SURE time

Automatic Light Switch with Photocell – 2 Wire

Model: ST210

1. General Information

These instructions should be read carefully in full prior to installation, and retained for further reference and maintenance.

2. Safety

- Before installation or maintenance, ensure the mains supply to the light switch is switched off and the circuit supply fuses are removed or the circuit breaker turned off.
- It is recommended that a qualified electrician is consulted or used for the installation of this light switch and install in accordance with the current IEE wiring and Building Regulations.
- Check that the total load on the circuit including when this light switch is fitted does not exceed the rating of the circuit cable, fuse or circuit breaker.

3. Technical Specifications

- Mains Supply: 230V AC 50 Hz
- 2 wire connection: No neutral required
- This light switch is of class II construction and must not be earthed
- Switch Type: Single or Two way
- Switch Rating: 300W (Max total load) Halogen,

    18W (Min lamp size) to 150W (Max total load) Fluorescent Low-loss or Electronic ballast,

    15W (Min lamp size) to 100W (Max total load) CFL Electronic ballast,

    5W (Min lamp size) to 300W (Max total load) LED lighting
- Minimum Depth of Wall Box: 25mm
- Operating Temperature: -20°C to +40°C
- Mounting Height: 1.1m for optimum detection range
- On-time Adjustment: 0, 2, 4, 6, 8 hours or D (Dusk until Dawn).
- LUX Adjustment: 1 ~10lux (Moon symbol) to 300lux (Sun symbol)
- Manual ON/OFF Switch

- RED LED: This will light to indicate that an On-Time duration is set.
- CE Compliant
- Dimensions – H=86mm, W= 86mm, D=27mm

This product requires to be permanently powered which is achieved through the switched live. As such, some LED and CFL lamps may glow or flash whilst this product is in the "OFF" status. This glow/flash can be eliminated by adding the Timeguard ZV900 Automatic switch load controller to the circuit.
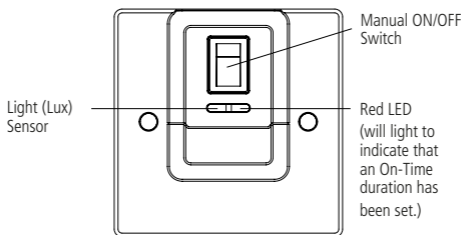

Manual ON/OFF Switch

Light (Lux) Sensor

Red LED (will light to indicate that an On-Time duration has been set.)

Fig 1 – Front Face of ST210
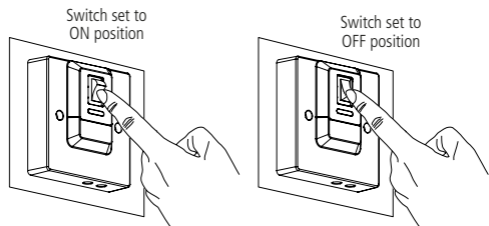

Switch set to ON position

Switch set to OFF position

Fig 2 – Manual ON/OFF Switch Positions

4. Installation

4.1 Ensure the mains supply is switched off and the circuit supply fused are removed or the circuit breaker is turned off, until you have completed the installation.

4.2 Remove the existing light switch, and transfer the wires to the ST210 (See Fig 5 – Connection Diagram).

4.3 Secure the unit to the back box with the fixing screws provided, forming the cables during installation to avoid any entrapment and cable damage.
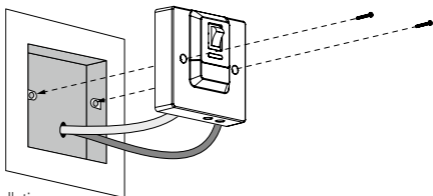

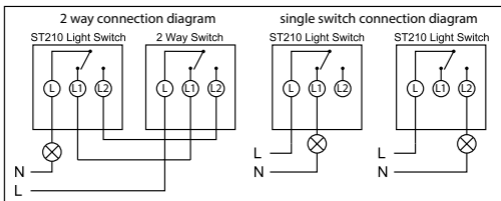
Fig 3 – Installation

5. Connection Diagram
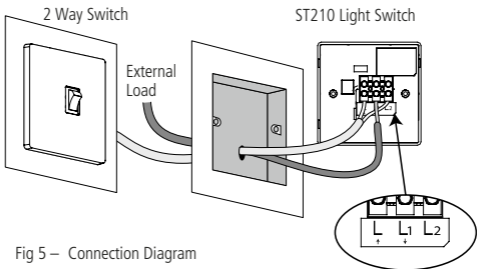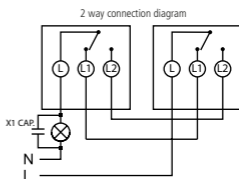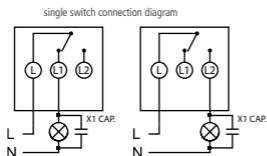

Fig 4 – Connection Diagram

Fig 5 – Connection Diagram

In the event of ST210 not able to power on during installation due to high impedance of LED lamp, installer is advised to connect X1 capacitor (without polarity) in parallel with L/N.

