



## INSTALLATION INSTRUCTIONS

Universal Voltage (120-277V) LED Luminaire Retrofit Kit

VTR-14-MU-30-9TW-A

VTR-22-MU-30-9TW-A

VTR-24-MU-45-9TW-A

Reference spec sheet for full part numbers

## INSTALLATION INSTRUCTIONS

### Installation Warnings

- To reduce the risk of death, personal injury, property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards make sure to read all warnings and instructions included with and on the fixture box and all fixture labels.
- Follow these general precautions before installing, servicing, or performing routine maintenance upon this equipment.
- Commercial installation, service, and maintenance of luminaires should be performed by a qualified licensed electrician.
- LED Retrofit kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

### Warnings

- Turn off electrical power at fuse or circuit breaker box before wiring fixture to the power supply.
- Turn off the power prior to performing any maintenance
- Verify that the supply voltage is correct by comparing it with the luminaire label information.
- All wiring connections should be capped with UL approved wire connectors.

**Risk of fire or electric shock. The electrical rating of these products are 120-277 VAC, the installer must determine whether they have 120-277 V at the luminaire before installation.**

**Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and /or drawings.**

**Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED retrofit kit. Check for enclosed wiring and components.**

### Caution

- Avoid direct eye exposure to the light source while it is on.
- Account for small parts and properly dispose of packing material, as these may be hazardous to children.
- Risk of burn. Disconnect power and allow fixture to cool before changing bulb or handling fixture.

**NOTE:** The green ground screw is installed in its proper location. Do not Relocate.

**NOTE:** Please use minimum 90°C rated supply conductors.

**NOTE:** Specifications and dimensions subject to change without notice.

**NOTE:** Suitable for Dry and Damp location, Type IC.

### Avertissements d'installation

- Pour réduire le risque de décès, de blessures corporelles, de dommages matériels dus à un incendie, un choc électrique, la chute de pièces, des coupures/abrasions, et autres dangers, assurez-vous de lire tous les avertissements et instructions inclus avec et sur la boîte du luminaire et toutes les étiquettes du luminaire.
- Suivez ces précautions générales avant d'installer, d'entretenir ou d'effectuer un entretien de routine sur cet équipement.
- L'installation commerciale, l'entretien et la maintenance des luminaires doivent être effectués par un électricien.
- L'installation du kit LED Retrofit nécessite une connaissance des systèmes électriques des luminaires. Si vous n'êtes pas qualifié, ne tentez pas l'installation. Contactez un électricien qualifié.
- Pour éviter d'endommager le câblage ou de l'abrasion, n'exposez pas le câblage aux bords de la tôle ou à d'autres objets pointus.
- Ne faites ni ne modifiez aucun trou ouvert dans un boîtier de câblage ou de composants électriques pendant l'installation du kit.

### Avertissements

- Coupez l'alimentation électrique au niveau de la boîte à fusibles ou du disjoncteur avant de câbler le luminaire à l'alimentation électrique.
- Couper l'alimentation avant d'effectuer tout entretien.
- Vérifiez que la tension d'alimentation est correcte en la comparant aux informations de l'étiquette du luminaire.
- Toutes les connexions de câblage doivent être coiffées de connecteurs de fil approuvés UL.

**Risque d'incendie ou de choc électrique. Les caractéristiques électriques de ces produits sont de 120-277 VAC, l'installateur doit déterminer s'il dispose de 120-277 V au niveau du luminaire avant l'installation.**

**Risque d'incendie ou de choc électrique. Installez ce kit uniquement dans les luminaires qui présentent les caractéristiques de construction et les dimensions indiquées sur les photographies et/ou les dessins.**

**Risque d'incendie ou de choc électrique. Le câblage et les composants électrique du luminaire risquent d'être endommagés lors du perçage pour l'installation du kit de mise à niveau pour LED. Vérifiez si le câblage et les composants sont enfermés.**

### Mise en garde

- Évitez l'exposition directe des yeux à la source lumineuse lorsqu'elle est allumée.
- Tenez compte des petites pièces et éliminez correctement les matériaux d'emballage, car ils peuvent être dangereux pour les enfants.
- Risque de brûlure. Débranchez l'alimentation et laissez le luminaire refroidir avant de changer l'ampoule ou de manipuler le luminaire.

