



WL S-501 Solar Powered Medium Intensity
Aviation Obstruction Light
Instruction Manual

Rev: 1.0V

Descriptions

This product is a combination of power supply and lighting lamp, suitable to be used in the places without electricity power, no need for maintenance and management, automatic control. This product can continuously operate for 5 days without any sunlight.

This product uses Standardized design, with the advantages of shockproof and corrosion resistance. It consists of an aviation light, controller, silicon solar panel and battery.

This product complies with ICAO (Annex 14) and FAA, the enclosure of this light is made of die casting aluminium (LM6) with powder coated, having the advantages of lightweight, waterproof, shockproof and corrosion resistance etc.

The battery enclosure is made of cold rolled steel, and light sources consists of high luminous long life LEDs, and the optical decay does not exceed 30%.

This lamp has a built-in controller, whose key part is MCU, makes this lamp having the functions of fault detecting, circuit-measuring, circuit-protecting, circuit-monitoring and solar system protecting etc.

Silicon solar panel has the advantages of high conversion rate, small scale fading, good reliability, external long life etc. The mounting bracket for solar panel is made of stamping parts, which can withstand the harsh efforts of the environment and also can withstand the strong wind up to 70KM/H. Its inclination angle is 20 – 70 degree and inclination direction is NNW-SSE.

The built-in battery is long life maintenance free solid battery and equipped with special mounting bracket, convenient to install and disassemble WL S-501 Solar Powered Medium intensity Aviation Warning Light.



Functions and Features:

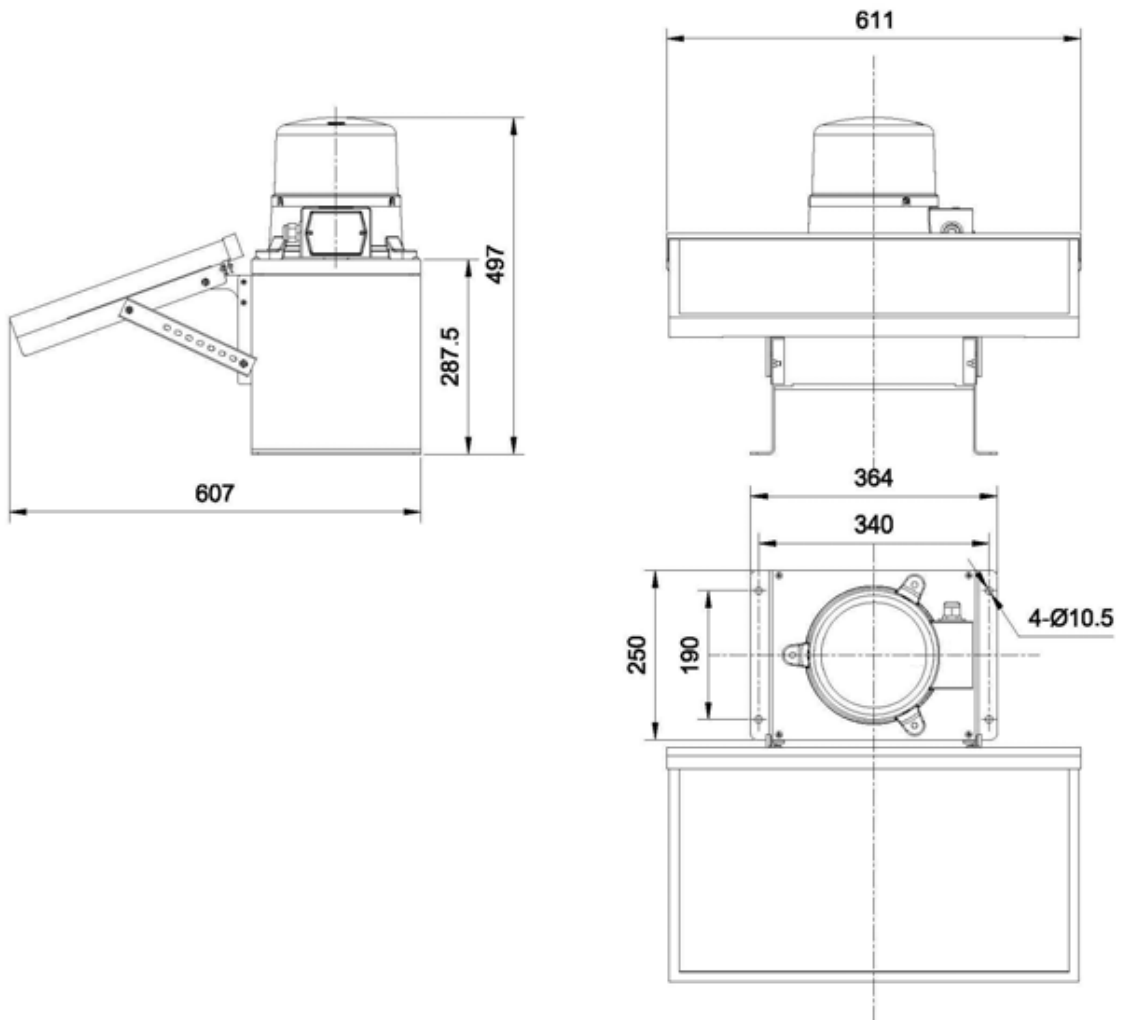
- Modular design and meets optics standard
- Extremely Reliable — Major Maintenance Cost Saving
- Resistant to Shock and Vibrations
- Corrosion Resistant
- Base material: Die casting aluminum
- Lamp housing –Polycarbonate, with good anti-impact strength, thermal stability, high transmittance
- Battery enclosure: Cold rolled steel
- Combustibility rating: UL94 - VO

