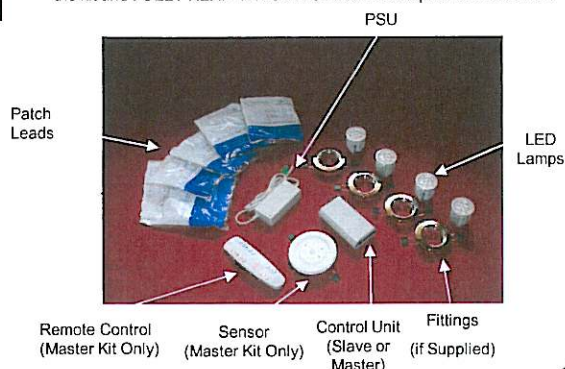# RESPONDALIGHT - *INSTALLATION INSTRUCTIONS*

Important Safety Notice – Please Read These Instructions Prior To Installation

1

GETTING STARTED - Always familiarise yourself with the components in the kit and **FULLY READ THESE INSTRUCTIONS** prior to installation.

PSU

Patch Leads

LED Lamps

Remote Control (Master Kit Only)   Sensor (Master Kit Only)   Control Unit (Slave or Master)   Fittings (if Supplied)

2

Only commence the installation when you are confident that sufficient access is available to allow the system to be installed.
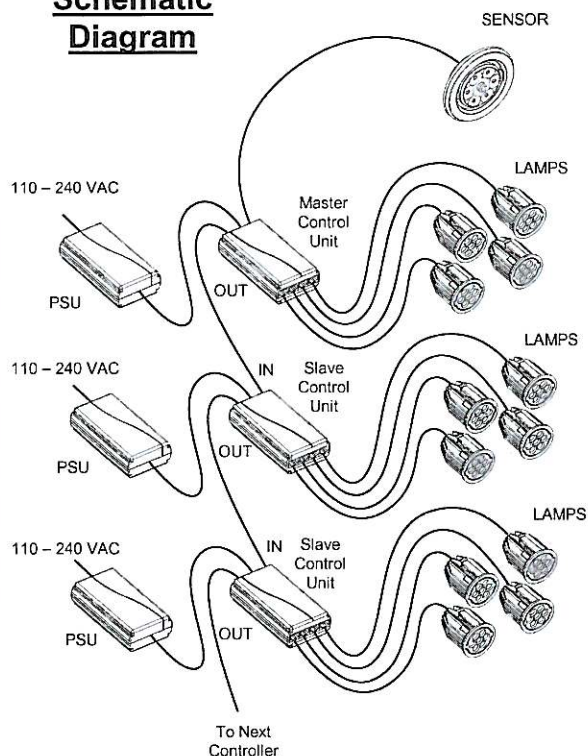
NEW BUILD - Choose the lamp positions and use the schematic diagram to establish the best locations for the connecting cables , mains feeds & power supply units (**Section 3**), control units and the sensor (**Section 5**).

Where possible, 'First-Fix' all power and system cables prior to floor and ceiling boarding. Ensure cables are protected from damage and can be easily located ready for 'Second Fixing'

RETRO FITTING - Ensure that it is possible to locate power supply units (**Section 3**), control units, sensor (**Section 5**) and lamps prior to installation. Check that all necessary mains voltage power cables and low voltage RJ45 system cables can be routed (see schematic diagram). Where lamp fittings exist it may be necessary to remove them to investigate joist layouts and access.

Use the labels supplied to identify the each end of the cables before fitting

L = <u>L</u>amp   S = <u>S</u>ensor   O = Loop <u>O</u>ut   I = Loop <u>I</u>n

Schematic Diagram

SENSOR

110 – 240 VAC

PSU

Master Control Unit

OUT

LAMPS

110 – 240 VAC

PSU

IN   Slave Control Unit

OUT

LAMPS

110 – 240 VAC

PSU

IN   Slave Control Unit

OUT

LAMPS

To Next Controller

3

LOCATING OR PROVIDING MAINS POWER SUPPLIES

Each Master and Slave Control Unit requires a switched power supply and will therefore need to be connected to the Mains Electrical Wiring. Always connect the earth wire.

L   N

P S U   P S U   P S U
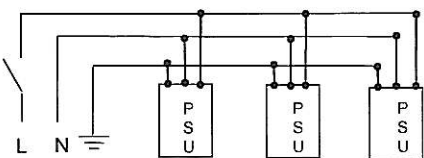
NOTE: IT IS RECOMMENDED THAT MAINS ELECTRICAL CONNECTIONS ARE CARRIED OUT BY A QUALIFIED ELECTRICIAN.

ALWAYS ENSURE THE MAINS SUPPLY IS ISOLATED BEFORE WORKING ON ANY EXISITING ELECTRICAL WIRING AND CHECK THE SUPPLY IS *OFF* BEFORE YOU START

4

NOTES OF CAUTION.