**REMARQUE:** La vis de terre verte est installée à son emplacement approprié. Ne déménagez pas.

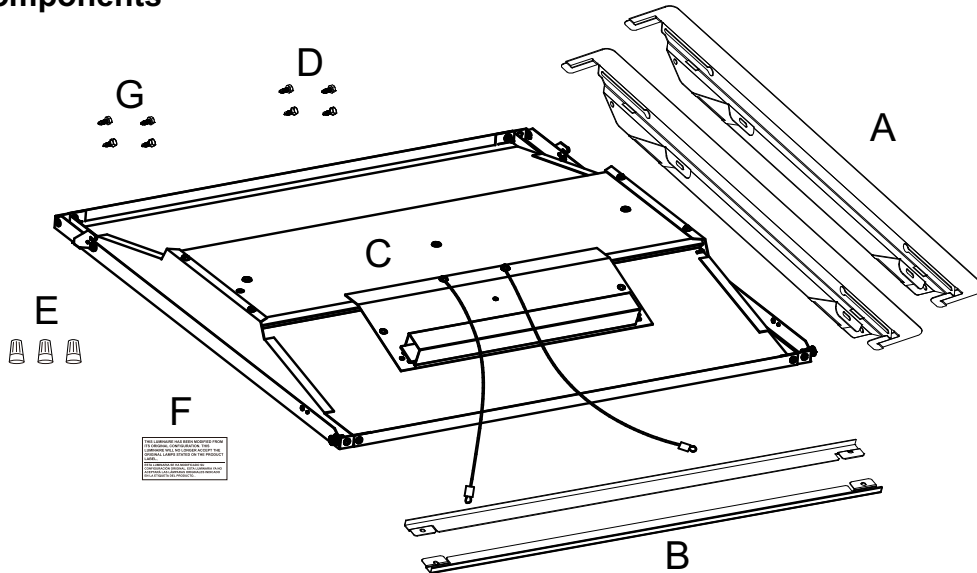
**REMARQUE:** Veuillez utiliser des conducteurs d'alimentation d'au moins 90 °C.

**REMARQUE:** Spécifications et dimensions sujettes à modification sans préavis.

**REMARQUE:** Convient aux emplacements secs et humides, type IC.

## INSTALLATION INSTRUCTIONS

### Retrofit Kit Components

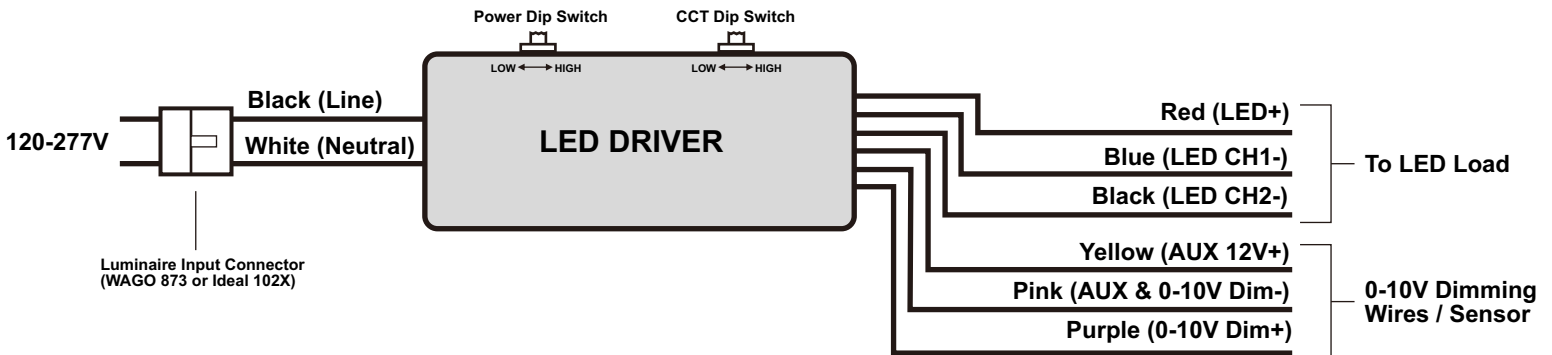


- A: End Brackets..... 2pcs
- B: Side Brackets..... 2pcs
- C: Retrofit Kit Housing..... 1pcs
- D: #8 x 1/2" Self-Taping Screws..... 4pcs
- E: Wire Caps..... 3pcs
- F: Retrofit Label..... 1pcs
- G: M4x6x8 Screw for EM..... 4pcs

