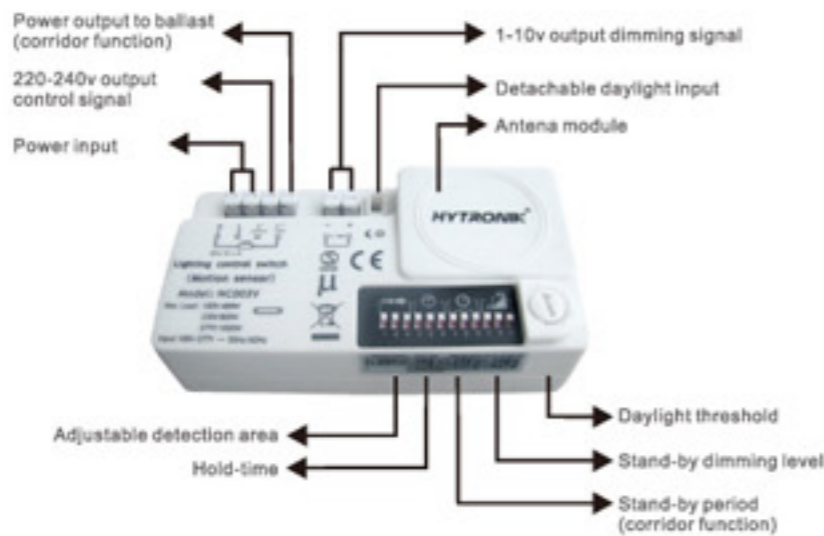
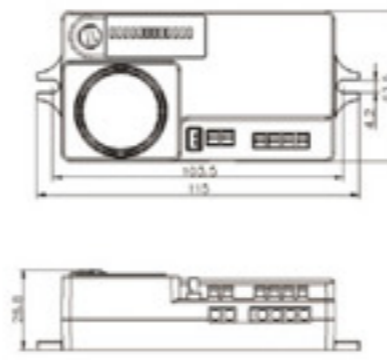


# Advanced version



HC003V (220-240v)



HC403V (120-277v)

## 1. Output function:

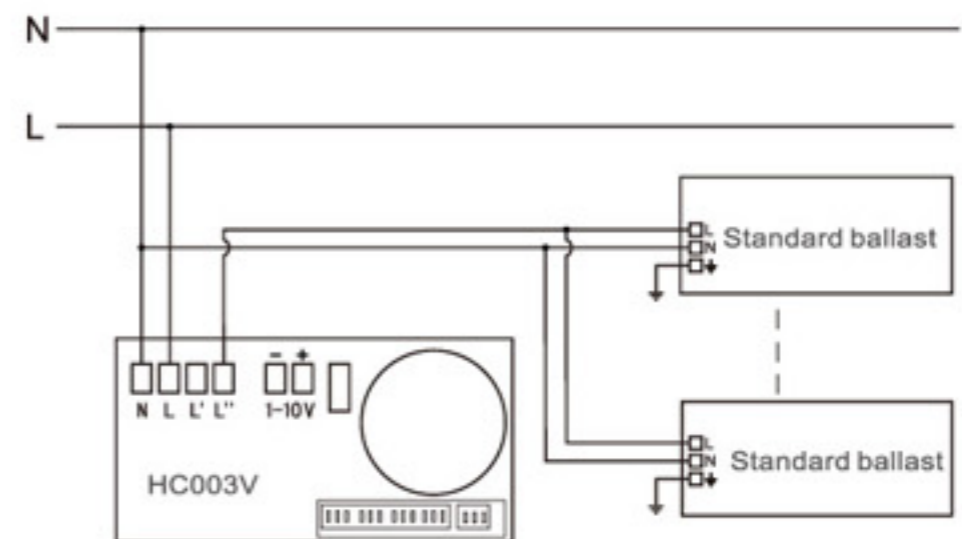
With both 1-10v output signal and 220-240v signal, it can switch on/off any lighting applications, and dim fluorescent lamps, HID lamps as well as LED lamps.

### A : on/off function with non-dimmable ballast--

The sensor can switch on/off halogen transformer, non-dimmable fluorescent ballast, non-dimmable LED drivers. However there is a limit of max. Load due to the inrush current.