Recommended X1 Capacitor value.

- X1 0.22uf / 275V or
- X1 0.33uf / 275V or
- X1 0.39uf / 275V

single switch connection diagram

2 way connection diagram

6. Testing

- Ensure that the light switch is in the OFF position.
- Turn the Lux Adjustment, located on the bottom of the light switch, fully anti clockwise to the Moon symbol. (See Fig 6)
- Turn the On-time Adjustment, located on the bottom of the light switch, clockwise to the 2 hour mark. (See Fig 6)
- The RED LED will light to indicate that an On-time duration is set.
- Emulate darkness by covering the Light Sensor (make sure the Light Sensor is fully covered, use black insulation/PVC tape if needs be).
- The lamp will automatically turn ON.
- After 3 seconds, uncover the Light Sensor.
- The lamp will turn off after it's set period 2, 4, 6 or 8 hours or until dawn.
- To revert to a normal light switch, turn the On-time Adjustment fully anti-clockwise to the 0 hour mark (The RED LED will turn OFF).
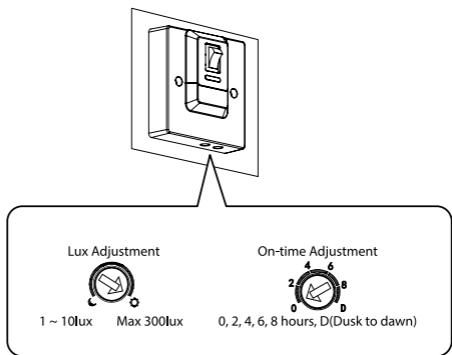
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Fig 6 – On-time and Lux Adjustment

7. Setting Up For Automatic Operation

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- Ensure the light switch is in the OFF position.
- Turn the Lux Adjustment fully anti-clockwise to the Moon symbol.
- Turn the On-time Adjustment to the desired setting (2, 4, 6, 8 Hours or D for Dawn).
- The RED LED will light to indicate that an On-time duration has been set.
- When the ambient light level reaches the level of darkness at which you wish the lamp to become operative (i.e. at dusk) SLOWLY rotate the control in a clockwise direction until a point is reached where the lamp illuminates.
- Leave the Lux Adjustment set at this point.
- At this position, the unit should become operative at approximately the same level of darkness each evening.

Note: If you wish to use unit as a normal light switch, turn the On-time Adjustment fully anti-clockwise to the 0 hour mark (the RED LED will turn OFF). If you wish to use the Automatic feature again, please follow the above instructions.

Adjustment

- If you find that your lights switch on when it is too dark, turn the Lux Adjustment clockwise towards the Sun symbol.
- If the light is in operation when it is too light turn the Lux Adjustment towards the Moon symbol.

Notes:

- The ST210 light switch has a built-in delay function to ensure that momentary changes in the light do not switch it ON.
- The hours shown on the dial are only approximate guides, do not expect great accuracy.
- Once the switch has turned ON and the programme has turned OFF after the required number of hours, it is important not to allow artificial light to fall on it, followed by a period of darkness. This wool fool the switch into thinking it is dark again and it will operate. Care should therefore be taken to prevent light falling onto the switch, e.g. table lamps.

8. Support

Note: If you have any concerns that the intended application of this product does not meet your requirements, please contact Timeguard directly prior to installation.

2 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture within 2 years of the date of purchase, please return it to your supplier in the first year with proof of purchase and it will be replaced free of charge. For the second year or any difficulty in the first year telephone the helpline on 020 8450 0515.

Note: A proof of purchase is required in all cases. For all eligible replacements (where agreed by Timeguard) the customer is responsible for all shipping/postage charges outside of the UK. All shipping costs are to be paid in advance before a replacement is sent out.

If you experience problems, do not immediately
return the unit to the store.
Telephone the Timeguard Customer Helpline:

HELPLINE
020 8450 0515

or email helpline@timeguard.com

Qualified Customer Support Coordinators will be online
to assist in resolving your query.

For a product brochure please contact:

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London NW2 6ND
Sales Office: 020 8452 1112
or email csc@timeguard.com

www.timeguard.com

TW - August 2023