

PASSIVE INFRA-RED MULTI SENSOR SWITCH & DETECTOR

Cat No. SL055



TIME GUARD
LIMITED

INSTALLATION & OPERATING
INSTRUCTIONS

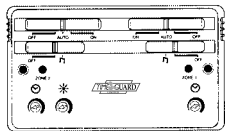
General

A passive infra-red Multi Sensor Switch and 180° sensor-detector, providing security lighting control in either 1 or 2 zones. The wall switch is designed to be sited internally on new or existing installations and operates in conjunction with low-voltage SL099 sensor detectors, mounted externally. Each zone is fully independent and can control up to 4 sensor-detectors and up to 1500W of lighting. Simple slide-switch controls allow automatic passive infra-red security or manual ON/OFF operation in both individual zones. An audible alarm (optional setting) with LED indication sounds on detection. Light-on-times are adjustable from 5 seconds to 5 minutes in each zone and a light level control allows dusk till dawn and daylight operation.

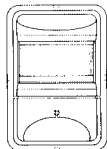
INSTALLATION SHOULD BE CARRIED OUT BY A COMPETENT DIY PERSON. IF IN DOUBT CONSULT A QUALIFIED ELECTRICIAN. PLEASE READ THE INSTRUCTIONS THOROUGHLY BEFORE COMMENCING WORK.

SAFETY The electricity supply must be disconnected whilst carrying out the installation.

Pack Contents



MULTI SENSOR SWITCH



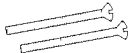
180° WALL SENSOR DETECTOR

NOTE: Wall mounting fixing screws and wallplugs for the Wall Sensor Detector are not supplied. Use 2 X No 8 11/2" (40mm) screws



1 WAY TERMINAL BLOCK

(for earth termination – see wiring section)

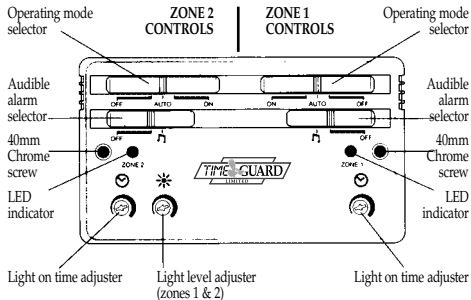


2 x 40mm CHROME SCREWS

(to secure Multi Sensor Switch to wall box – see installing switch section)



2 x 165mm LONG PVC INSULATION SLEEVES
(to insulate low voltage 2 core cable inside switch – see wiring section)



Multi Sensor Switch Controls

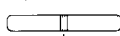
Each of the zone controls are independent of each other allowing individual zone settings or combined operation. NOTE: There is only one light level adjuster for both zones which is set in conjunction with the sensor detector connected to zone 1 in the darkest lit area.

Operating Mode Selector OFF/Auto/ON

(Independent to each zone)



Light(s) permanently OFF



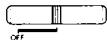
Light(s) operational in conjunction with PIR Wall Sensor Detectors



Light(s) permanently ON

Audible Alarm Selector - OFF/

(Independent to each zone)



Internal buzzer alarm permanently OFF



The internal buzzer alarm will sound for approx. 1 second each time movement is detected by a Wall Sensor Detector. NOTE: This facility operates over a 24hr period and can function independently of the operating mode selections (OFF/AUTO/ON) above.

To help distinguish in what zone an intrusion has occurred. ZONE 1 buzzer sounds a Continuous bleep – bleeeeeep ZONE 2 buzzer sounds a fast intermittent bleep – bleepbleepbleepbleep

LED Indicator

(Independent to each zone)



OFF – LED does not show



AUTO – Led shows on detection of movement detected by the Wall Sensor Detector. The indicator will remain on for the same period as the light on time selector. (see light on time adjuster.)



ON – LED remains permanently ON.

Light ON Time Adjuster

Sets the length of time the light(s) remain on after detection by a Wall Sensor Detector



Turn adjuster arrow anti-clockwise for minimum on time.



Turn adjuster arrow clockwise for a longer time on period.



Timing is adjustable from approx 5 seconds to 5 minutes.

Zone Link

Both zones can be linked via a removable selector link on the back of the switch.



ZONE LINK OFF - Light on times operate independently of each other.



