# **RF Wireless Grouping Communication**

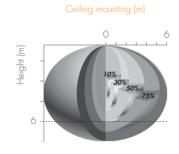
# with ON-OFF & Bi-level/Tri-level Dimming

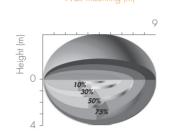
Thanks to the built-in RF wireless sensor, the motion detected by one luminaire (the master LED) can pass onto the other pre-defined luminaires (the slave LED) through RF transmission. Easy to set up by either the rotary coding switch or remote controller, and up to 16 different groups can be created.

### Features & Benefits

- ullet Detection range (diameter x height): Max. 12m x 6m
- Wireless communication between luminaires, no control cables needed. Transmission range can be 30 meters in door and 100 meters in open area.
- Up to 16 groups can be created.
- Selectable hold-time, sensitivity, daylight sensor, stand-by time and stand-by dimming level.

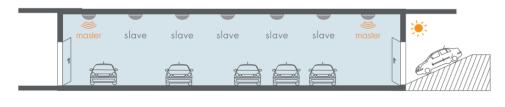
### Detection Pattern



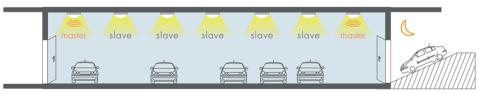


### RF Transmitting (Transmitter + Receiver, Dimming Control)

Sensor Settings Demostration: Hold-time: 10min Sensitivity: 100% Daylight Threshold: 50lux Stand-by Period: 5min Stand-by Dimming Level: 10%



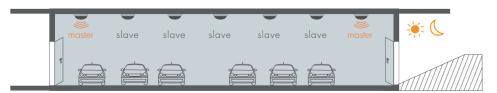
With sufficient natural light, the lights keep off when presence is detected.



The master switches all salves on by RF transmission when natural light is below daylight threshold and presence is detected.



After the hold-time, the whole group of lights dim to pre-set dimming level if no movement detected.

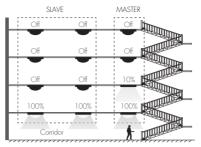


The whole group of lights switch off automatically after the hold time and no presence is detected.

\*Set stand-by time at infinity for bidevel control.

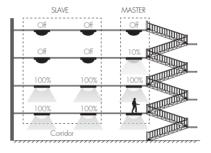
### Application Example - Staircase





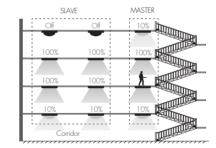
While the 1st sensor detects motion on the 1st floor, it switches the light on 100% and sends signal to all slave units. All slaves on the 1st floor turn on 100% and the master on the 2nd floor goes to stand-by level.





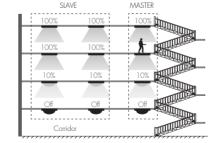
The person walks to the 2nd floor, the 2nd master switches the light on 100%. All slaves on the 2nd floor turn the light on 100% and the master on the 3rd floor goes to stand-by level.





When walks to the 3rd floor, the 3rd master switches the light on 100%. All slaves on the 3rd floor turn the light on 100% and the master on the 4th floor goes to stand-by level. Meanwhile, the lights on the 1st floor are dimmed to stand-by level after hold-time.





The person walks to the 4th floor, the 4th master switches the light on 100%. All slaves on the 4th floor turn the light on 100% and the next master goes to stand-by level. Meanwhile, all sensor on the 1st floor turn the light off after stand-by period, and all lights on the 2nd floor dim to stand-by level after hold-time.

# • RF Grouping (Max. 16 Channels)

Using screwdriver to adjust the rotary switch on both master & slave luminaire, and keep them pointing at the same channel. The grouping is then automatically completed.





## Sensor Setting Options



#### Sensitivity

Detection area can be adjusted by selecting the combination on DIP switches to suit each application.

Sensitivity option:

100% / 75% / 50% / 25% / 10%



#### Hold-time

Hold-time is the period the lamp stays on 100% after the person has left the detection area. Hold-time options:

 $5s/30s/1min/5min/10min/20min/\ 30min.$ 



#### **Daylight Threshold**

The daylight threshold can be set on DIP switches to suit each application.

Daylight sensor options:

2Lux / 10Lux / 50Lux / Disable.



#### **Stand-by Period (Corridor Function)**

This is the time period required at the low light level before it is switched off after the absence of people.

Stand-by period options:

 $0s/10s/1min/5min/10min/30min/1h/+\infty$ . \*Set stand-by time at infinity for bi-level control.



### **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.

Stand-by dimming level options: 10%/ 20%/ 30%/ 50%.

63 / Intelligent Lighting Solutions / 64

<sup>\*</sup>Factory settings can be customized upon request.