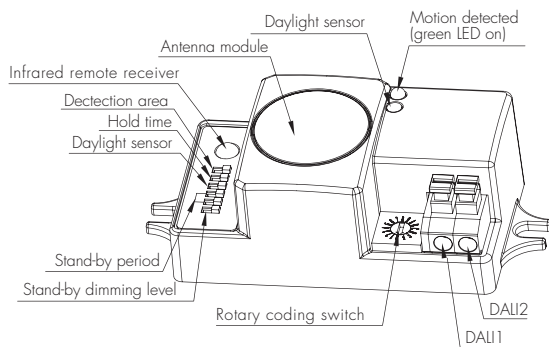
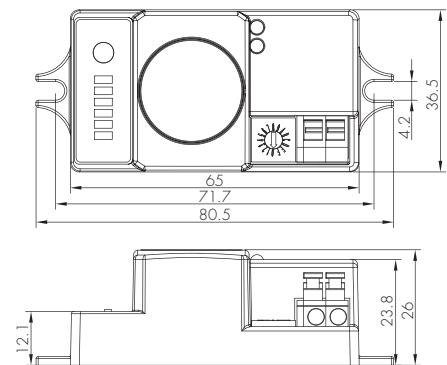


DALI Sensor Built-in Version

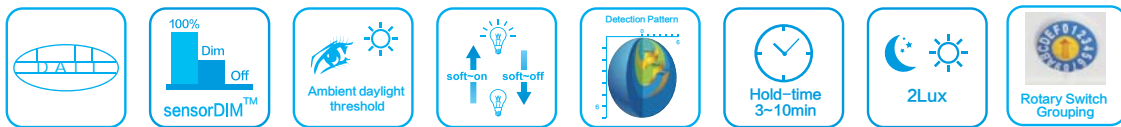
Model: HCD405RC with HRC-02



Model: HCD405RC



Mechanical structure (mm)



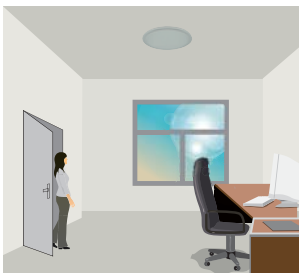
This DALI sensor is designed for built-in lighting fixture, to be incorporating into the DALI system, taking command from the DALI master, accepting and carrying out the grouping work, switching on/off or dimming the assigned group members, and feedback the status to the DALI master.

With the rotary coding switch, it is easy to add in this sensor into the existing DALI system, and do the grouping work without the help of the DALI master and computer interface.

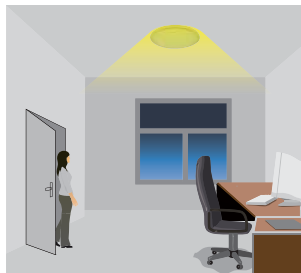
Functions and Options

1 Tri-level Dimming Control (Corridor Function)

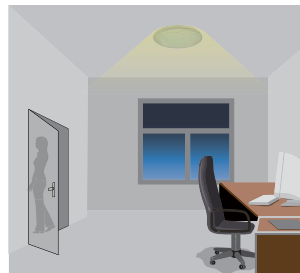
It offers 3 levels of light: 100%-->dimmed light-->off; and 2 periods of selectable waiting time: motion hold-time and stand-by period; selectable daylight threshold and choice of detection area.



With sufficient natural light, the fixture does not switch on when presence detected.



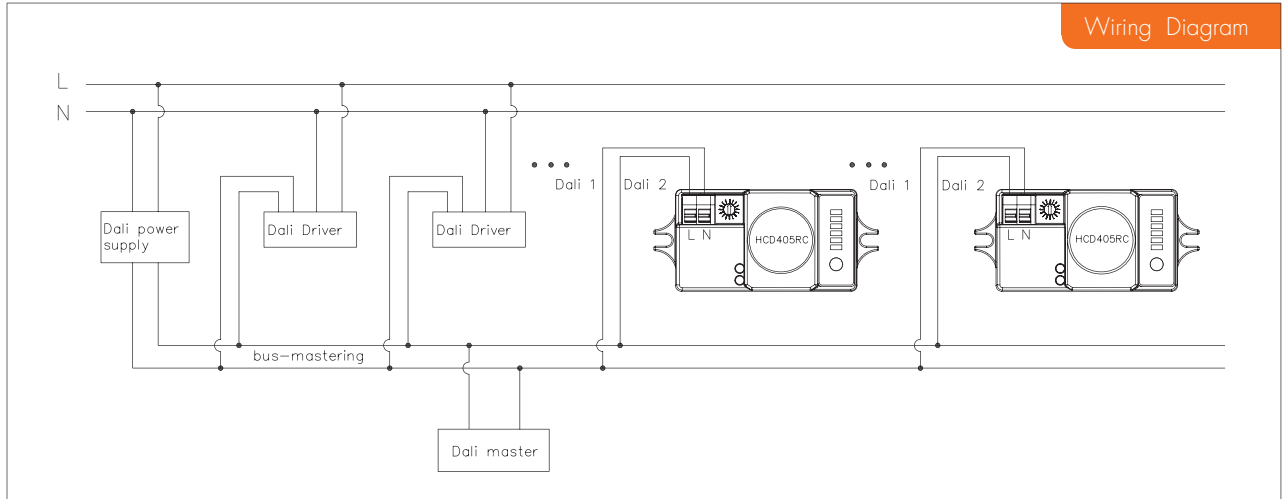
With insufficient natural light, the sensor switches on the light automatically when person enters the room.



People left, light dims to stand-by level after the hold-time.



Light switches off automatically after the stand-by period elapses.



