

# TIMEGUARD®

## Automatic Light Switch with Photocell – 2 Wire

Model: ZV210N



Installation & Operating Instructions

# 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
- Battery: 9V DC battery supplied (replaceable).
- 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: 2000W Incandescent/Halogen,  
250W Fluorescent  
(Low-loss or Electronic Ballast),  
250W CFL (Electronic Ballast),  
400W LED Lighting  
(PF 0.9 or higher).
- Minimum Depth of Wall Box: 25mm
- Operating Temperature: 0°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)
- Front Cover: Conceals On-time/LUX adjustments and battery compartment, with retaining screw

- Manual ON/OFF Switch
- Low Battery Indication: The LED will pulse 1 sec ON, 8 secs OFF
- IP Rating: IP40
- CE Compliant
- Dimensions – H=86mm, W= 86mm, D=29.5mm

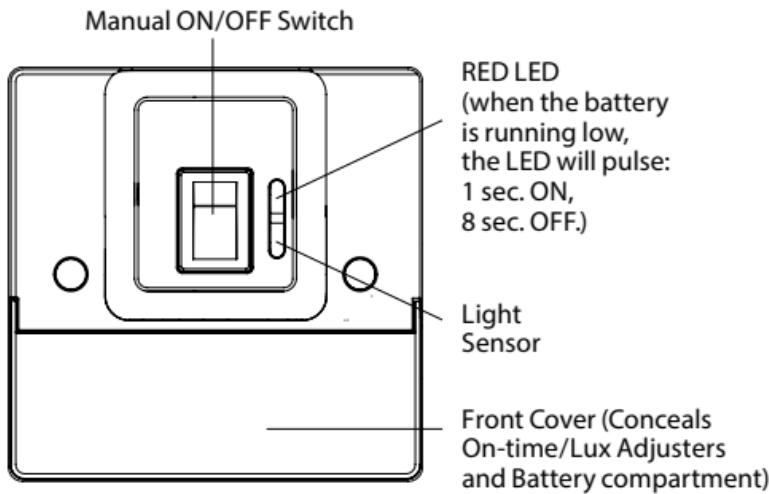


Fig 1 – Front Face

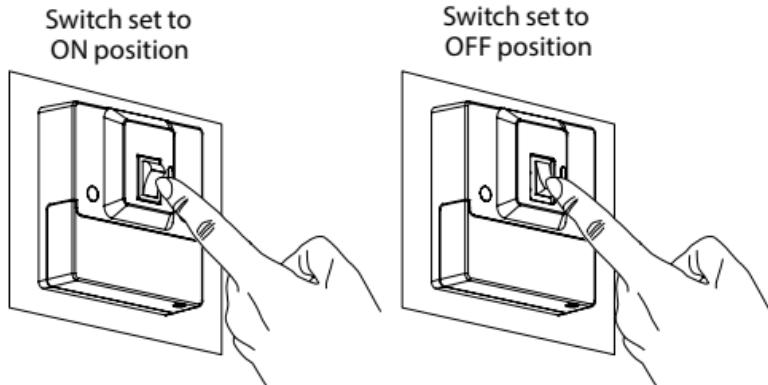


Fig 2 – Manual ON/OFF Switch Positions

## 4. Installation

**Note:** The installation of this light switch should be protected by suitable circuit protection of up to 10A rating.

- 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 Loosen the retaining screw located on the bottom of the light switch, and open the hinged front cover that conceals the battery holder and On-time/Lux adjusters. (Fig. 3)

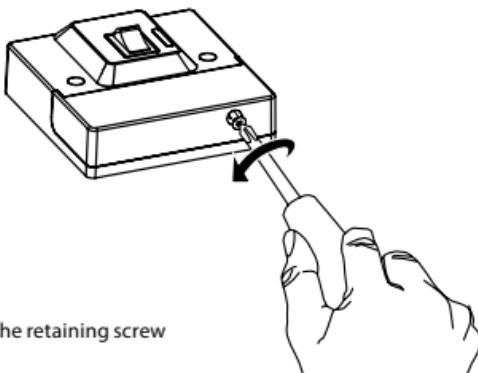


Fig 3 – Loosen the retaining screw

- 4.3 Fit the 9V battery (supplied) maintaining the correct polarity. (Fig. 4)

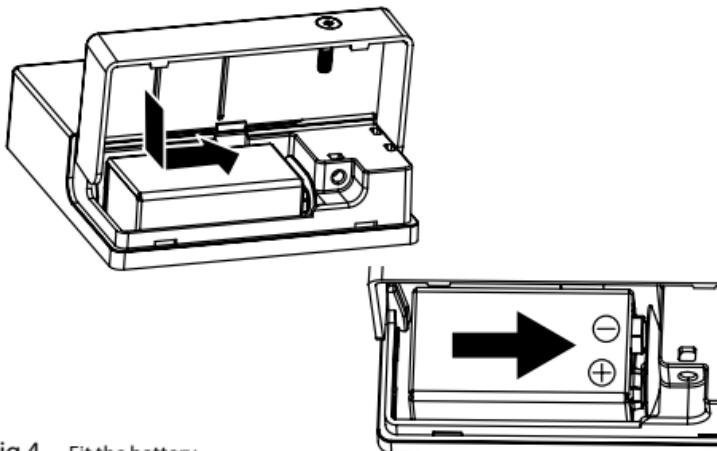


Fig 4 – Fit the battery

- 4.4 Remove the existing light switch, and transfer the wires to the ZV210N (See section 5.Connection Diagram).