If the power supply has been operated without a load do not touch the input wires of the unit immediately after disconnection. It is recommended that power supplies are only switched on when lamps are connected to allow capacitors within the unit to discharge.

Check that the system is correctly connected before switching the power on. Incorrect connection may cause damage to the system components.

5

SENSOR LOCATION - The sensor should be positioned to detect movement or sound within the zone. It is important to position the sensor such that it can detect a person entering the room. It is also important that occupants of the room are detected, to keep the lights on

Side View   Plan View

2.25m

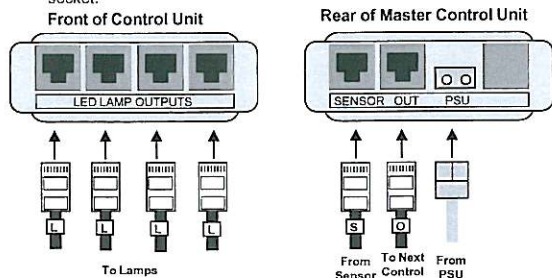Sensor Positioned To Detect Approach To Open Door

4.5m
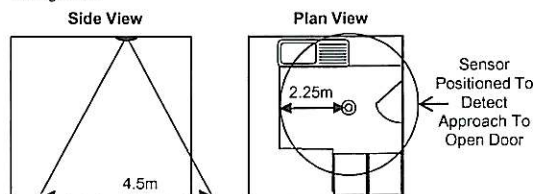
The lights can be activated by movement (PIR) only or a combination of movement and audio activity. The sensor will also dim the lights to 50% where the ambient light levels are very high. These features may be configured or defeated by use of the remote control (**Section 11**)

6

CUTTING HOLES FOR THE LAMPS & SENSOR – Use a pad saw or hole saw to cut the holes for the lamp fittings and sensor. Locate the cables and pull through the hole ready to fit the lamps and sensor.
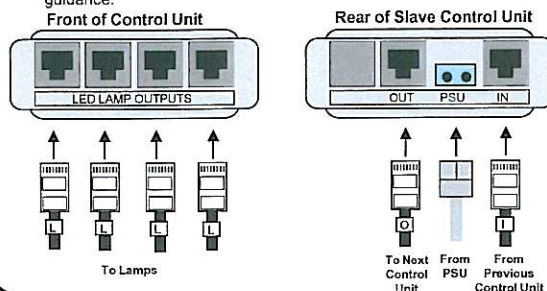
L   L   S

65   75   80

Fixed Fitting   **Tilting Fitting**   **Sensor**
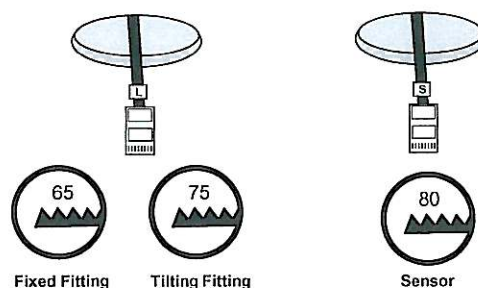
7

Master Control Unit Connections – Each control unit has 4 RJ45 sockets to support the LED lamps. Connect the RJ45 system cable for each lamp into these sockets. At the rear of the Master Control Unit connect the cables for the Sensor and the LOOP OUT connection to the slave control unit (if applicable). Finally insert the green PSU connector into the green socket.
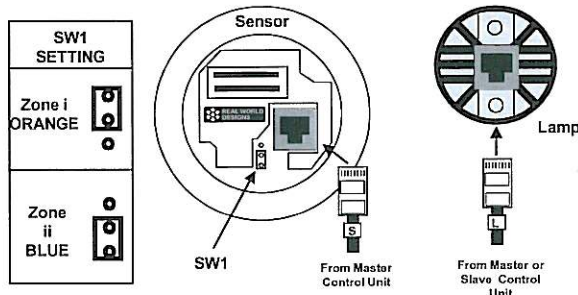
Front of Control Unit

LED LAMP OUTPUTS

To Lamps

Rear of Master Control Unit

SENSOR | OUT | PSU

From Sensor | To Next Control Unit | From PSU

8

Slave Control Unit Connections – Connect the RJ45 cables for the lamps as previously described **(Section 7)**. Connect the LOOP IN cable from the previous controller in the loop and connect the LOOP OUT cable to the next slave control unit (if applicable). Connect the PSU (green) connector. A maximum of 4 Slave units may be connected onto the loop for each master. To configure a larger system contact Real World Designs for guidance.

Front of Control Unit

LED LAMP OUTPUTS

To Lamps

Rear of Slave Control Unit

OUT | PSU | IN

To Next Control Unit | From PSU | From Previous Control Unit

9

Sensor & Lamp Connections – Insert the cable into the sensor. Note the position of the jumper SW1 (for more information see **section 10**). Do not fit the sensor into the ceiling at this stage.

