SET-SOLOXS
Installation Instructions

These instructions apply to the SET-SOLOXS and the SET-SOLOXS-IR. Setsquare recommend all installations are carried out by a suitably qualified electrician and that these instructions are followed. Failure to do so may lead to damage to either the circuits or installer.

Unit Description

The SET-SOLOXS is an automatic switching system which operates by sensing movement of infra-red radiation from the human body. The unit incorporates occupancy detection, photocell and switching all in one unit. The SET-SOLOXS-IR is the same as the SET-SOLOXS but with the added facility of IR remote control.

Location

The sensor should be mounted on a rigid surface where it has a clear view of the occupancy zone, and should preferably be mounted in front of rather than behind activity.

The sensor is designed to be recessed into suspended ceilings.

Position the sensor where it does not look out of a door.

Avoid placing adjacent to forced air heating or cooling systems (1 metre or more in direct flows).

If using the photocell do not mount close to a light or a window.

Mounting

The sensor should be mounted through a 42 - 44 mm diameter hole. The minimum ceiling void is 120 mm.

Remove Front Cover here.

Warning:-

The potentiometers in this unit will be damaged if forced past their end stops. These potentiometers adjust over an arc of 270 degrees only. It is recommended that a suitable trim tool is used.

Electrical Connection

Important : Isolate supply before starting installation procedure.

1. Fix unit into position.

2. Connect the wiring as shown on the connection diagram.

3. Remove the lens cover from the sensor to allow access to the time delay and light level setting potentiometers.

4. Ensure the time delay is set at maximum by gently setting VR1 fully clockwise.

5. Ensure the light level is set to its highest level by gently setting VR2 fully clockwise.

6. Reinstate supply to unit. The sensor when powered up will switch ON. Allow 10 Minutes for the unit to stabilise.

7. Using an insulated adjuster, gently set VR1 fully anticlockwise, (TEST MODE) then replace lens cover. Ensure unit switches OFF when there is no movement, and switches ON when there is movement within its detection zone.

8. Set VR1 to the required time delay.

9. Adjust the light level settings using the photocell procedure.

Photocell

Important: The photocell is easiest to set up when the lights are required to switch ON. i.e. When it is dull.

1. Using an insulated adjuster, gently turn the potentiometer VR2 fully anticlockwise. The controlled lights will go OFF in 30 Seconds approx. (To reduce this delay put unit into test mode).

2. Turn VR2 until the green LED glows. This is the level at which the lights will come ON, however they will only switch after 30 seconds as there is a buffer to stop short dull spells making the lights switch ON and OFF.

3. When the lights come ON, the unit automatically takes a snapshot of the new light level. The OFF level is set at a slightly higher light level, this ensures that the OFF level is higher than that created by the lights. Light level operation is now fully automatic.

4. If the light level setting is too high it can only be reduced by repeating this set up procedure from step 1 above.
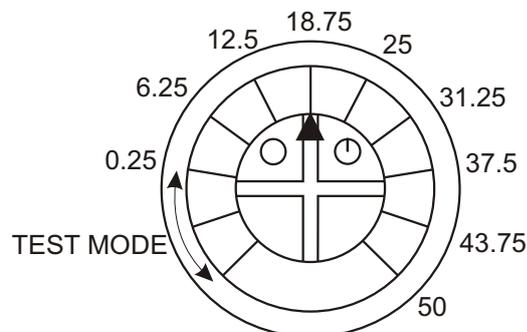
Time Delay Settings

Adjust VR1 gently to give the required time delay.

TEST MODE (10 seconds). Gently set VR1 fully anticlockwise.

Adjust VR1 from this position to give longer time delays. The time delay increases up to 50 minutes when VR1 is set fully clockwise.
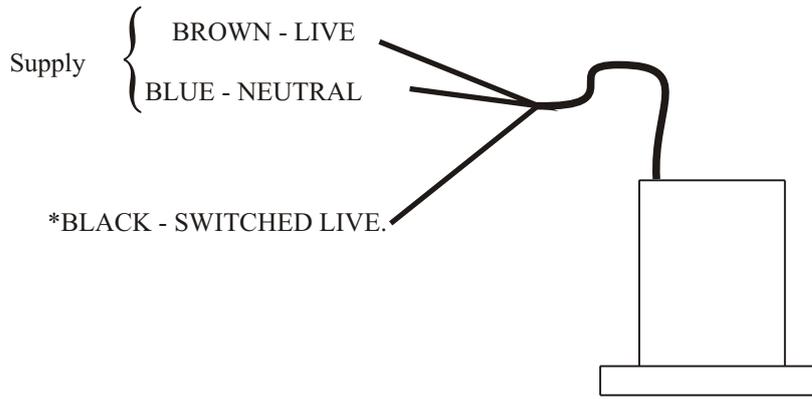
Recommended Delays

|	
Office - Low traffic	16mins
Office - High traffic	8mins
Classroom	8mins

This diagram shows the face of the time delay potentiometer VR1 showing approximate time delays at the tick marks. This diagram shows the time delay set at approximately 18.75 minutes.
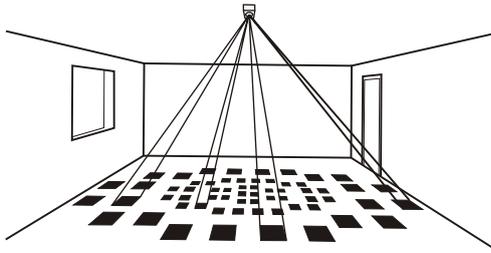
Wiring Diagram

Supply
{ BROWN - LIVE
BLUE - NEUTRAL

*BLACK - SWITCHED LIVE.

