



## DATA SHEET

### Wing**Watch** 360

*Transmitter/Receiver & Navigation/Position/Strobe LED Lights*



## **Safety and Responsibility Notice**

All operational instructions for this device must be fully understood and practiced on the ground prior to flight. Improper use, installation, or handling of the product may lead to serious consequences.

## **Assumption of Risk**

The buyer accepts full responsibility for the correct use, setup, and installation of this product. AvioLights disclaims any liability for damages caused by the use or improper handling of this product.

## **Liability Waiver**

AvioLights will not, under any circumstances, be held liable for direct, indirect, incidental, or consequential damages resulting from the use or inability to use this product, even if prior notice of such risks was provided.

## **Buyer's Responsibility**

It is the sole responsibility of the buyer to ensure that this product is installed and used in compliance with all applicable regulations, laws, and safety standards. Non-compliance is solely at the buyer's risk.

By purchasing and using this product, the buyer agrees to these terms and waives all claims against AvioLights.

## General information

**WingWatch 360** combines a transmitter with **navigation LED lights**, integrating an **ADS-L transceiver** and an **ADS-B/FLARM signal receiver** to detect and signal nearby aircraft, enhancing safety. Its compact, weather-resistant housing ensures durability in harsh conditions. The module is fully integrated into the lamp, eliminating the need for additional cockpit devices or external controllers. Installation is simple: connect the wiring directly to the aircraft's electrical system.

**WingWatch 360** communicates with onboard systems via Wi-Fi for seamless operation.

## Technical Data

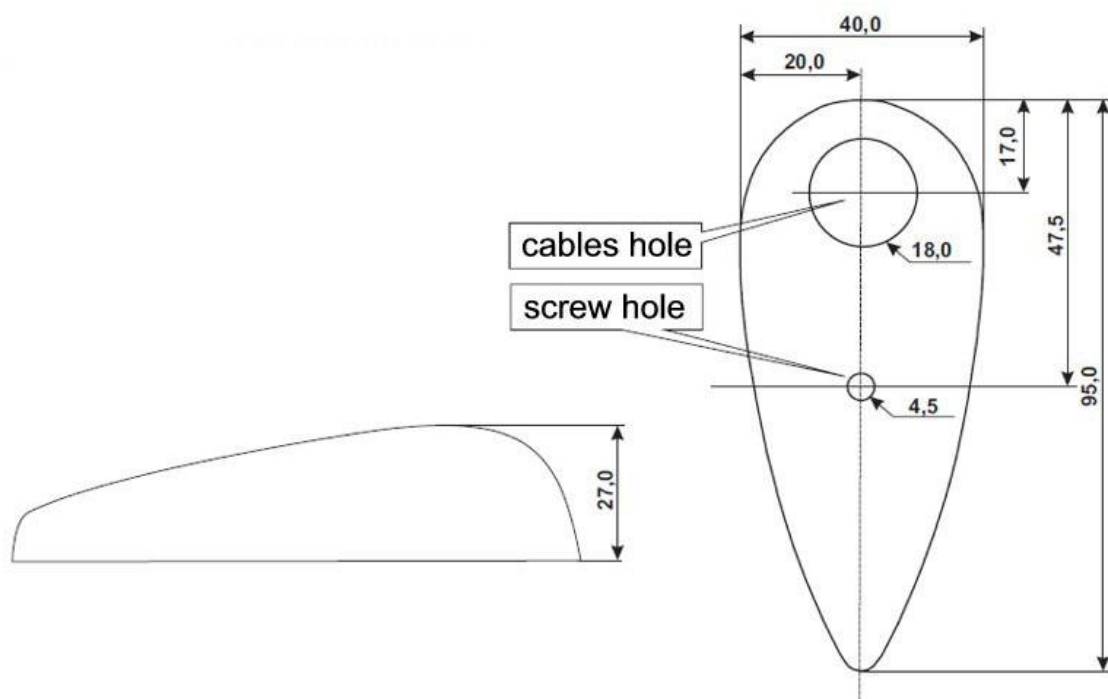
|                                                   |                           |
|---------------------------------------------------|---------------------------|
| Navigation light                                  | YES (red/green)           |
| Rear position light                               | YES (white)               |
| Strobe light                                      | YES (white)               |
| Operation voltage range                           | 12 V - 15 V               |
| Dimensions                                        | 95 mm x 40 mm x 27 mm     |
| Weight ( <i>set</i> )                             | 240 g                     |
| Operation temperature range                       | - 35°C to + 60°C          |
| Current - navigation light ( <i>2 lamps</i> )     | 0,5 A                     |
| Current - strobe light ( <i>2 lamps</i> )         | 3,2 A in peak             |
| Input power - navigation light ( <i>2 lamps</i> ) | 4,5 W                     |
| Input power - strobe light ( <i>2 lamps</i> )     | 45 W in peak              |
| Wiring requirement                                | 0,5 mm <sup>2</sup> cable |