#### max. Load (inductive load)--

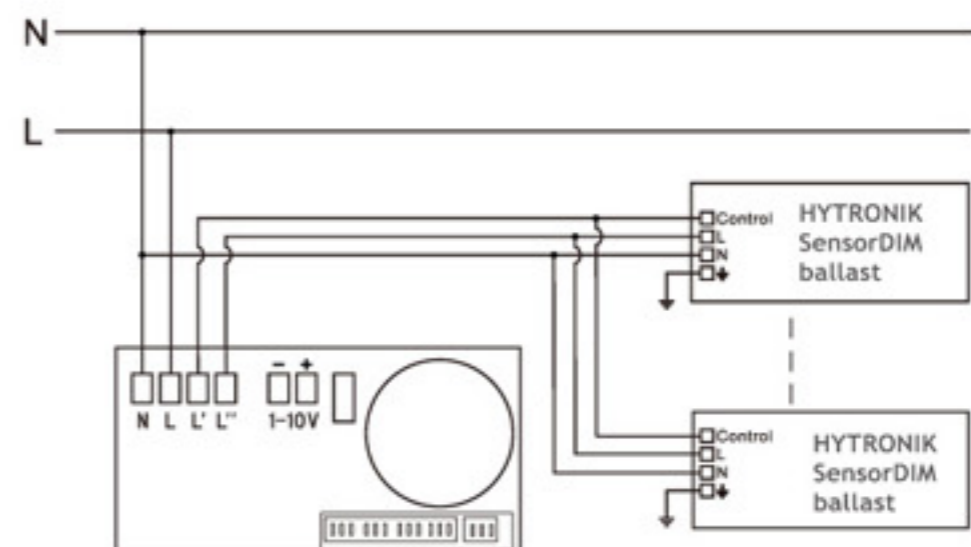
HC003V: 800w      HC403V: 800w at 120v;  
1200w at 277v.



### B : dimming function with HYTRONIK sensorDIM ballast--

This dimming functions works with HYTRONIK sensorDIM ballast only. The output signal is connected to the control terminal on the ballast, which switches on the light at 100%, and dims to 10% when the signal passes out.

HYTRONIK sensorDIM ballast has a wide coverage on various models and wattages of plug-in fluorescent lamps, T5, T8, HID lamps as well as all constant current LED lamps.



max. 800w .....

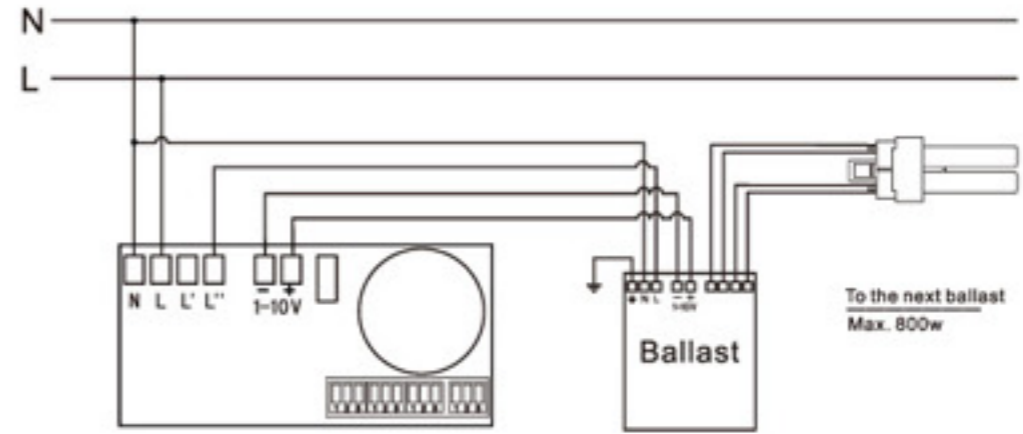
For detailed information about the sensorDIM ballast, please refer to page 41.

**C: dimming function with ordinary 1-10v dimmable ballast--**

This dimming functions works with any ordinary 1-10v analogue dimming ballast, including plug-in fluorescent lamps, T5, T8, and HID lamps.

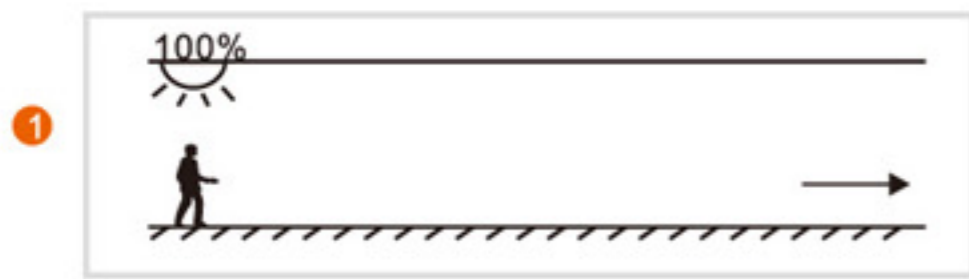
**max. Load (inductive load)--**

HC003V: 800w      HC403V: 800w at 120v;  
1200w at 277v.