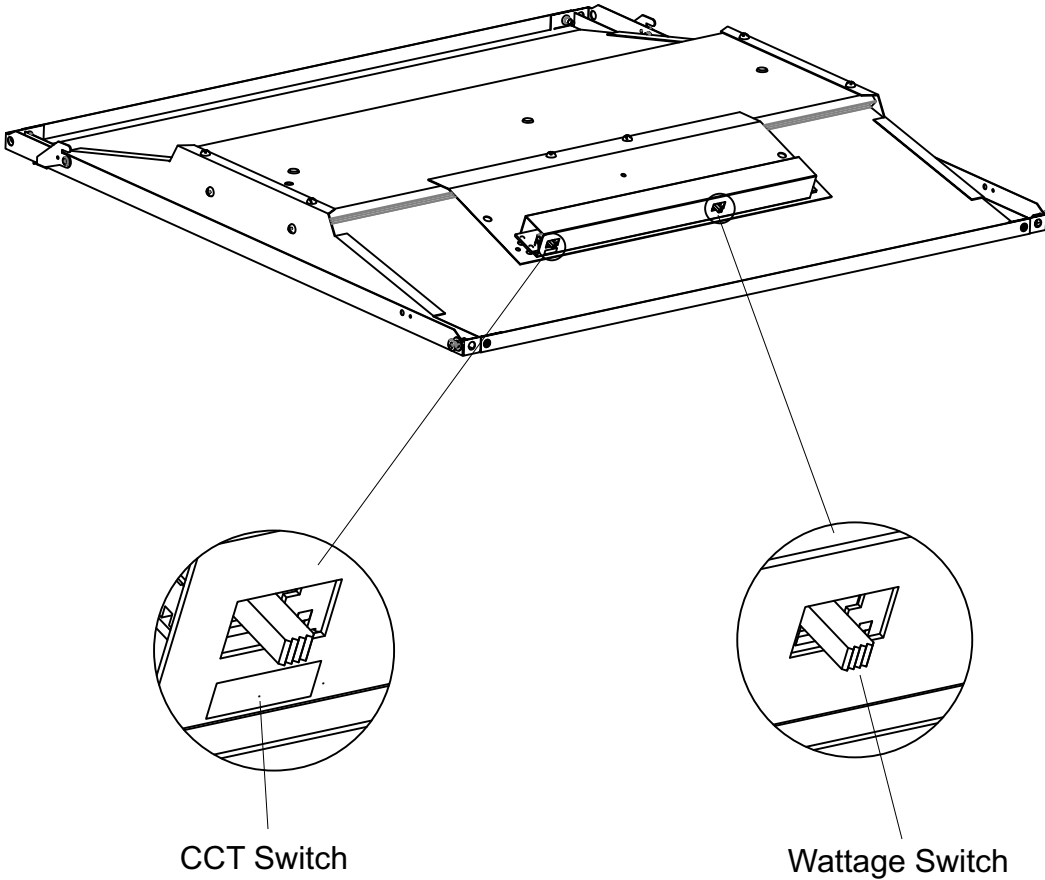
**NOTE:** The existing fluorescent luminaires housing shall be larger than dimensions described in below table:

Housing Designation	Overall Dimensions
1' x 4'	48.0" x 11.89" x 3.07"H (1220 x 302 x 78mm H)
2' x 2'	24.0" x 23.94" x 3.07"H ( 610 x 608 x 78mm H)
2' x 4'	48.0" x 23.94" x 3.07"H (1220 x 608 x 78mm H)

### General Wiring Diagram



**Field-Adjustable Wattage & CCT**



Adjustable lumen output and color temperature can be set to the desired output using the two DIP switches shown above. Each DIP switch has 3 options (Low, Medium and High) corresponding to the three available color temperatures and power levels.