## LIGHTS

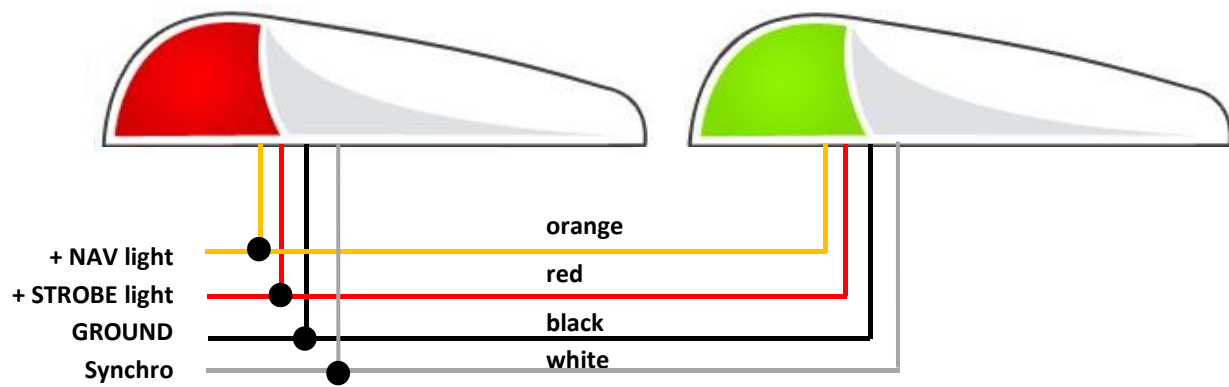
|                                              |                                      |
|----------------------------------------------|--------------------------------------|
| Navigation light angle                       | 110°                                 |
| Rear position light angle                    | 140°                                 |
| Nav/Pos light luminosity ( <i>per lamp</i> ) | 450 lm                               |
| Strobe light luminosity ( <i>per lamp</i> )  | 2000 lm                              |
| Strobe light frequency                       | 120 flashes/min                      |
| Encapsulation                                | Monolith of UV resistant epoxy resin |
| Strobe control unit                          | Lamp built in                        |
| Strobe synchronization                       | YES                                  |
| Reverse polarity protection                  | YES                                  |
| Vibration resistance                         | YES                                  |
| Water resistance                             | YES                                  |
| Warranty                                     | 2 years                              |

**TRANSMITTER/RECEIVER**

|                                    |                             |
|------------------------------------|-----------------------------|
| Receiver frequency ADS-L/OGN       | 868 MHz                     |
| Transmit frequency ADS-L/OGN       | 868 MHz                     |
| Transmit power                     | 14 dBm                      |
| Max. receiving sensivity ADS-L/OGN | -134 dBm                    |
| Receiver frequency ADS-B           | 1090 MHz                    |
| Max. receiving sensivity ADS-B     | -87 dBm                     |
| Receiver FLARM                     |                             |
| WiFi                               | 2.4 GHz                     |
| Vibration resistance               | YES                         |
| Water resistance                   | YES                         |
| Warranty                           | 2 years + 1 year (optional) |