* As per section 514.3 of BS7671:2008 All cores must be identified. As the cores identified (*) below are at line potential they should be marked with a brown coloured sleeve.

LIVE — BROWN
NEUTRAL — BLUE } Supply

SET-SOLOXS
SENSOR

LOAD — ***** BLACK
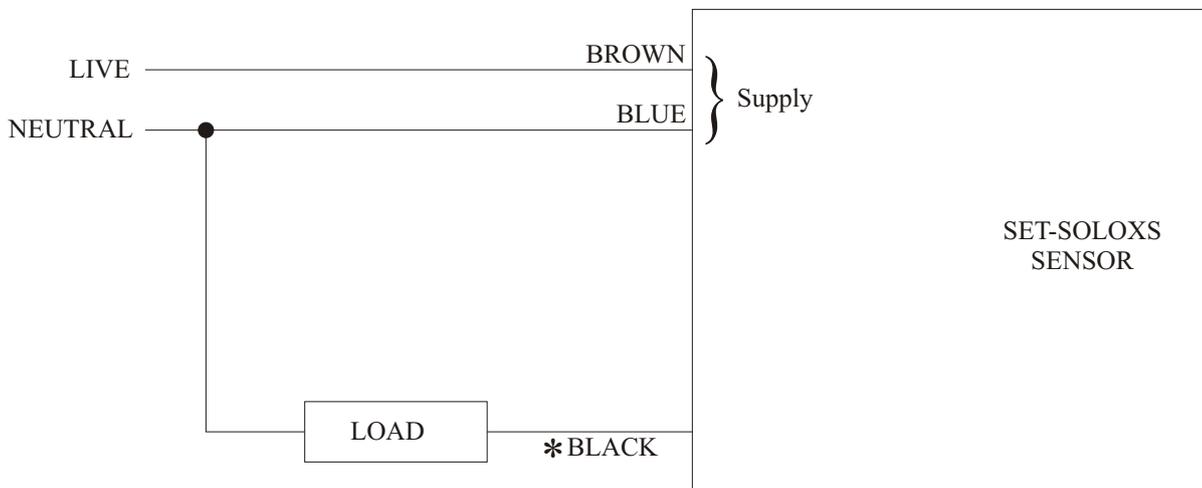
Detection Pattern

**Detectors should be placed at 5metre intervals
to ensure detection patterns overlap.**

GREEN LED

RED LED

VR1 Time Delay.

VR2 Light Level.
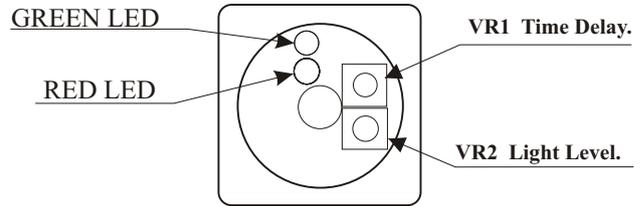
Warning:-

These potentiometers will be damaged if forced past their end
stops. These potentiometers adjust over 270 degrees only. It is
recommended that only a suitable trim tool is used.

IR Remote Control (optional SET-SOLOXS-IR)

The light can also be controlled using a small hand held infrared remote control unit (SET-IRT2).

This unit will depending on which button is pressed switch the lights ON or OFF.

If the sensor is in MODE 2 the Remote Control will also act as the Demand Button.

Fault Finding.

Q. Relay contacts will not CLOSE .
A. Check unit has a supply. Light level incorrectly set.

Q. Relay contacts switch OPEN then CLOSED every 10 seconds.
A. Time delay set to TEST MODE.

Q. Relay contacts switch OFF when I am working but come ON when I move.
A. Reposition sensor or increase time delay.

Q. Can I override the photocell and use movement detection only.
A. Yes, Set VR2 fully anticlockwise then fully clockwise.

Q. Can I use the photocell only.
A. No.

Specification

Supply Voltage	230V a.c. $\pm$ 10% (other supply voltages available)
Switching Capacity	8amp Inductive or Resistive up to 230V ac. Maximum of 8 HF ballasts.
Time Delays	0.25 to 50 minutes adjustable. Test Mode 10 seconds
Cable Length	2 metres.
Order Code	SET-SOLOXS Standard sensor.
	SET-SOLOXS-IR Sensor with IR remote control.

Motion Sensor

Sensor	Passive infra red detector
Field of view	Ceiling mount 360 Deg.
Area of detection	Radius 1.2 x Ceiling height. (Typical radius 3.5Metres at average ceiling height)

Light Sensor

Light Level	50 to 1500 Lux +-10%

Option

IR Hand Held	Order Code: SET-IRT2 for use with SET-SOLOXS-IR

WARNING

This unit contains electronic devices.

Do not perform any high voltage tests on this product or to any equipment connected to this product.

Mains connections can be high voltage tested in accordance with BS 7671:2008, IEE Wiring Regulations 17th edition section 613.3.3.

Electrical and electronic equipment should never be disposed of with general household or commercial waste but collected for their proper treatment and recovery. The crossed out wheely bin symbol is to remind you of the need to dispose of this product at the end of its life in a way that will assist in the recovery, recycling and reuse of many of the materials used in this product. Where possible also recycle the packaging.

WEE/DJ0002ZR

The SET-SOLOXS and SET-SOLOXS-IR are part of a range of energy conservation products available from Setsquare.

This apparatus may be turned on by high powered RF interference and should not be installed near pager aerials or inductive loop equipment. It will recover when the RF ceases.

CE

For details of other products contact:-

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