1. DIP switches are located on the side of the retrofit kit housing.
2. Select a wattage and temperature by sliding each switch left or right to set the desired value. See below for available options:

Part Number	Power Level	CCT Level
VTR14-MU-30-9TW-A	20W / 25W / 30W	3500K - 5000K
VTR22-MU-30-9TW-A	20W / 25W / 30W	3500K - 5000K
VTR24-MU-45-9TW-A	34W / 38W / 45W	3500K - 5000K

\* Default factory setting is the lowest CCT level (3500K) and the highest power Level (30W/45W).

## Installation

Figure 1

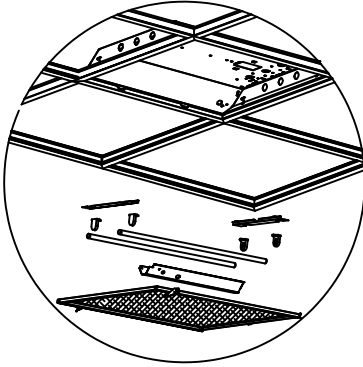


Figure 2

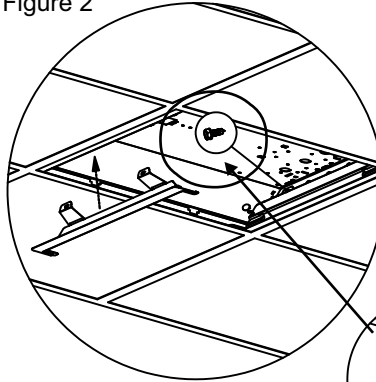


Figure 3

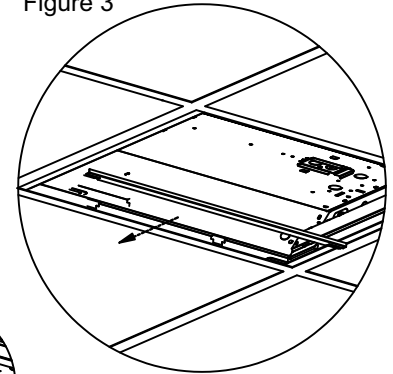


Figure 4

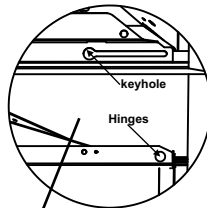
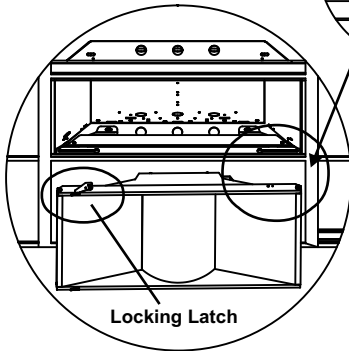


Figure 4A

Figure 5

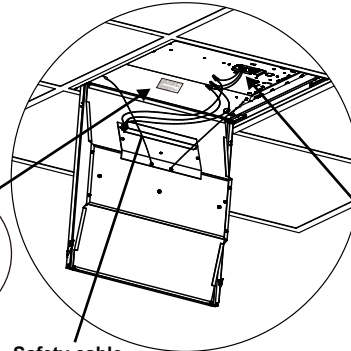


Figure 5A



Figure 2A

Figure 6

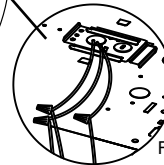
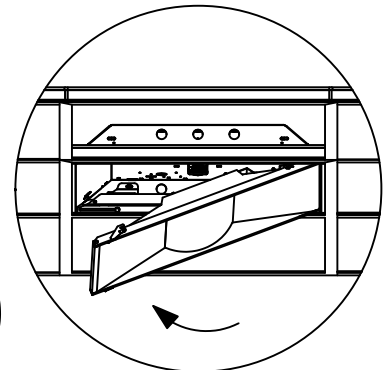