Insert the each lamp into it's fitting and plug in the cables ready to test the system. Do not fit lamps into the ceiling at this stage.

SW1 SETTING	
Zone i ORANGE	
Zone ii BLUE	

Sensor

SW1

From Master Control Unit

Lamp

From Master or Slave Control Unit

10

Configuring And Testing The System – Before locating the power supplies and control units in their final positions, check all connections and switch on the power

Check that all power supply and control units have a green LED illuminated. If the PSU LED is not lit, disconnect from one remote control unit and use test equipment to check that the electrical supply is present from the switch. When all LED's are on, the system is ready to configure.

Two zones can be operated independently from the remote control. The zone is configured by adjusting the position of jumper SW1 **(Section 9)** adjacent to the connector at the rear of the sensor to select the following:

Zone One (Zi) – The ORANGE LED at the front of the sensor will be ON and the control unit will respond to the buttons on the handset with an ORANGE outline.

Zone Two (Zii) -The BLUE LED at the front of the sensor will be ON and the control unit will respond to the buttons on the handset with a BLUE outline.

Once configured, use the remote control to operate the system, checking each function in turn **(Sections 11&12)**. When the system has been tested fit the PSU's and Control Units into their final locations and fit the lamps and sensor into the ceiling.

11

Remote Control - The Infra-Red remote control may be used to control two different sets of lights.

Zone One (Zi) – Use the left hand buttons with ORANGE outline.
Zone Two (Zii) – Use the right hand buttons with BLUE outline.
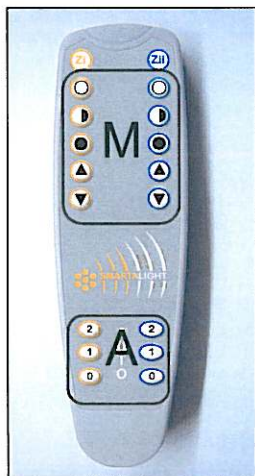
To change the batteries remove the battery cover at the rear of the unit.. The handset requires two AAA type batteries.

BUTTON	FUNCTION
◯	LIGHTS OFF
◖	HALF BRIGHTNESS
●	FULL BRIGHTNESS
▲	INCREASE BRIGHTNESS
▼	DECREASE BRIGHTNESS
2	AUTO PROGRAM 2
1	AUTO PROGRAM 1
0	AUTO PROGRAM 0

A	Step One	Step Two	PIR	Audio	Indication
2	Wait 10 Min[1] Dim to 50%	Wait 10 Min[1] Lights OFF	ON	ON	Lights Flash Twice Green LED ON
1	Wait 5 Min[1] Dim To 50%	Wait 5 Min[1] Lights OFF	ON	OFF	Lights Flash Once Green LED OFF
0*	Wait 10 Min[2] Dim To 50%	Wait 10 Min[2] Lights OFF	ON	OFF	Green LED OFF

* The system automatically enters program 0 on power up
1 Unless movement or sound is detected
2 Unless movement is detected

12

Operating Instructions – The system functions can be operated by use of the IR remote control **(section 11)**.

The Manual controls (M) allow adjustment of the brightness UP and DOWN as well as selecting OFF, HALF and FULL. Use of the manual controls will cancel automatic programs (see below)

The AUTO controls (A) allow the selection of an automatic program to switch the lights off when a room is unoccupied.

The system waits for a predetermined time **(section 11)** before dimming the lights to HALF brightness and a further period before switching to standby. PIR and Audio detectors fitted to the sensor will reset the timer if triggered by movement or noise. Once the system is in standby the lights will be activated by movement detected by the PIR sensor.

The AUDIO detection is de-activated in Program 0. (Green LED on Sensor is OFF).

When the system is first switched on, the lights are ON and AUTO PROGRAM 0 is activated.

System Status Indication – The system flashes the lights once or twice to indicate the selection of programs **1 or 2**.

The Green LED on the sensor indicates that the Audio detector is active

SENSOR

IR Receive Window

Zone Indication
Orange = Zi
Blue = Zii

AUDIO Detection
Green = ON

PIR Detector
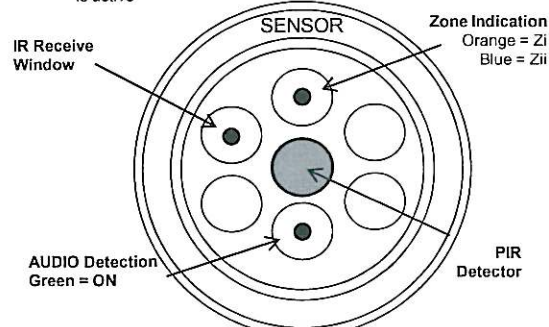
The sensor will dim the lights to 50% where the ambient light levels are very high

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