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

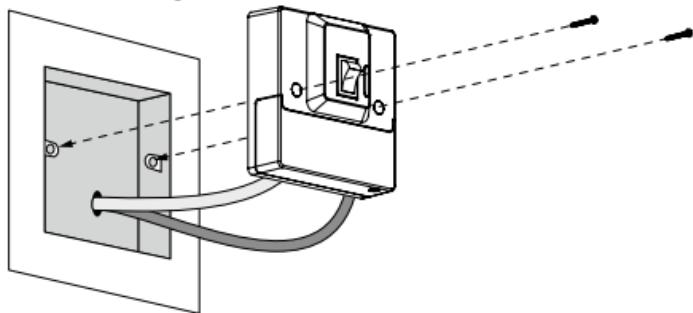
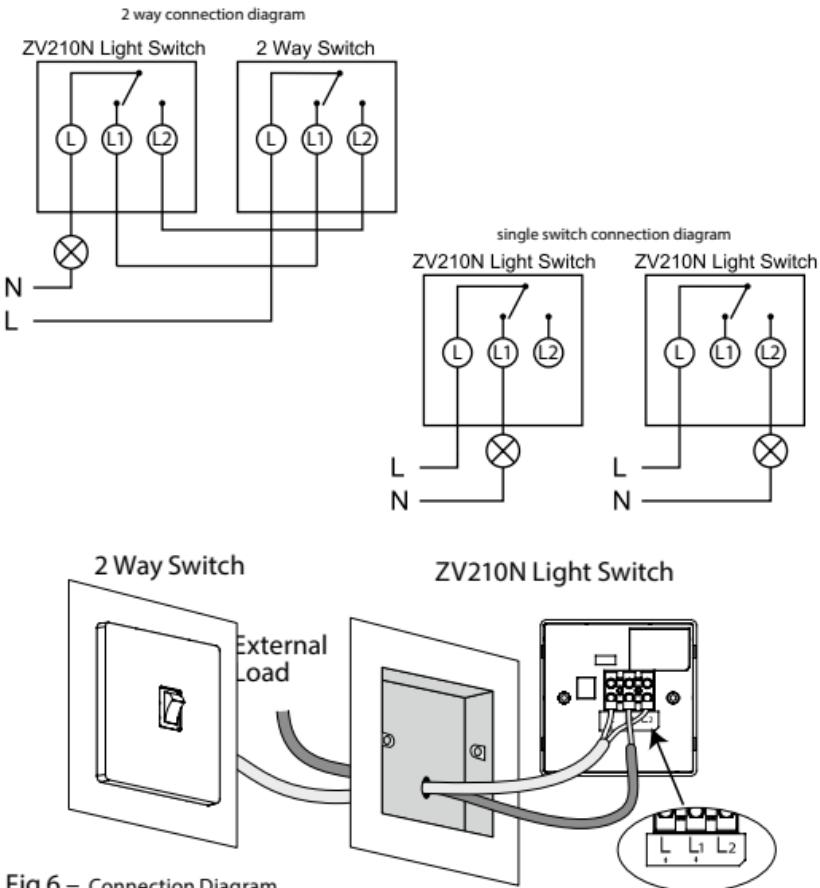


Fig 5 – Installation

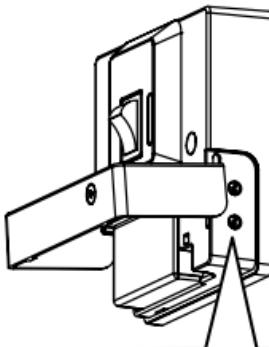
## 5. Connection Diagram



## 6. Testing

- Ensure that the light switch is in the OFF position.
- Turn the Lux Adjustment, which is located beneath the front cover on the right hand side of the light switch, fully anti clockwise to the Moon symbol.
- Turn the On-time Adjustment, which is located beneath the front cover on the right hand side of the light switch, clockwise to the 2 hour mark
- 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.

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On-time Adjustment



0, 2, 4, 6, 8 hours, D(Dusk to dawn)

Lux Adjustment



1 ~ 10lux

Max 300lux

Fig 7 – On-time and Lux Adjustment

## 7. Setting Up For Automatic Operation

- 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).
- 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 lux adjustment 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. If you wish to use the Automatic feature again, please follow the above instructions.

### Adjustments

- 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 ZV210N 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 will 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. Low Battery Warning

- When the 9V battery is running low, the RED LED will pulse 1 second ON, 8 seconds OFF, as warning and indication to change it (See section 4. Installation, step 4.2 & 4.3 for how to access the battery compartment).

## 9. 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.



If you experience problems, do not immediately  
return the unit to the store.

Telephone the Timeguard Customer Helpline:

**HELPLINE  
01582 544 548**

or email [helpline@timeguard.com](mailto:helpline@timeguard.com)

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



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