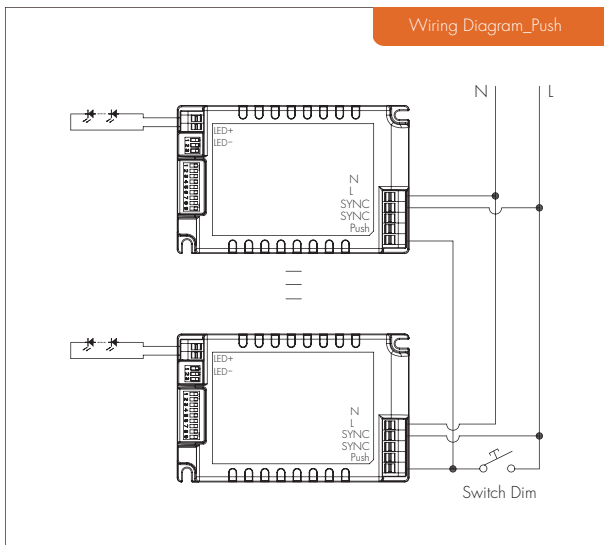
Stand-by period (tri-level control)

Press the buttons of "stand-by period" to set stand-by period at 0s / 10s / 1min / 10min / 30min / +∞.

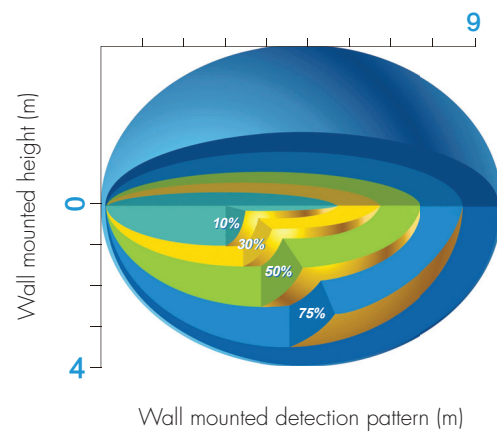
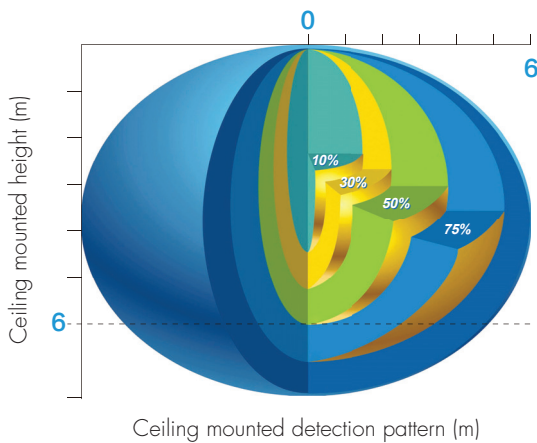
Note: "0s" means on/off control; "+∞" means bi-level control, light never switches off when daylight sensor is disabled.

Stand-by dimming level

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



Detection Pattern



Settings

1 Detection area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely for each specific application.

Note: by choosing "Sensor OFF", it becomes a dimmable driver without sensor mode.

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



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

2 Hold-time

Hold-time means the time period to keep the lamp on 100%, after all motion has ceased (detection area vacated).

Note: the maximum brightness during hold-time can be overridden by long push on the push-switch.

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



I – 5s
II – 30s
III – 3min
IV – 10min

3 Daylight sensor

The daylight threshold can be set on DIP switches, to fit for particular application.

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



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

4 Stand-by period (tri-level control)

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.

Note: "0s" means on/off control;

"+∞" means bi-level control, fixture never switches off when daylight sensor is disabled.

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



I – 0s
II – 10s
III – 30min
IV – +∞

5 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.

| | 9 | |
|----|---|-----|
| I | ● | 10% |
| II | ○ | 30% |



I – 10%
II – 30%

Technical Data

| | |
|----------------------------|---|
| Operating voltage | 120-277Vac 50/60Hz |
| Input current | 0.24-0.14 A |
| Input power | 31W (Max.) |
| Stand-by power | < 0.5W |
| Warm time | 20s |
| Detection area | Sensor OFF/50%/75%/100% (100%/50%/10% on RC) |
| Hold-time | 5s/30s/3min/10min (TEST 2s/30s/1min/5min/10min/30min on RC) |
| Daylight threshold | 5Lux/10Lux/50Lux/disable (2Lux/10Lux/50Lux/Lux disable on RC) |
| Stand-by period | 0s/10s/30min/+∞ (0s/10s/1min/10min/30min/+∞ on RC) |
| Stand-by dimming level | 10%/30% (10%/20%/30% on RC) |
| HF (microwave) frequency | 5.8GHz+/-75MHz |
| HF (microwave) power | <0.2mW |
| Detection range | Max. (ØxH): 12m x 6m |
| Detection angle | 30°~150° |
| Mounting height | Max. 6m |
| Output LED current | 350mA/500mA/550mA/700mA/750mA/900mA |
| Output LED voltage | 10~50V (350mA) 10~50V (500mA) 10~48V (550mA@277V)/ 10~45V (550mA@120V) 10~43V (700mA@277V)/ 10~36V (700mA@120V) 10~40V (750mA@277V)/ 10~33V (750mA@120V) 10~25V (900mA) |
| Output LED power | 3.5~17.5W (350mA) 5~25W (500mA) 5.5~26W (550mA@277V)/ 5.5~25W (550mA@120V) 7~30W (700mA@277V)/ 7~25W (700mA@120V) 7~30W (750mA@277V)/ 7~25W (750mA@120V) 9~23W (900mA) |
| Empty load voltage | 60V |
| Power factor | >0.9 |
| Efficiency | 85% (Max.) |
| Operating temperature | -20°C ~ +50°C |
| Abnormal protection | Output short-circuit protection with auto-reset |
| EMC standard | Part 15B |
| Safety standard | UL 8750 |
| Certification | cULus listed, FCC |
| Dielectric strength | Input→output:3750Vac /5mA/1min |
| Max. case temperature (Tc) | 75°C |
| IP rating | IP20 |