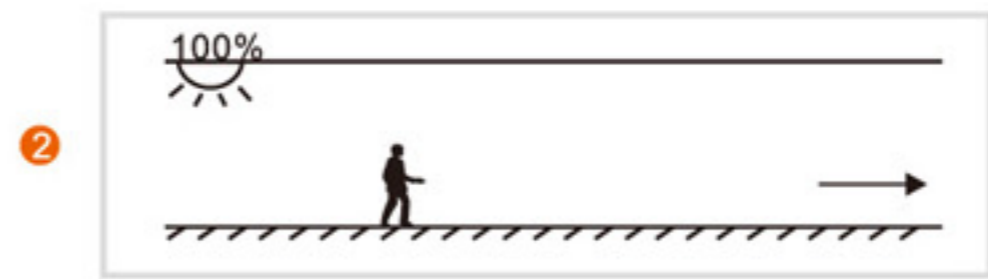


**2: corridor function--**

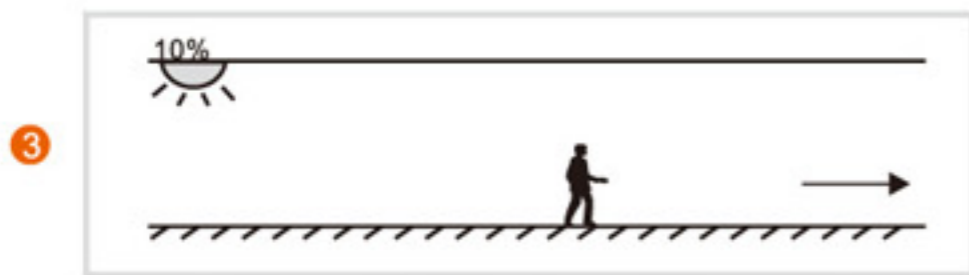
Same function as Tridonic Excel ballast, HYTRONIK has built in the corridor function inside the motion sensor instead...



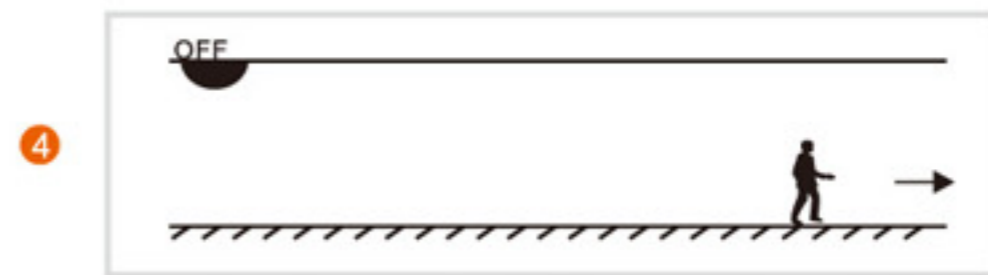
Movement of people activates the lamp.



Lamp is still on at 100% during the hold time.



Lamp is dimmed to 10% after holdtime, system goes to stand-by period

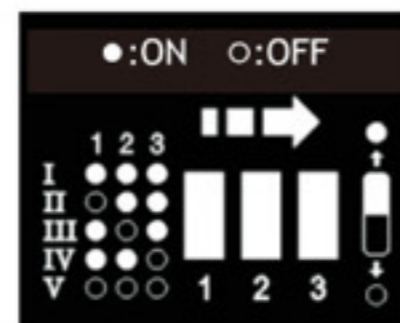


Lamp is switched off after the stand-by period

**3: detection area--**

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

For detailed measurement at each setup, please refer to page 4, graphic of the standard version

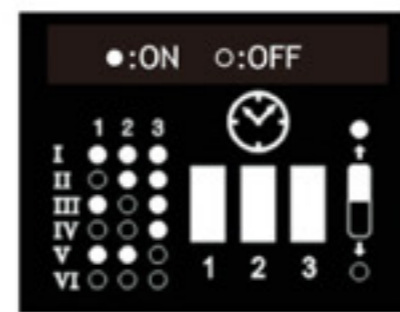


**Recommendation**

	1	2	3	
I	●	●	●	100%
II	○	●	●	75%
III	●	○	●	50%
IV	●	●	○	30%
V	○	○	○	10%

**4: hold-time--**

Hold-time means the time period you would like to keep the lamp on 100% after the person has left the detected area.

