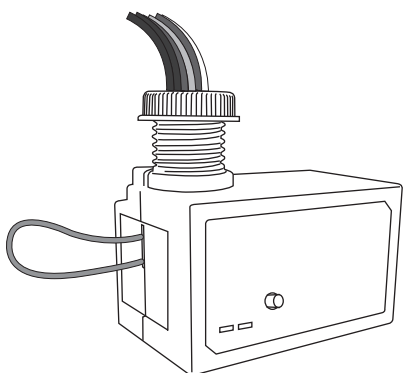




ELC-309

Automatic Load Controller Relay (Emergency Lighting Controller)

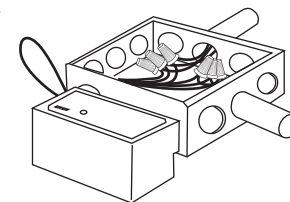
INSTALLATION INSTRUCTIONS



ONLY QUALIFIED
ELECTRICIANS
SHOULD INSTALL
THIS DEVICE.

OVERVIEW The ELC-309 is a control unit designed to allow sensor control for both the normal lighting and emergency lighting that needs to turn on when normal power is unavailable. The emergency lighting circuit is designed with an exclusive Hybrid Switching technology ideal to control the lighting with exceptionally high inrush current (HIC) while switching on, such as multiple LED or CFL lightings connected in parallel.

With an occupancy sensor connected, the ELC-309 allows the emergency lighting to be controlled as sensor set mode when normal power is available. Once normal power is unavailable, the emergency lighting will stay on using the emergency power. This control unit can be attached to the existing junction box with 1/2" knockout or mounted into fixture cable trays.



SPECIFICATIONS

Operation Voltage		AC 120 / 277V
Max Load	Ballast	20A @ 120 ~ 277V
	LED	20A @ 120 ~ 277V
	Motor	1 HP @ 120 ~ 277V
	Plug Load	20A @ 120V
Control Panel Signal		24Vdc sourced, Dry contact closure
Humidity		95% RH max
Operation Temperature		-20°C ~ 55°C (-4°F ~ 131°F)
Storage Temperature		-40°C ~ 70°C (-40°F ~ 176°F)
Dimensions		75x45x45mm (3" x 1.8" x 1.8")

LED INDICATION

(Normal operation with Normal Switch Sense Wire attached, not during test procedure below)

DESCRIPTION	NORMAL Power LED	EMERGENCY Power LED
Normal Power On - No Emergency Power	Blinking Green	LED Off
Normal Power On - Emergency Power On	Blinking Green	Red On
Normal Power Off - Emergency Power On	LED Off	Red On
Test Button Pressed or Control Panel output is OPEN with Normal Power On - Emergency Power On	Blinking Blue	Red On

TESTING

Note: ① The LED INDICATION chart should not be used during the TEST PROCEDURE, follow the LED indication as dictated in these steps.
 ② Do not disconnect (cut) the blue wire to avoid need for remote device to signal the ELC-309.

1. Make sure all lighting circuit breakers are off.
2. Disconnect the Normal Switch Sense wire from the circuit.
3. Turn the power on for the circuit breaker for the Emergency power circuit.
4. The Red LED will be on showing there is Emergency power connected, the Normal Power LED will be off. Only the lights connected to the Emergency Circuit should be on.
5. Turn the power on from the circuit breaker for the Normal power circuit.
6. The Green LED is now on showing there is Normal power connected, the Red LED will also be on at this time. All lights on the Normal Power circuit will be on. All lights on the Emergency Power Circuit will be off.
7. Press the test button. The Green LED will change to a blinking Blue LED and the Red LED will be on. Both the Normal and Emergency powered lights will be on. The lights will stay in this state for 5 seconds and then return to the state in step 6.
8. Turn off both the Normal and Emergency power circuit breakers.
9. Re-connect the Normal Switch Sense wire.
10. Turn on both the Normal and Emergency power circuit breakers.
11. Both the Normal and Emergency powered lights should be on. The Green LED should be blinking, and the Red LED should be on. The lighting will be controlled by any connected sensors that are attached.

