SLC - The Smart LED Conversion Kit

Start Saving 95% Lighting Energy Cost in 10 Minutes

 Fact:
 Did you know that a single 4-tube T12 fluorescent fixture (4 x 40W) turned on 24/7 cost you > \$280 per year* in electricity bills?

 Solution:
 Convert your fluorescent fixture to Smart LED using the low cost Alec SLC Smart LED conversion Kit and SAVE as much as 95% in your next lighting energy bill!

Question: How much would each	Conventional Fluorescent Fixture 4-tube T12, 40W per tube	After Smart LED Conversion 40W, 5700 Lumens LED Efficient (>140 lm/W), long life (> 50,000 hrs)		
lighting fixture cost you in electricity bills per year?	Original Fluorescent Fixture	Converted Smart LED Fixture, dimmed		
Operating Hours		to 10% brightness.		
24hrs/day, 7 days/week (i.e. must have lights all day, but most of the time the space is not occupied)	Power when ON = 160W Energy per year = 1,402 kWh	90% of the time the space is vacant and the light is dimmed to 10%. Brighten to 100% when occupied. Average power when ON = 0.9*4 + 0.1*40 = 8W Energy per year = 70kWh		
Annual ON hours = 8760	* Energy cost/year = <mark>\$280</mark>	Energy per year = 70kWh. * Energy cost/year = \$14 Saving \$266/yr per fixture!		
60 hours per week	Power when ON = 160W	Dim to 0% when vacant. Dim to 10% in presence of		
(12hr/day, 5 days/week)	Energy per year = 499 kWh	strong daylight. Save 50% on average. Average power when ON = 0.5*40 = 20W		
		Energy per year = 62.4 kWh Saving		
Annual ON hours = 3120	* Energy cost/year = \$99.80	* Energy cost/year = \$12.48 \$87/yr per fixture!		

* Based on electricity rate of \$0.20 /kWh (includes taxes)

Features:

- 1) Conversion takes only 10 minutes!
- 2) Occupancy / Vacancy sensor Auto-dim LED lights when vacant. Brightens immediately when occupied.
- 3) Daylight Harvesting Sensor Auto-dim LED lights proportionally to daylight.
- 4) Dual-stage OFF ensure lights will never be turned OFF suddenly.
- 5) Comply to Energy Codes ASHRAE 90.1, NECB, IECC or Title 24
- 6) Connects to 110-277VAC mains. (347VAC Input model also available on special order)
- 7) **User-adjustable** working brightness, minimum brightness and vacancy time-out via preset trimmers. No programming required!
- 8) Eliminate Over-Lighting problems that can affect worker productivity.
- 9) No old fixture to dispose of Environmentally friendly and save on disposal costs.



Conversion vs Buying New LED Panel/Light

Your other upgrade option is to replace the old fluorescent light with brand new LED panels or fixtures. But do you know that in many jurisdictions, upgrading > 10% of your lighting load would mandate installation of advanced, often costly lighting control to comply with new building energy codes such as ASHRARE 90.1, NECB or Title 24? With its built-in smart controller and sensors, the **Alec Smart LED Conversion Kit** is already code-compliance and offers many advantages over the new LED panel option:

Ease of Installation => Lower Installation Cost	 Takes only 10 minutes per fixture to convert using SLC. No need to remove existing fixture to install new panel. No need to re-wire incoming AC mains.
Lower Hardware Cost	Cost only a fraction of a new dimmable LED panel light (before adding any control).
Energy Code Compliant	SLC's built-in dimming controller is fully configurable to meet any of the building energy codes (ASHRAE 90.1 NECB, Title 24 etc). No need to spend hundreds of dollars to add control hardware for compliance.
Long Lifespan	Similar lifespan as standard LED panel – up to 50,000 hours @ full power, and carry a 5-year manufacturer's warranty. However, thanks to vacancy and daylight dimming by the smart controller, the LED lamps' lifespan is expected to extend well beyond the rated full-power lifespan.
Ease of Maintenance	When an LED panel fails or reaches its end-of-life, the whole panel must be replaced by a qualified electrician. With SLC, every individual component is quickly replaceable using its quick connectors. E.g. Each individual LED lamp on the SLC can be quickly detached from the low voltage DC power, and a new lamp can be replaced within < 1 minute!

Smart LED Conversion Kit Models

A SLC kit comprises an **Alec LC1** Smart Lighting Controller and an **Alec RF1** Fluorescent-to-dimmable LED Retrofit Kit. We offer several models of SLC kits with different color temperatures to suit different applications. Almost any type of 2' or 4' fluorescent fixture can be converted to Smart LED light.

1. AC 100V-277V Conversion Kits for fixtures using 2' (60cm) fluorescent tubes. CERTIFIED Secret S					
Model No	Input Voltage	Output Power	Lumen ¹	CRI	Color Temperature
SLC1-22F40K	AC 100-277V	20W	2850	80	4000K (Daylight)
SLC1-22F50K	AC 100-277V	20W	2850	80	5000K (Cool Daylight)

 AC 100V-277V Conversion Kits for fixtures using 4' (120cm) fluorescent tubes.





¹Total nominal output lumens before fixture loss LC1-CABLE-060 - 60cm (2') Extension Cable for LC1

Model No	Input Voltage	Output Power	Lumen ¹	CRI	Color Temperature
SLC1-24F40K	AC 100-277V	40W	5700	80	4000K (Daylight)
SLC1-24F50K	AC 100-277V	40W	5700	80	5000K (Cool Daylight)

¹Total nominal output lumens before fixture loss

Note: 347V version of all the above models are available on special order. The 347V models have the -347V suffix to the corresponding model number before XXK. E.g. A 4 ft conversion kit (5000K) is labeled: **SLC1-24F50K-347V**