

EVOLUTION SERIES NAV/STROBES

Model	Part No.	Voltage	Power (Watts)	Current (Amps)	Weight
Wing Nav/Strobe Red – 14V	AL-EV14NS-R	12~14VDC	Nav: 4.0	0.28A	0.24lbs
Wing Nav/Strobe Green – 14V	AL-EV14NS-G		Strobe: 18.2	1.12A (peak)	
Tail Nav/Strobe; 14V	AL-EV14NS-W		Nav: 4.0 Strobe: 8.40	0.28A 0.60	0.16lbs
Wing Nav/Strobe Red – 28V	AL-EV28NS-R	24~28VDC	Nav: 4.0	0.14A	0.24lbs
Wing Nav/Strobe Green – 28V	AL-EV28NS-G		Strobe: 31.0	1.10A (peak)	
Tail Nav/Strobe; 28V	AL-EV28NS-W		Nav: 3.50 Strobe: 8.4	0.122 0.30	0.16lbs



Installation Guide

Legacy Retrofit Installations:

Wing: The base plate adapter layout is a direct replacement for legacy fixtures. For retrofit installations, permanently mount the supplied baseplate to the wingtip with hardware appropriate for the specific application.

Tail: The Evolution Taillight Assembly is designed to mount in the OEM location.

New Installations:

Wing: The baseplate may be used as drill guide template; or reference the hole spacing in the mounting layout diagram (Ensure the "Y" side is facing forward). Drill the hole for the wire harness such that the size is adequate to pass the connector through.

Tail: Reference the cutout schematic for hole locations and size.

Note: This assembly should not be installed with mounting holes on a horizontal axis; the light distribution angles are designed for the assembly to be mounted with the holes on a vertical axis.

Wiring:

It is recommended to install a 4-pin disconnect plug (Molex, Duetsche, CPC, etc.) to each light assembly to aid in easy removal for inspection.

Power Inputs: Each light assembly incorporates two discrete power inputs (12V to nav circuit – Red wire; 12V to strobe circuit – Brown Wire)

Ground: A single ground wire (black wire) serves the whole light, so it is imperative that it be connected to location that has good continuity to the aircraft battery ground.

Strobe Synchronization: The strobe sync wire (yellow wire) may be left disconnected if you do not require the strobes to flash simultaneously. However, for the strobes on each wing (and tail if applicable) to flash together, the yellow wire on each light must be attached together.

Do not attach the yellow wire to power or ground under any circumstance. If unused, isolate the wire with heat shrink tube (This wire carries voltage at low current).

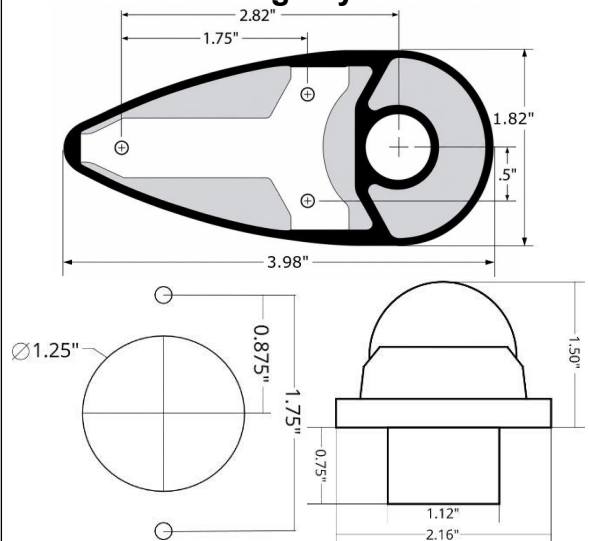
Mounting the light to baseplate (Wing only):

Connect the pigtail to the aircraft side of the wire harness through the hole cut forward of the Y-bracket. Place the light assy atop the Y-bracket and align the holes. Apply BLUE thread locking compound (Loctite 242 or equivalent) to the three mounting screws. Loosely start all three set screws, being careful not to cross-thread. Once all three screws are started, snug each screw in rotation while lightly pressing the light assy to keep it flush to the baseplate.

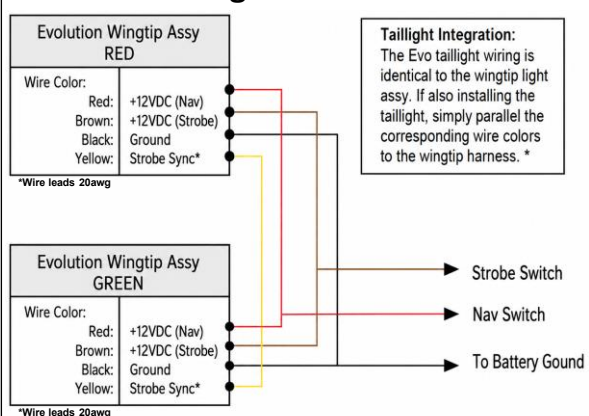
*Once light is installed to baseplate, it is recommended to seal between the base of the light and the wingtip by applying a bead of silicone/RTV around the base of the light to prevent moisture accumulation behind the fixture.

***Before return to service It is imperative to test ALL Comm/Nav/GPS equipment for integrity and/or RF interference with both the Nav and Strobe circuits powered on.**

Mounting Layout:



Wiring Schematic:



***To synchronize strobe flash between both wings and/or tail (not required), yellow wire from each assy must be spliced together to each other. DO NOT attach the yellow wire to power or ground.**