⚠ WARNING & CAUTION

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

- Do not use outdoors.
- Do not mount near gas or electric heaters.
- Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than its intended use.
- CAUTION: RISK OF SHOCK — DISCONNECT EMERGENCY AND NORMAL INPUT POWER SOURCES BEFORE SERVICING.
- The Driver is intended for ordinary locations and for permanent installation into one Listed emergency luminaires.
- Use UL listed wires for all wiring connections. Low voltage wiring connection should use at least 22 AWG wire. Load switching wiring connection should use at least 14 AWG. AC power line voltage wiring connection should use at least 18 AWG wire. Wire all Class 2 circuits using types CL3, CL3P, CL3R, or equivalent conductors. For plenum return ceilings, use UL listed plenum-approved cables.
- Always check national, state and local building codes for necessary compliance. After initial wiring is complete, ensure to verify all the low and high voltage wires are correctly connected before applying the power. Incorrect wiring could possibly cause permanent damage to the power pack, lighting system, occupancy sensors or other control devices.

⚠ AVERTISSEMENT & PRUDENCE

SAUVEGARDES IMPORTANTES

Lorsque vous utilisez un équipement électrique, des précautions de sécurité de base doivent toujours être respectées, y compris les suivantes:

LISEZ ET SUIVEZ TOUTES LES INSTRUCTIONS DE SÉCURITÉ

- Ne pas utiliser à l'extérieur.
- Ne l'utilisez pas près de chauffages à gaz ou électriques.
- L'équipement doit être installé à des emplacements et à des hauteurs où il ne sera pas facilement accessible au personnel non autorisé.
- L'utilisation d'équipement accessoire non recommandé par le fabricant peut entraîner des risques pour la sécurité.
- N'utilisez pas cet équipement pour un usage autre que celui prévu.
- PRUDENCE: RISQUE DE CHOC ÉLECTRIQUE - DÉBRANCHEZ L'ALIMENTATION AVANT L'ENTRETIEN.
- Le pilote informatique est conçu pour des emplacements ordinaires et pour une installation permanente dans les luminaires de sécurité listés.
- Utiliser homologation UL fils pour toutes les connexions de câblage. Basse tension connexion de câblage doit utiliser au moins 22 fils de AWG. Commutation de charges connexions de câblage doit utiliser au moins 14 AWG. Tension de la ligne de courante alternative connexions de câblage doit utiliser au moins 18 fils de AWG. Brancher tous les circuits de classe 2 à l'aide de types CL3, CL3P, CL3R, ou conducteurs équivalent. Pour les plafonds de retour de plénum, utiliser UL câbles ignifuges approuvés énumérés.
- Toujours vérifier les codes de constructions nationaux, étatiques et locales pour le respect nécessaire et conformité. Après le câblage initial est terminé, assurez-vous de vérifier que tous les fils basse et haute tension sont connectés correctement avant d'appliquer la puissance. Un câblage incorrect pourrait causer des dommages permanents à la batterie d'alimentation, système d'éclairage, aux détecteurs de présence ou autres dispositifs de commande.

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Printed in Taiwan

This product may be covered by one or more U.S. patents or patent applications. Please visit www.irtec.com for more information.



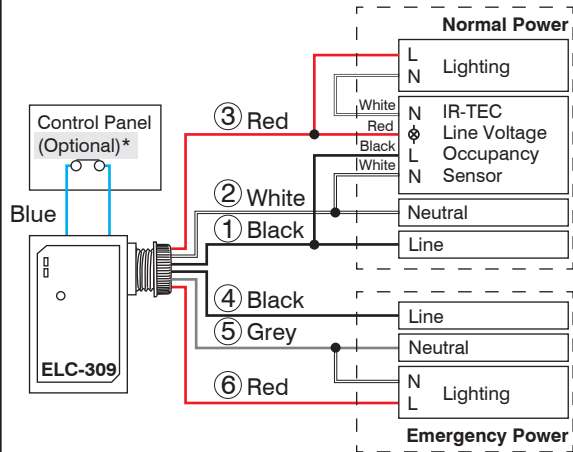
WIRING DIAGRAMS

Wires	① Black	NORMAL POWER SENSE
	② White	NORMAL NEUTRAL
	③ Red	NORMAL SWITCH SENSE
	④ Black	EMERGENCY POWER IN
	⑤ Grey	EMERGENCY NEUTRAL
	⑥ Red	EMERGENCY POWER OUT
	Blue	Control Panel Signal

*Cut jumper loop to use with Normally Closed control panel (fire/security panel)

