# Teco LIGHTING

CE

# ■ FIXTURE EXTERNAL   0-10 VOLT DIMMING  SENSOR WITH IP65

REF/TSEPIRSENS01 + TLIREMSENS01

M20 x 1.5
129.6
28
17
36.4
149

## Walk across



| Height | Range Diameter |
|--------|----------------|
| 7m | 16m |
| 2.8m | 9m |

## Walk towards
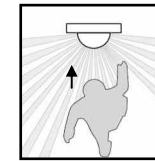


| Height | Range Diameter |
|--------|----------------|
| 7m | 10m |
| 2.8m | 5m |

## INTRODUCTION

The miniature PIR (passive infrared) presence detector provides automatic control of lighting loads. It is specifically designed for mounting onto a batten style luminaire.
The detector will switch incandescent, fluorescent, compact fluorescent and LED lighting.
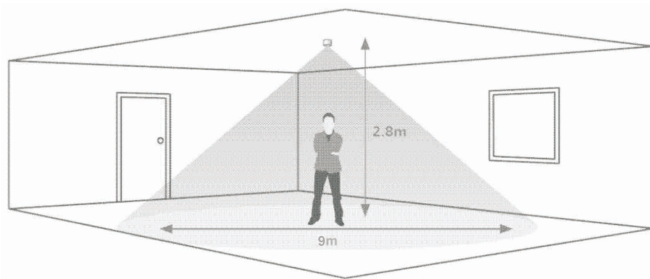The unit detects movement using a PIR sensor and turns the load on. When an area is no longer occupied the load will switch off after a 10 minute time out period.
A selection of fixing washers are supplied to aid fixing to a variety of luminaires.

## SPECIFICATIONS

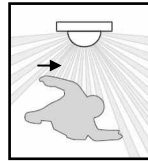| | | | |
|---|---|---|---|
| Dimensions | See diagrams opposite. | Power consumption | On 799mW, Off 807mW |
| Supply Voltage | 100-240VAC | Cable specification | 1m 1/1.13 solid core cable |
| Frequency | 50/60Hz | | 105°C |
| Maximum Switching | 2 Amps fluorescent and | Temperature | - 10°C to 35°C |
| Load | incandescent lighting. | Humidity | 5 to 95% non-condensing |
| | 2 Amps compact fluorescent | Material | Flame retardant ABS/PC |
| | lighting. | Type | Class 2 |
| | 2 Amps low energy lighting. | IP rating | IP65 |
| | 2 Amps low voltage lighting | | |
| | (switch primary of transformer). | | |
| | Switch SON lighting loads via a | | |
| | contactor. | | |

## DETECTION DIAGRAM



2.8m

9m

Area of high sensitivity    Area of lower sensitivity

Note: illustration shows an average of the walk across and walk towards figures below.
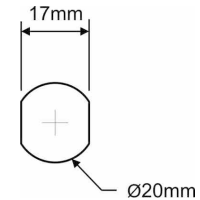
## INSTALLATION

Do not grip unit at the lens end. Hold the square body near the threaded end when installing and tightening the nut. Care must be taken to prevent damage to the lens and surrounding IP seal.
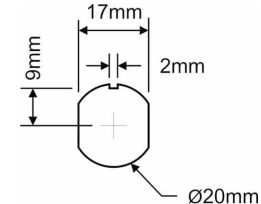
### Components

| Part | Quantity Supplied |
|------|-------------------|
| Silicone washer | 2 |
| 5° washer | 1 |
| 5° spacer | 1 |
| M20 nut | 1 |

### Mounting hole without key
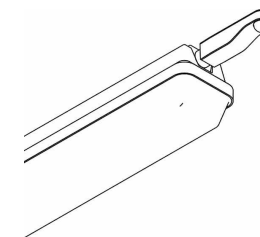
17mm

Ø20mm

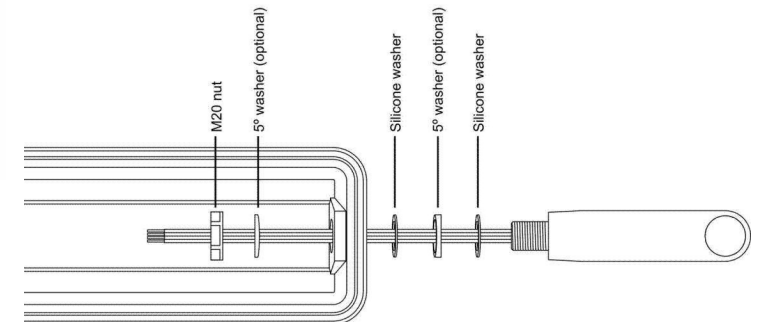### Mounting hole with key

17mm
9mm
2mm

Ø20mm

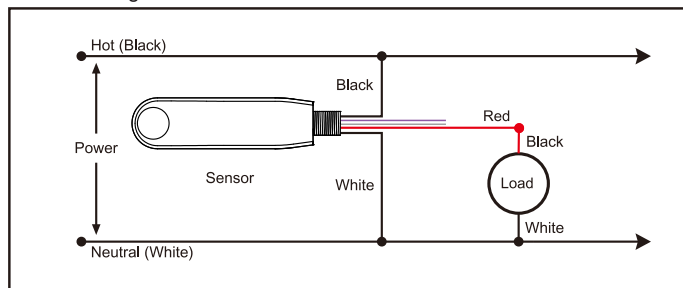Note. Key to be at top of sensor.

## IP LUMINAIRE FITTING



Note. Use the 5° spacers where the luminaire housing has a draft angle.