2 DALI Group Selection

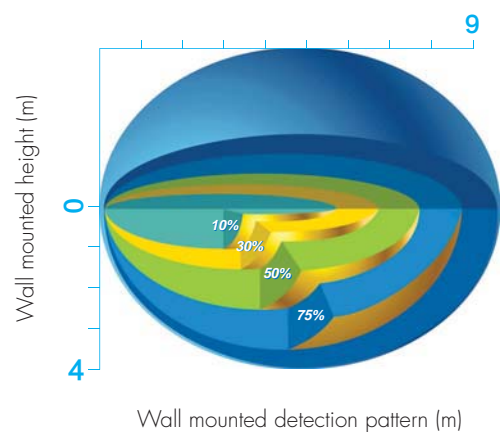
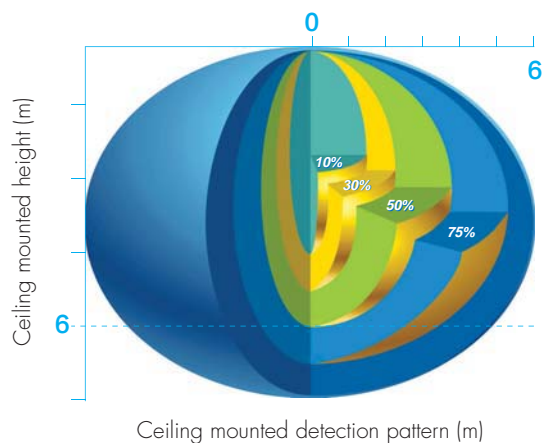
DALI group configuration can be done either on PC, or on the rotary coding switch:

1. There are 16 channels available on the rotary switch. "0" is for DALI broadcast, the rest 15 channels are for end-user to define the application unit.
2. PC grouping can overwrite rotary switch grouping, and vice versa. The last setting controls. The rotary switch channels are corresponding to the groups listed below:

Switch channel	DALI group	Switch channel	DALI group
0	broadcast	8	group 7
1	group 0	9	group 8
2	group 1	A	group 9
3	group 2	B	group 10
4	group 3	C	group 11
5	group 4	D	group 12
6	group 5	E	group 13
7	group 6	F	group 14



Detection Pattern



Settings (Remote Control HRC-02)



Permanent ON/OFF function

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

* 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 late status before the light was switched on/off.



Reset function

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



Test mode

The button "Test 2s" 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 "reset", or any button of "scene mode" and "hold time". The sensor setting is changed accordingly.



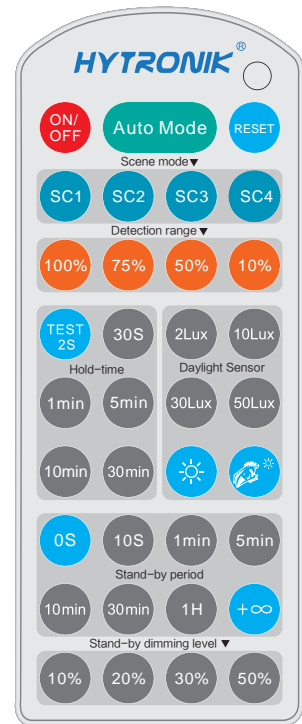
Daylight sensor disable

Press this button, the built-in daylight sensor stop working, and all motion detected could turn on the lighting fixture, no matter how bright the natural light is.



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.



HRC-02

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

Scene mode

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 of detection range/hold time/stand-by period/stand-by dimming level. The last setting stays in validity.

Detection range

Press the buttons of "detection range" to set detection range at 100%/75%/50%/10%.

Hold time

Press the buttons of "hold time" to set hold time at 30s / 1min / 5min / 10min / 30min .

Daylight sensor

Press the buttons of "daylight sensor" to set daylight sensor at 2Lux / 10Lux / 30Lux / 50Lux.

Stand-by period (Corridor function)

Press the buttons of "stand-by period (corridor function)" to set stand-by period at 0s/10s/1min/5min/10min/30min/1H/+∞.

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

Stand-by dimming level

Press the buttons of "stand-by dimming level" to set the stand-by dimming level at 10%/20%/30%/50%.

Settings

1 Detection area

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

	1	
I	●	100%
II	○	50%



I – 100%
II – 50%

2 Hold-time

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

	2	
I	●	3min
II	○	10min



I – 3min
II – 10min

3 Daylight sensor

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

	3	
I	●	Disable
II	○	2Lux



I – 100%
II – 50%

4 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.

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

" +∞ " means bi-level dimming control, fixture never switches off.

	4	5	
I	●	●	0S
II	●	○	10min
III	○	●	1H
IV	○	○	+∞



I – 0s
II – 10min
III – 1H
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.

	6	
I	●	10%
II	○	50%



I – 10%
II – 50%

Technical Data

Operating voltage	9.5~22.5Vdc (suitable DALI power supply)
Input current	Approx. 12mA
Group selection	16 groups via rotary switch
Detection area	50 / 100% (10% / 50% / 75% / 100% on RC)
Hold-time	3min / 10min (TEST 2s / 30s / 1min / 5min / 10min / 30min on RC)
Stand-by period	0s / 10min / 1H / +∞ (0s / 10s / 1min / 5min / 10min / 30min / 1H / +∞ on RC)
Stand-by dimming level	10% / 50% (10% / 20% / 30% / 50% on RC)
Daylight threshold	2Lux, disable (2Lux / 10Lux / 30Lux / 50Lux on RC)
Microwave frequency	5.8GHz+/-75MHz
Microwave power	<0.1mW
Detection range	Max. (ØxH): 12m x 6m
Detection angle	30°~150°
Mounting height	Max. 6m
Operating temperature	-20°C ~ +60°C
IP rating	IP20 IP65 (mounted in Hytronik special box)
Certificate	Semko, CB, EMC, CE, R&TTE, SAA