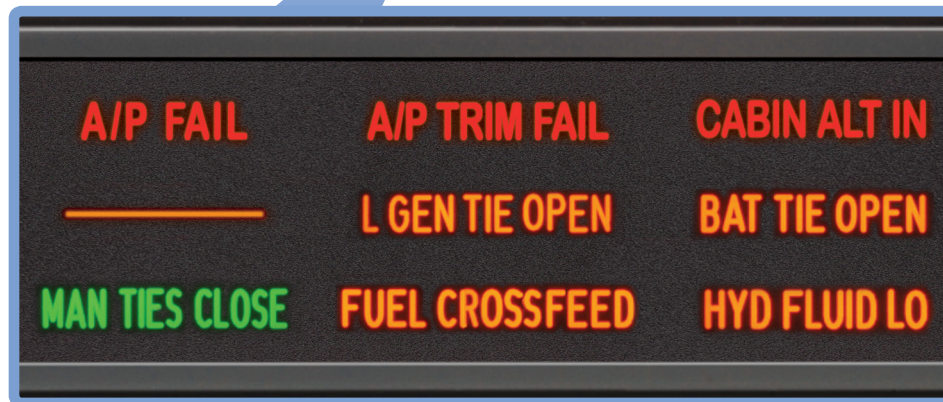


New... for King Air C90

Lumatech™ LED ANNUNCIATORS



- Lifetime LEDs – never replace another bulb or cap assembly
- Cool running – solid state – shock resistant
- True Sunlight Readability with excellent off-angle viewing
- Zero maintenance cost – no more dispatch delays
- Improves flight safety – saves money

Never replace another bulb or cap assembly

Why your old annunciators are costing you money

Obsolete design

The annunciators on your C90 are still using obsolete 1960's incandescent technology – with up to 90 incandescent light bulbs running red hot in small enclosures. This intense heat means 90 chances for a bulb to suddenly fail – compared to new cool-running LEDs that never burn out.

Unreadable legends

The high temperature of the incandescent lamps degrades the plastic cap components on your annunciator panels so *the assemblies don't fit properly and break easily*. Heat also causes the legends to get fuzzy and to change color. With age and heat, the legends become difficult to read.

Costly maintenance

Incandescent panels require on-going and sometimes expensive maintenance. Besides sudden death from overheating, the bulbs have fragile filaments, subject to vibration and shock failure. One large fleet operator reported

that he had 15 unscheduled caution/warning removals in one year – a significant expense. And every year the maintenance cost of your old incandescent panels goes up. Old annunciators require more maintenance and replacement parts are getting harder to find and cost more.

Dispatch delays

When an annunciator panel fails on the ramp it causes a maintenance event and often a dispatch delay. This costs you serious money – all because of a burned out light bulb. And lamp failures are most likely to be discovered just before departure when system test and engine starts can cycle each station multiple times.

Safety cost

The cost of flight safety is difficult to quantify, but common sense says that unreliable, hard-to-read annunciator panels reduce flight safety – and reduced flight safety is the nightmare of all expenses.

How Lumatech™ annunciator panels will save you money

LEDs – lifetime reliability

Lumatech annunciators use lifetime LEDs. Old annunciators with incandescent lamps waste 80% of their power generating destructive heat, instead of light. LEDs generate almost no heat, so they can last up to 100,000 hours – virtually the life of the aircraft. And solid state LEDs don't have a fragile filament to break.

Bright legends – readable in direct sunlight

LEDs provide brighter, more uniform illumination. Each legend is crisp and evenly lit, and the displays are bright enough to read in direct sunlight. The lettering of Lumatech legends is laser sharp and readable. And the letters will never get fuzzy or change color from heat or age.

Flat panel appearance

Like modern glass cockpit systems, Lumatech Panels have a one-piece flat surface for easy reading. There is no visual clutter – not like your C90's present annunciators with 45 individual cap assemblies.

High contrast

For sharper contrast, Lumatech Panels have an anti-reflective coating so they are absolutely deadfront when not illuminated. The LEDs for each legend are enclosed to prevent light leakage to adjacent cells. The legends cannot be seen until they are illuminated, so there is no ghosting that can lead to misinterpretation or pilot error.