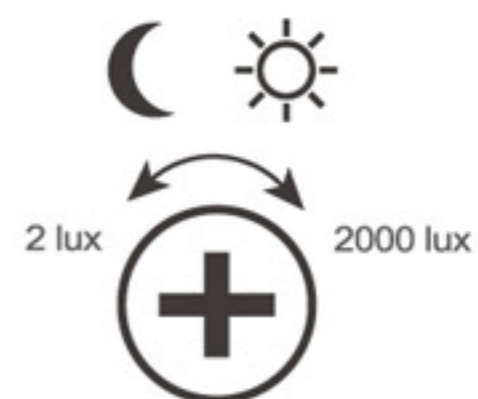


**Recommendation**

	1	2	3	
I	●	●	●	5s
II	○	●	●	30s
III	●	○	●	3min.
IV	○	○	●	5min.
V	●	●	○	15min
VI	○	○	○	25min

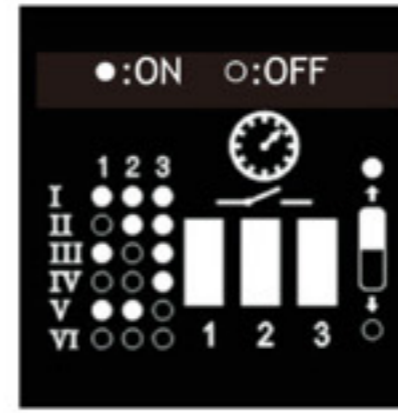
**5: Detachable daylight sensor--**

the daylight threshold can be set on the potentiometer, from 2 lux up to 2000 lux, to fit for any particular application.



## 6: 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.

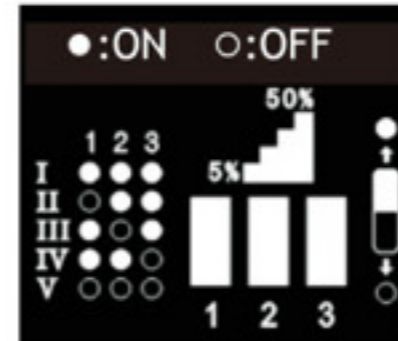


### Recommendation

	1	2	3	
I	●	●	●	5min
II	○	●	●	10min
III	●	○	●	20min
IV	○	○	●	40min
V	●	●	○	1h
VI	○	○	○	Disable

## 7 : 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.



### Recommendation

	1	2	3	Output voltage	Dimming level
I	●	●	●	5V	45-50%
II	○	●	●	4V	35-40%
III	●	○	●	3V	25-30%
IV	●	●	○	2V	15-20%
V	○	○	○	1.4V	5-10%

## Why detachable?

In high-low dimming application, often the sensors are used inside the fixture, very close to lamps. The artificial light produced by the lamps can be easily interpreted by the daylight sensor as natural daylight. In such cases, the motion sensor realised the natural daylight is too high, and shuts down the lamp, as consequence, it becomes dark again inside the fixture, and the motion sensor thinks the lamps should be switched on again... This cycles goes on for ever.

To avoid such problem, it is necessary to put the daylight sensor outside of the fixture, so that it only takes in and measure natural daylight, and ignore the artificial light produced by the lamp. So that the fixture reacts correctly according to natural daylight.

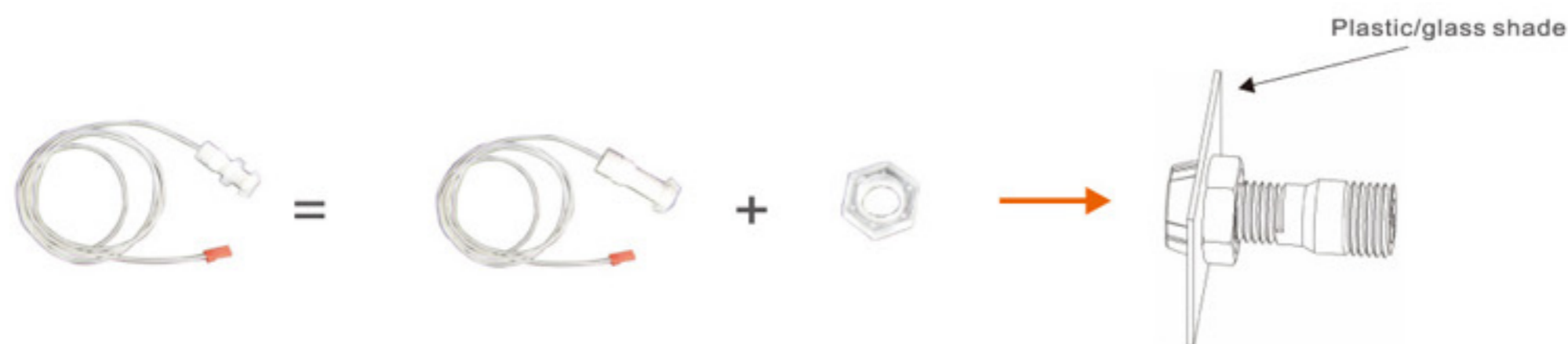
HYTRONIK has specially designed a photo switch ( model PS01) consisting of 4 components, offering 3 package of accessories to help fixing the daylight sensor onto fixtures--