Important
Ensure that the Silicone washer and/or the IP spacer are used to ensure IP rating.
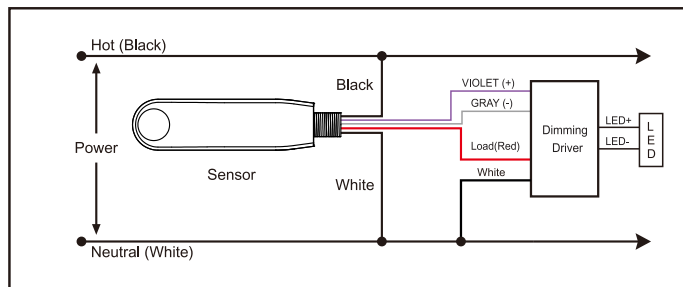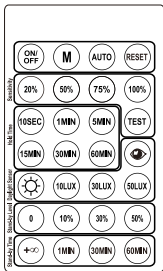
M20 nut
5° washer (optional)
Silicone washer
5° washer (optional)
Silicone washer

CE

## WIRING DIAGRAMS

Non-Dimming Driver



Dimming Driver



## SETTING BY REMOTE CONTROL



| Button | Description | Button | Description |
|---|---|---|---|
| ON/OFF | Press the "on/off" button, the light goes to permanent on or permanent off mode,the sensor is locked,Press "AUTO " to quit from this mode. | TEST | The button "Test" is for testing sensitivity purpose  only. the sensor goes to test mode (hold-on time is only 2s)automatically after commissioning,meanwhile the stand-by period and daylight sensor are disabled. Press"AUTO " to quit from this mode. |
| M | Memorize a list of specific parameters in "M" button as one touch button. | | |
| AUTO | Press "AUTO"button,the sensors starts to work and all parameters remains the same as the latest status. | RESET | Press "RESET"button ,all parameters go back to default settings: 75% 10SEC ☼ 30% 60MIN |
| 20% 50% 75% 100% | Select as  appropriate to adjust sensor sensitivity | 10SEC 10MIN 20MIN 30MIN | The time of light fixture remains at programmed 100% level after motion  is  not detected |
| 👁 | 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. | ☼ 10Lux 30Lux 50Lux | Select ☼/10LUX/30LUX/50LUX/☼ threshold for sensor to turn light fixture ON. Select ☼ ,current surrounding lux value as daylight lux threhold , select ☼ , the built-in daylight sensor stops working, and all motions detected could turn the light fixture on,no matter how bright the natural light is. |
| 0 10% 30% 50% | Press the buttons of "stand-by dimming level"to set the stand-by dimming level at 0/10%/30%/ 50%; Note: 0 means on /off control; | +∞ 1MIN 30MIN 60MIN | Press the buttons of "stand-by period (corridor function)"to set stand-by period at 1min/30min/ 60min/+∞ ; Note:"+∞"means bi-level dimming control, fixture never switches off. |

**NOTE:** 1. when the sensor connect AC power first time, the light will be on one time and off,it take 20seconds to warm up.

2. the light will be on one time and off as confirm the sensor gets remote control signal.

### Quick User Guide:

1."ON/OFF" MODE: Press the "ON/OFF" button,the light goes to permanent on or permanent off mode, Press "AUTO " ,  button to quit from this mode.

2."RESET" MODE: Press "RESET" button ,all parameters go back to Default parameter: 75% 10SEC ☼ 30% 60MIN .

3."AUTO" MODE: Press "AUTO" button, the sensor starts to work automatically ,the parameters same as latest parameters  in "AUTO" mode , you can begin to adjust the parameters as you desired.

**For example:** make desired Parameters as following: sensitivity 50%,hold time 10seconds, daylight sensor ☼ ,   Stand-by level 30%,Stand-by time: 1min) .

Step 1. push the "AUTO" button, light will be on one time and off , as confirm.
Step 2. push the sensitivity "50%"button,llight will be on one time and off , as confirm.
Step 3. push  hold time "10seconds" ,light will be on one time and off , as confirm.
Step 4. push  daylight sensor "  ☼  ", light will be on one time and off , as confirm.
Step 5. Push Stand-by level "30%"button ,light will be on one time and off , as confirm.
Step 6. Push Stand-by time "1MIN" button ,light will be on one time and off , as confirm.

The sensor detects motion, the light on 100%,the light will go to 30% if no motion is detected within 10Seconds, and light will off if no motion is detected within 1min.

5. "M" Mode: "M" means Memory , this mode is to memorize a list of specific  parameters in "M"  button , so other light sensors can copy same parameters immediately by just pushing M button .

**For example:** you have 1000pcs lights need to set same parameter as following : sensitivity 50%,hold time 10seconds,  daylight sensor ☼ , Stand-by level 30%,Stand-by time: 1MIN.

Step 1. push "M" button , light will on  then off ,then push "TEST" and hold until light remains on .
Step 2. push the sensitivity "50%"button ,the light will flash and remains on as confirm .
Step 3. push  hold time "10SEC" button ,the light will flash and remains on as confirm .
Step 4. push daylight sensor "  ☼ ", the light will flash and remains on as confirm .
Step 5. push Stand-by level "30%" button ,the light will flash and remains on as confirm .
Step 6. push Stand-by time "1MIN" button, the light will flash and remains on as confirm .
Step 7. push "M" button, memorize the Parameters above , light will be off as confirm .
Step 8. Aim at the light, and press "M" button again ,mean the First light sensor get  parameters as above .
Step 9. Aim at other 999pcs lights, just need to push only one button "M" one by one , lights sensor will get all parameters as above .