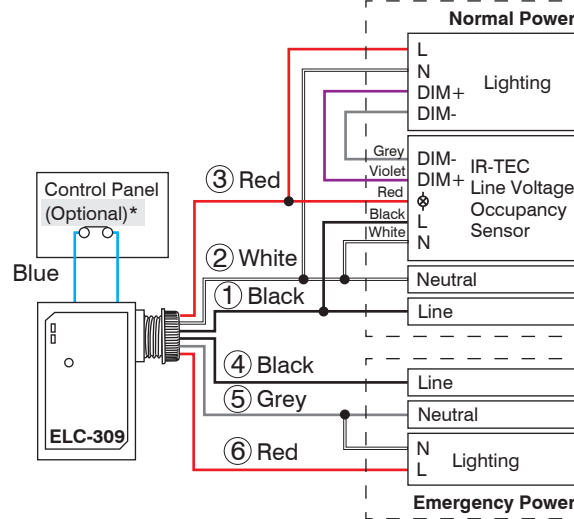
1. Line Voltage Sensor Control of Normal and Emergency Lighting

Normal: Sensor control ON/OFF switching
Emergency: Emergency lighting ON



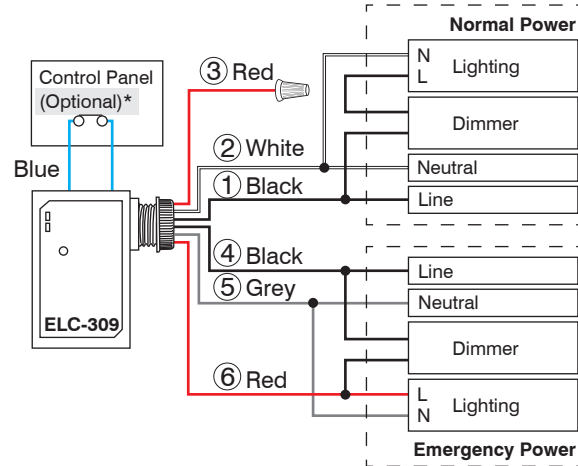
2. Line Voltage Sensor Control of Normal and Emergency Lighting with Dimmable Lighting

Normal: Sensor control with dimming (emergency lighting ON/OFF only)
Emergency: Emergency lighting ON



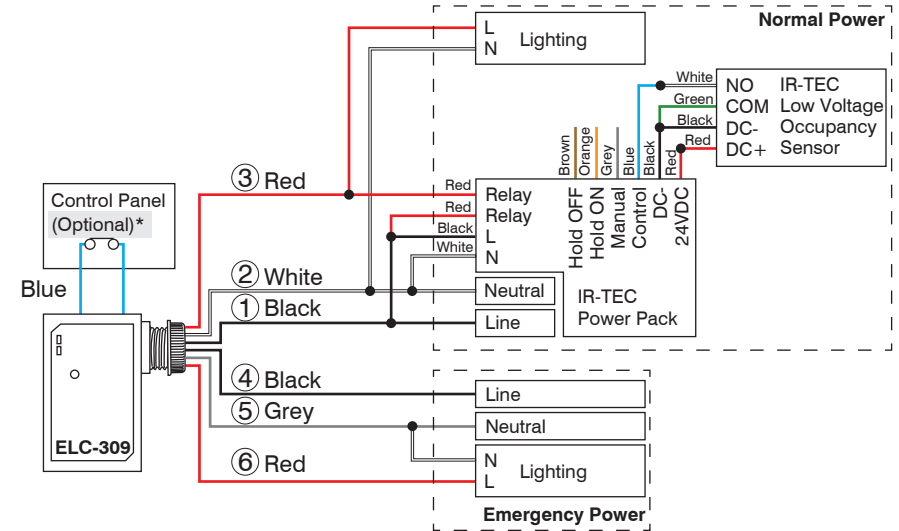
3. Dimmer Bypass of Emergency Lighting

Normal: Manual dim enabled
Emergency: Emergency lighting ON (dimmer disabled)



4. Low Voltage Sensor with Power Pack Control of Normal and Emergency Lighting

Normal: Sensor control ON/OFF switching
Emergency: Emergency lighting ON



5. Low Voltage Sensor with Power Pack Control of Normal and Emergency Lighting with Manual ON

Normal: Manual ON, Sensor OFF
Emergency: Emergency lighting ON