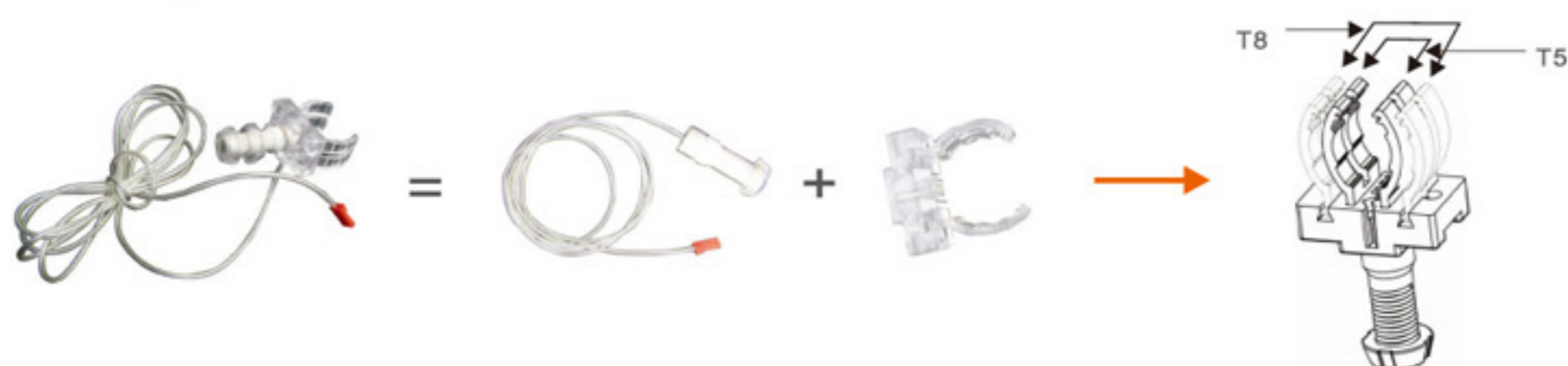
### 1. Mounting on flat surface--



## 2. Mounting on glass /plastic shades--



## 3. Mounting on linear tubes--






Note: all parts are made of transparent PC. Transparent cable length 1 meter.

### Technical Data

Operating voltage:	220-240V $\pm$ 10%, 50/60Hz, 120-277v $\pm$ 10%
Switched power:	HC003V--800w ; HC403V--800/1200W
Standby power:	0.6w (standby), 1.2w (operation)
Detection area	10 / 30 / 50 / 75 / 100% , can be customized
Hold time	5s/30s/180s/300s/15min/25min, can be customized
Daylight threahold	2--2000 lux
Sensor principle	microwave motion detector
Microwave frequency	5.8 GHz +/- 75 MHz
Microwave power	<1mw
Detection range	Max. ( $\phi$ x H ): 8m x 10m
Detection angle	30--150 $^{\circ}$
Motion detection	1-20km/h(<3m mounting height); 1-200km/h(>5m mounting height)
Mounting height:	0.5--100m.
Operating temperature:	-35 $^{\circ}$ C ~ +70 $^{\circ}$ C
IP rating:	IP 20 (mounting inside a lamp); IP 65(mounting in Hytronik special box)

### Compliance and Marking

EU directives:	Standards:	Safety certification
Nr. 1999/5/EC	IEC61000-4-2 IEC61000-3-2	     
Nr. 2004/108/EC	IEC61000-4-3 IEC61000-3-3	
Nr. 73/23/EEC	IEC61000-4-4 EN60669-2-1	
Nr. 2002/95/EC	IEC61000-4-5 EN60669-1	
	IEC61000-4-6 CISPR 14	
	IEC61000-4-8 CISPR 15	
	IEC61000-4-11	