Fail-safe circuits

LED circuits can be designed for greater redundancy. In Lumatech Panels, all LEDs have both series and parallel

fail-safe circuits. Even with multiple single point failures, all legends remain brightly illuminated.

Zero maintenance cost

You will never have to replace another light bulb or cap assembly. Your only maintenance will be a dust rag. And we back this up with our full bumper-to-bumper 5-year warranty (see back page).

No more dispatch delays from faulty annunciators

Imagine the money you can save with reliable LED caution-warning panels that will never cause a flight delay. Sudden failures are a thing of the past with Lumatech's solid-state LEDs and fail-safe circuitry.

Plug and Play installation – no flight tests

Lumatech Panels are STC certified as one for one replacements for most King Air models (see back page). Installation is quick plug-and-play. After installing your new LED panels, just run a quick validation ground test. No flight test is required.

An investment that pays for itself

Lumatech Panels will quickly pay for themselves with *direct savings in maintenance costs, fewer dispatch delays, and improved safety*. And the initial cost of new Lumatech Panels is low compared to the cost of your present panels (now fully amortized). Also, modern LED Lumatech Panels will add resale value to your aircraft. So why keep wasting money on obsolete annunciators? Start saving money right now with Lumatech Panels. **Please give us a call today: TollFree: 800.706.7602, x305 or Int'l: +1.425.643.4000, x305.**

Lumatech™ Panels... ...as modern and reliable as a glass cockpit

Lifetime LEDs

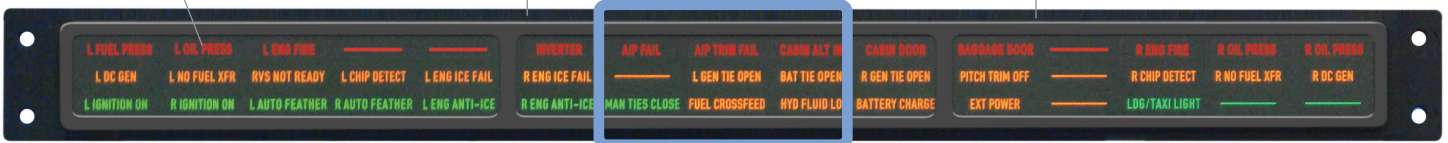
Last the life of the aircraft.
Zero maintenance.

Flat front surface

No cap assemblies, no visual clutter.

Cool to the touch

Lumatech LED panels generate almost no heat.
Cockpit stays comfortable.

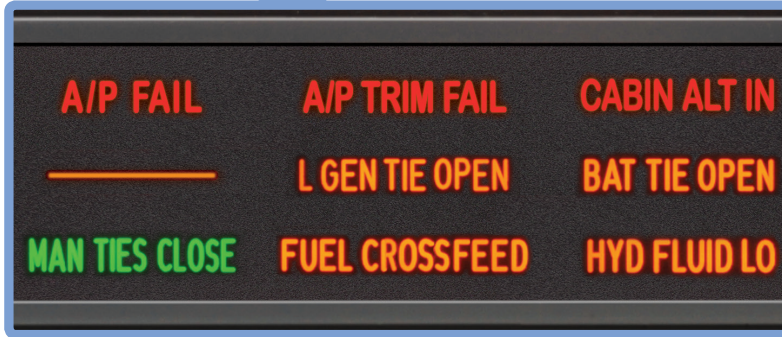


No ghosting

Pilot sees only the ON legends.
No ghosting from stray or reflected light.

Readable in direct sunlight

Non-reflective background.
High contrast legends.



Permanent colors

Colors never change –
always instantly recognizable.

Sharp, clear lettering

Legends never get fuzzy
from heat or age.
Always bright and readable.

Uniform illumination

All legends uniformly bright and readable –
illuminated by arrays of multiple LEDs.

Rugged solid state

No filaments to burn out or fail
from shock or vibration.