**Drawing**

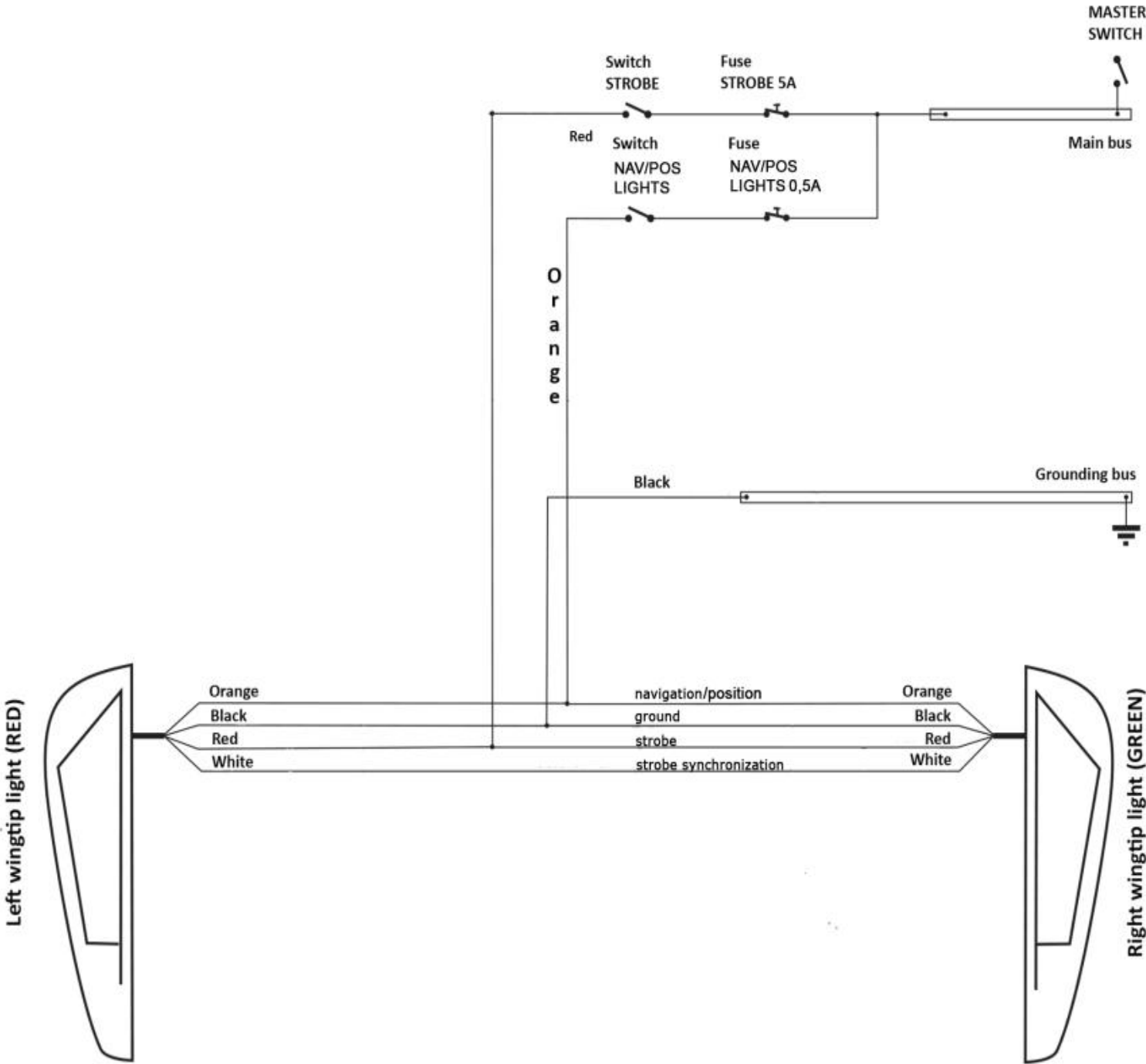
## Connection Diagram



## Light Distribution



Wiring Diagram



## First use

After installing the light, turn on the navigation lighting. If there is nearby air traffic, WingWatch 360 should appear in applications such as SkyDemon, Flightradar24, etc.

## Device Registration

To receive an additional one-year warranty, register your device in the system. Scan the QR code (included in box) or visit <https://products.aviolights.com/> and follow the instructions.

By registering, you gain:

- ❖ An extra year of warranty
- ❖ Access to the latest software updates
- ❖ Email notifications about upcoming updates
- ❖ A simplified contact system

## Configuration

Connect to the Wi-Fi network *WingWatch-[serial number]*, password: 12345678 and visit <http://192.168.1.1>. Here, you can view the software version and current settings. To configure the device, click the **Settings** button.

Available settings:

- ❖ Aircraft type
- ❖ Protocol
- ❖ Stealth mode
- ❖ Track/No track

## Updates

Update information will be posted on our website and sent via email to registered users.

### How to Perform an Update:

1. Turn on the aircraft's navigation lighting.
2. Download the update file and save it on your laptop, tablet, or phone.
3. Connect to the Wi-Fi network: *WingWatch-[serial number]*, password: 12345678
4. Visit <http://192.168.1.1>.
5. Click the **Firmware updates** button.
6. Upload the update file and wait for the process to complete.
7. Reconnect to the Wi-Fi network.
8. Check the software version.