ZONE LINK ON - Light on times are governed by the zone set with the longest light on time period. All Wall Sensor Detectors in either zone will operate the system with this link

Light Level Adjuster

The adjustable light level control (100 Lux – 5 Lux determines at what part of the day the system operates when set in AUTO (PIR) operating mode



Turn adjuster arrow fully clockwise for the day and night operation.



Turn adjuster arrow anti-clockwise for a darker start operation.



NOTE: There is only one light level adjuster controlling both zones. The wall sensor detector connected to zone 1 within the darkest lit area sets the light level.

Installing the Multi Sensor Switch

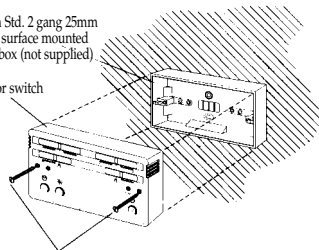
Wall Mounting

The Multi Sensor Switch is for internal siting only and can be either flush mounted or surface mounted onto an interior wall.

Surface Mounted

Use a Std. 2 gang 25mm deep surface mounted wall box (not supplied).

Multi Sensor switch

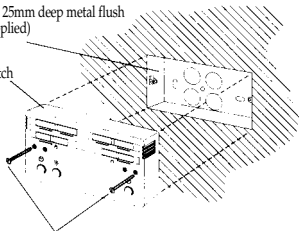


40mm chrome screws

Flush Mounted

Use a Std. 2 gang 25mm deep metal flush wall box (not supplied).

Multi Sensor switch



40mm chrome screws

Wiring

INSTALLATION SHOULD BE CARRIED OUT BY A COMPETENT DIY PERSON. IF IN DOUBT CONSULT A QUALIFIED ELECTRICIAN.

THE MAINS SUPPLY TO THE UNIT SHOULD BE FUSED AT:

3 AMPS - Light loads up to 500W

13 AMPS - Light loads between 500-1500W

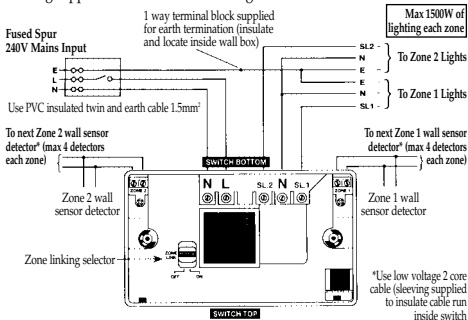
AND ALSO INCORPORATE AN ON/OFF SWITCH

It must be possible to isolate the supply completely for installation/maintenance purposes. This can be done by an isolating switch or at the mains supply switch to the premises.

BEFORE WIRING THE MULTI SENSOR SWITCH ENSURE THAT THE MAINS IS DISCONNECTED AT SOURCE.

Cable Plan

For mains IN and switched mains OUT (to lights) – use PVC insulated twin and earth cable 1.5mm². For Wall Sensor Detector connection (zone 1 and zone 2) – use low voltage 2 core cable (bell wire). **IMPORTANT:** Use the two strips of sleeving supplied to insulate the low voltage cable run inside the switch.

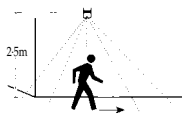


Installing the Wall Sensor Detector

A maximum of 8 detectors – 4 each zone can be installed using low voltage 2 core cable (bell wire).

Siting

The Wall Sensor Detector should be mounted at a height of 2.5 metres. At this height the sensor can be adjusted within minimum and maximum settings. Refer to adjusting detection range.



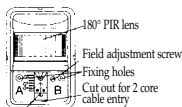
Maximum sensitivity is achieved when movement of people is past the detector rather than movement directly towards or away from it.

False Alarms

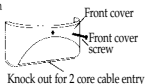
It may also respond to cars, animals, central heating flues, cold moving objects against a warmer background (e.g. swaying trees in front of a warm wall).

Fixing Sensor Detector to the Wall

- Unscrew and pull off front cover
- Mark fixing holes A & B and drill holes
- Fix unit to the wall using 2 x No 8 1 1/2" (40mm) screws and wallplugs (not supplied)
- Replace front cover on completion of Wiring and walk testing.



