

WHELEN AEROSPACE TECHNOLOGIES

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Installation Guide/ICA: Aviation model 9061001, 9061002 P/N 01-0790610-01, 01-0790610-02 LED Position, Anti-Collision and Infrared Light Assembly

TSO-C30c TSO-C96a TYPE I, II & III CLASS I APPROVED APPROVED The conditions and tests required for TSO approval of this article are minimum performance standards. Those installing this article either on or within a specific type or class of aircraft must determine that the aircraft installation conditions are within the TSO standards which include any accepted integrated non-TSO function(s) must have separate approval for installation in an aircraft. The article may be installed only according to 14 CFR part 43 or the applicable airworthiness requirements.

MARNING: This product can expose you to chemicals including Methylene Chloride which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SPECIFICATIONS:

Nominal Operational Voltage:	.28 VDC
(Operation from 22-32 VDC)	
Input Current:	
LED Position Light	0.23 Amps
LED Anti-Collision Light (Avg.)	0.73 Amps
LED Anti-Collision Light (Pulse@.25 Sec.)	3.9 Amps
LED Infrared Light (Avg.)	0.06 Amps
LED Infrared Light (Pulse@.25 Sec.)	0.3 Amps
Flashrate	45 ±5 / Min.

EQUIPMENT LIMITATIONS: An approved lighting system consists of two lights, one located on each wingtip. The baseplate must be mounted parallel to the vertical and horizontal centerlines of the aircraft to project the patterns properly.

Per FAR 23.1401(d) or 25.1401(d) do not operate the anti-collision light and the infrared light at the same time.

The Infrared Light is a non-TSO function.

Certain types of installations may require additional testing.

AIRWORTHINESS LIMITATIONS: The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under §43.16 and §91.403 of the Federal Aviation Regulations, unless an alternative program has been approved.

No airworthiness limitations are associated with the installation of the LED anticollision light.

CONTINUED AIRWORTHINESS: The forward position light is designed with 4 Green LEDs or 5 Red LEDs. The tail position light is designed with 2 LEDs. The infrared light is designed with 12 LEDs. The anti-collision light is designed with 36 LEDs. If any one LED fails, the unit must be repaired or replaced. Note: To reduce eye strain, use an optical filter such as dark glasses or a blue covering dome during LED inspection. Inspect the lens. Replace if there is excessive scratching, pitting, discoloration or cracking. For additional lens maintenance detail see SAE ARP5637.

Note: The anti-collision light will automatically shut-off after 9-10 flashes if a failure is detected.

PERIODIC INSPECTIONS: An annual inspection shall be performed unless the OEM specifies a shorter interval.

INSTALLATION PROCEDURES: The following information is to assist you in installing a WAT light system. The installation procedure described in the following text will be confined to a single light installation, but is identical for multiple light installations.

- 1. Choose the appropriate Model 90610() light assembly.
- Using the mounting detail information provided, prepare the aircraft for means to secure the LED light assembly.
- Connect the inputs according to the chart shown. Connect the power leads to an appropriately sized breaker. Connections to be in accordance with FAA approved methods.
- 4. Remove the lens retainers and carefully remove the lens. Using appropriate hardware, install the light assembly and insure that all leads are clear of any obstructions. Secure as required. Secure the light assembly using vibration resistant threaded fasteners.

- Carefully reinstall the lens and retainers.
- Waterproof the lightbase to aircraft. Apply single-part Silicone (RTV) or equivalent around any open area where water could get in.
- Check all avionics systems for interference from this installation.
- 8. A flight check should be performed by a properly certified pilot.
- If required, update aircraft records utilizing FAA Field Approval (Form 337) or equivalent.

Note: SYNC is a low power bi-directional control signal. Connecting to the synchronize signal of any WAT LED anti-collision assembly will cause the lights to flash at the same time. If synchronization is not necessary, the connection may be left open.