Specification

- Compliance with ICAO standard Annex 14 and FAA
- Battery Capacity: 24W silicon solar panel 12V/24AH lead –acid battery
- Ambient temperature: - 30 ~ + 70°C
- Relative humidity: 10% - 95% (Non – condensing)
- Flash frequency: 40 times / min (optional)
- Intensity: 2,000cd ± 500cd
- Color: Aviation red
- Horizontal degree: 360°
- Vertical degree: 3°
- Visible distance (T=0.85): >14.5km
- On /Off level: 70/100Lux (optional)
- Autonomy: >100Hours

- Lamp source: High luminous LEDs
- Lamp life: ≥ 100.000 hrs
- IP protection: IP65
- Weight: 25.0kgs
- Dimension: 611mm(L) X 607mm(W) X497mm (H)
- Lead-acid battery life: one year

Mounting Dimension



Wiring:

- Open the cover of junction box located on the back of solar panel; connect Solar V+ and Solar V- wire (figure 1) to the corresponding terminals, i.e. the V+ and V- on the solar panel (figure 2)



Figure 1



Figure 2

- Open the nameplate on the lamp, and then connect Lamp V+ to DC12V V+, lamp V- to DC12V V – see figure 3)



Figure 3

- How to open WL S-501 solar powered aviation light system:
 - Unscrew 4 no. M5 x 20 screws on the front panel.
 - You can see a snap switch inside (see figure 3), switch this switch to the “System On” position, the solar light starts to work.

Note: the snap switch is in “system off” position before leaving the factory.



Figure 3

Note:

Label instructions:

- Battery V+ positive pole of battery the corresponding PCB board Battery V+ (figure 4)
- Battery V- negative pole of battery the corresponding PCB board Battery V- (figure 4)
- Solar V+ positive pole of solar panel the corresponding PCB board Solar V+ (figure 5)
- Solar V- negative pole of solar panel the corresponding PCB board Solar V- (figure 5)

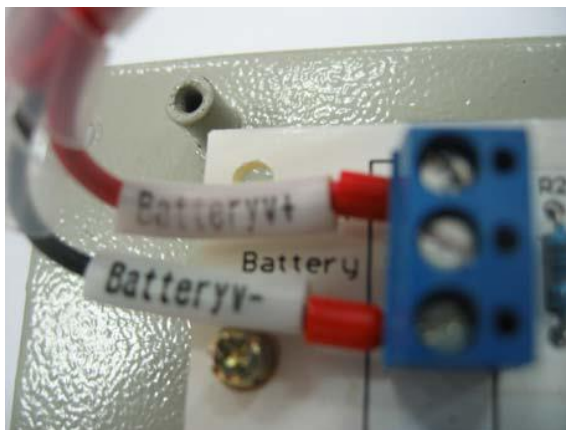


Figure 4



Figure 5

Notice

- Temperature rise inside the control box is normal phenomenon
- Please change the lead-acid battery regularly, to ensure the normal operation of the light,
- It is suggested to change the battery once a year.
- Please do not open the control box by yourself
- This product is a sealed structure; should not be tampered with by anyone other than registered installer because Delta has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

***Note: Please use this product strictly on accordance with
the instruction above***

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