Terminal block slides up and down to adjust detection range
Up = minimum
Down = maximum



Adjusting Detection Range

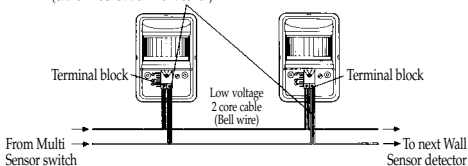
- Unscrew and pull off front cover
- Loosen field adjustment screw
- Using terminal block slide up or down into position Up=Minimum setting at 2.5 metres 180° Down=Maximum setting at 15 metres 180° (Refer to detection range).
- Once the range is established lock the terminal block into position by tightening the field adjustment screw.
- Replace front cover and secure with cover screw.

Wiring

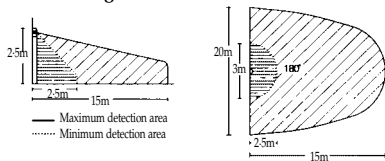
All Wall Sensor Detectors should be wired in parallel back to the Multi Sensor Switch terminals zone 1 and 2 (refer to Multi Sensor Switch cable plan).

A low voltage 2 core cable (bell wire) should be used. For convenience wiring may be looped from one detector to the next. Alternatively a junction box may be used.

Route 2 core cable through case cut into terminal blocks and secure (cable knockout on front cover)

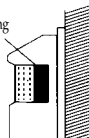


Detection Range



Masking the Detection Area

The detection angle masking area may be reduced by masking the lens with adhesive PVC tape cut to required width.



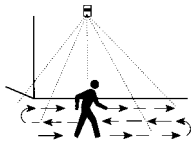
Walk Testing

Before commencing the walk test turn the Light level adjuster on the Multi Sensor Switch to * the day and night setting and both zone 1 and 2 light on time adjusters to ☉ the minimum light on time setting.

Switch on the mains electricity supply to the Multi Sensor Switch and wait 20 seconds for the switch to stabilise.

Starting at a distance greater than 15 meters from the Wall Sensor Detector walk across the front of the unit gradually moving closer. Note the position where detection occurs. The light will remain on for approximately 3 seconds. Continue this pattern to establish the full extent of coverage.

Reset the light level and light on time controls on the controlling switch. Commissioning is now complete.



Points to Remember

- Installation should be carried out by a competent DIY person. In if doubt consult a qualified electrician.
- The electricity supply must be disconnected whilst carrying out the installation.
- An earth connection must be made for safety.
- The Multi Sensor Switch is for internal siting only. Wall Sensor Detectors are mounted externally.
- Use the 2 strips of insulating sleeve (supplied) to insulate the 2 core low voltage cable run inside the Multi Sensor Switch.
- Wall Sensor Detectors should be mounted at a height of 2.5 metres. At this height the detector can be adjusted within minimum and maximum settings. Refer to adjust detection range setting.
- Set light level/time on controls as shown under section heading.
- In normal use a built-in light sensor prevents daylight operation unless light adjuster is set to day and night operation.

- False alarms may occur (see siting).
- The Sensor detector is more sensitive to movement across the detector rather than directly towards or away from it.
- To help distinguish in what zone an intrusion has occurred:
ZONE 1 buzzer sounds a continuous bleep – bleepleepleepleep
ZONE 2 buzzer sounds a fast Intermittent bleep –bleepleepleepleep

Specifications

Supply voltage	220 –240V 50Hz
Power consumption	6VA Lamps off
Lighting load	Incandescent /tungsten halogen 3000W Maximum (1500W each zone)

SUITABLE FOR FLUORESCENT LIGHTING AND LOW ENERGY BULBS UP TO 500W MAXIMUM IN EACH ZONE

Light-on-time	Adjustable from 5 seconds to 5 minutes. Timing interval starts from last detection.
Light level	Adjustable from 5 lux to 100 lux using zone 1 detector.
Detection coverage	2 independent zones of detection with up to 4 Wall Sensor Detectors (SL099) each zone. Detector range up to 15 metres at an ambient temperature of 20°C and 180° coverage in the horizontal plane.
Protection rating	Wall Sensor Detector (SLO99) – IP54
Operating rating	-20°C to +50°C
Conforms to directives:	73/23/EEC and 89/336/EEC

5 Year Guarantee

We shall repair or at our option replace this product if it becomes defective within 5 years of the date of purchase, provided that you return it to us with proof of purchase. A product becomes defective where it fails due to fault in the material or workmanship, but not where the failure is caused by an accident, misuse or neglect. This guarantee does not effect your rights under statute or common law.

HELPLINE
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