- **Damage resistant legend plate** The legend plate is molded of a tough high-density polymer. Won't deteriorate from age or wear. Even if gouged by a tool, the legends remain readable and are easily replaced.
- **Saves weight** A set of Lumatech caution/warning panels weighs 3 to 4 pounds less than comparable incandescent panels.
- **Lower power consumption** Lumatech LED panels draw only 10 to 20 percent as many amps as equivalent incandescent panels.
- **Legends easy to update** If indicia needs to be updated, the legend plate can be quickly replaced. One week factory turn around.
- **Adds resale value – Quick return on investment** Lumatech Panels add resale value and a quick return on your investment with direct savings from zero maintenance costs and reduced dispatch delays.
- **5-Year warranty from Luma Technologies** If any part fails within 5 years after installation and during normal use, we will repair or replace it at no charge. (See back page.)

More than 4000 installed Lumatech products



More than 4000 Lumatech brand panels, switches, and annunciators have been installed in fixed and rotary-wing aircraft. Luma products are preferred both in civil and military aircraft where they can withstand the harsh environment of shock and vibration, and are instantly readable in direct sunlight.

Off-angle viewing



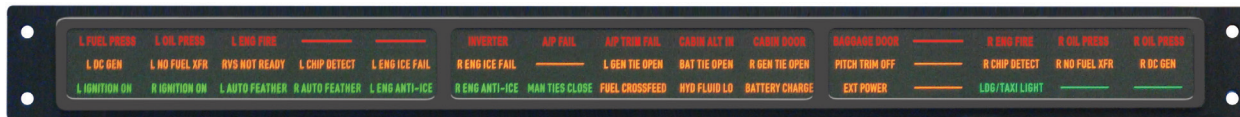
With bright, sharp letters, all Lumatech LED panels can be easily read by both pilots. (Panels for other aircraft shown here to illustrate off-angle.) No fuzzy legends or uneven illumination means Increased Situational Awareness and Safety of Flight.

Plug and Play



Lumatech Panels are certified drop-in replacements for King Air aircraft (see back page.) Easy installation. Just run a quick check to confirm validation. No flight test is required.

See specifications and more...back page >>>



Lumatech LED Caution/Warning Panels for King Air

Certified for the following King Air models

C90, 200/B200, 300/B300(350), & 1900D Series

C90 (LJ-1063 and newer)			
200	B200C	B200CGT	UC-12M
200C	B200CT	C12F	300
200CT	B200T	C12R	B300C
200T	B200GT	UC-12	1900D
B200			

Configurations available

Configuration	Model Applicability
20-Station Upper Warning Panel	Common to all 200/300/350 models
25-Station Upper Warning Panel	Model 1900D
36-Station Lower Caution Advisory Panel	All 200 Series models including military "C" variants
42-Station Lower Caution Advisory Panel	All 300 and older 350 models
45-Station Integrated Caution/Warning Panel	C90 & Nextant G90XT
48-Station Lower Caution Advisory Panel	Newer 350 and all 350i models
63-Station Lower Caution Advisory Panel	Model 1900D

Certified to the following specifications

Temperature and altitude	RTCA DO-160E, section 4, category A1
Temperature variation	RTCA DO-160E, section 5, category C
Humidity	RTCA DO-160E, section 6, category A
Operational shock and crash safety	RTCA DO-160E, section 7, category B
Vibration	RTCA DO-160E, section 8, category S, curve M
Fungus	RTCA DO-160E, section 13, category F (analysis)
Magnetic effect	RTCA DO-160E, section 15, category Z
Induced signal susceptibility	RTCA DO-160E, section 19, category AC
Radio frequency susceptibility	RTCA DO-160E, section 20, category AA
Emission of RF energy	RTCA DO-160E, section B 21, category M
Lightning induced signal susceptibility	DO-160E, section 22, category A3G33
Electrostatic discharge	RTCA DO-160E, section 25, category A
Flammability	RTCA DO-160E, section 26, category C

Warranty

Each Lumatech Panel has a calculated MTBF in excess of twenty five thousand hours. If any panel fails during normal use, Luma will immediately repair or replace it at no charge for five years from the date of installation.

Available directly from Luma Technologies or through your preferred maintenance center.