Figure 5B

- Prior to installation, disconnect all incoming power to the fixture. Remove existing hardware (lens/lens frame, parabolic louver, reflector/ballast covers, brackets, lamps/lamp holders). Leave supply and grounding leads. (Fig. 1)  
NOTE: Follow all federal and local regulations when disposing of lamps and removed components.
- Install the end brackets to each end of the existing fixture by gently lifting the fixture and placing the end brackets between the fixture and T-grid. (Fig. 2)
- If you are not pleased with the side gap between the fixture and T-grid, you may install the side brackets between the fixture and T-grid. There are two tabs to allow for placing the side brackets into the slots on the end brackets. (Fig. 3)
- Secure the end brackets to the existing fixture using the provided #8 x 1/2" self-drilling screws. (Fig. 2A)
- Place the retrofit kit housing into the slotted keyholes of the end brackets, and slide it horizontally to the end of the slots. (Fig. 4 & 4A)
- Hook the safety cables onto the holes positioned on the end brackets. (Fig. 5)
- Use the provided wire caps to connect the wire leads of the retrofit kit housing to the main power leads. (Black-Live, White-Neutral, Green-Grounding) (Fig. 5B)
- Place the provided Retrofit Label on the original luminaire housing in a readily visible location for anyone attempting to service the luminaire. (Fig. 5-A)
- Secure the retrofit kit housing by locking the latches onto the end brackets. (Fig. 6)

## INSTALLATION INSTRUCTIONS

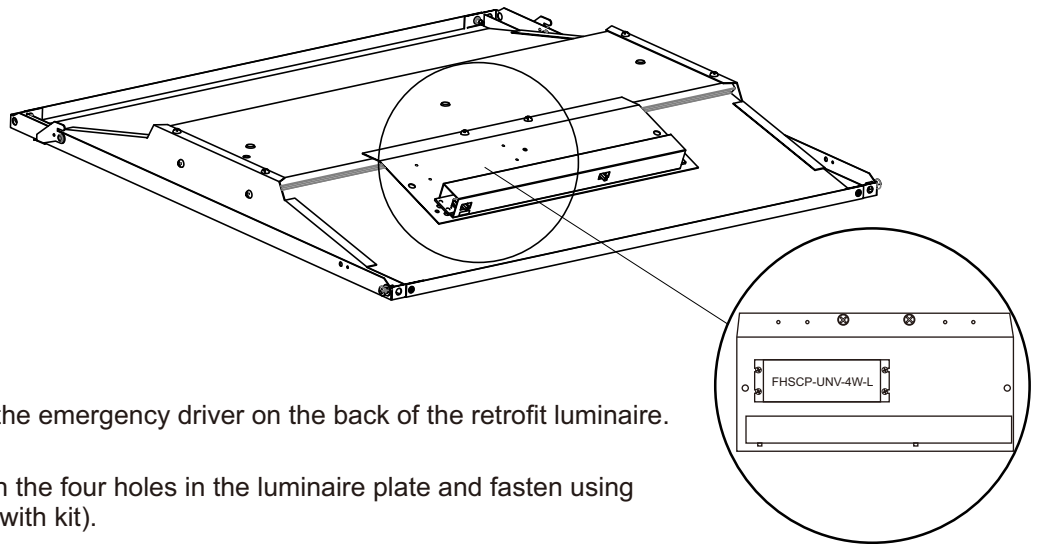
### Additional Accessories (Sold Separately)

Emergency Battery Back-up: FHSCP-UNV-4W-L

- 4W Constant Power Emergency Back-up
- 500lm
- 90 min. Runtime



### Installation



#### Step 1

Locate the mounting holes for the emergency driver on the back of the retrofit luminaire.

#### Step 2

Align the emergency driver with the four holes in the luminaire plate and fasten using four M4x6x8 screws (provided with kit).

#### Step 3

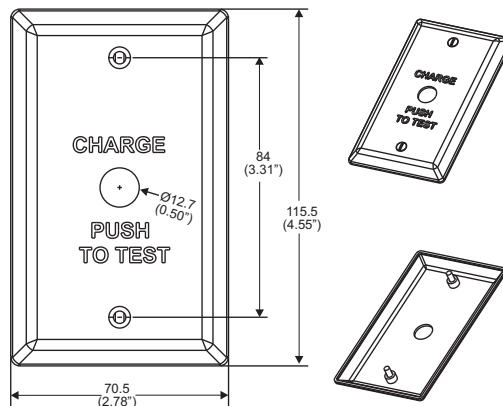
Wire the emergency driver in accordance with the wiring diagram on page 7.

**Note:** This unit can be wired for either 3500K or 5000K CCT in emergency.

### Wall Plate: FHSWLPWH



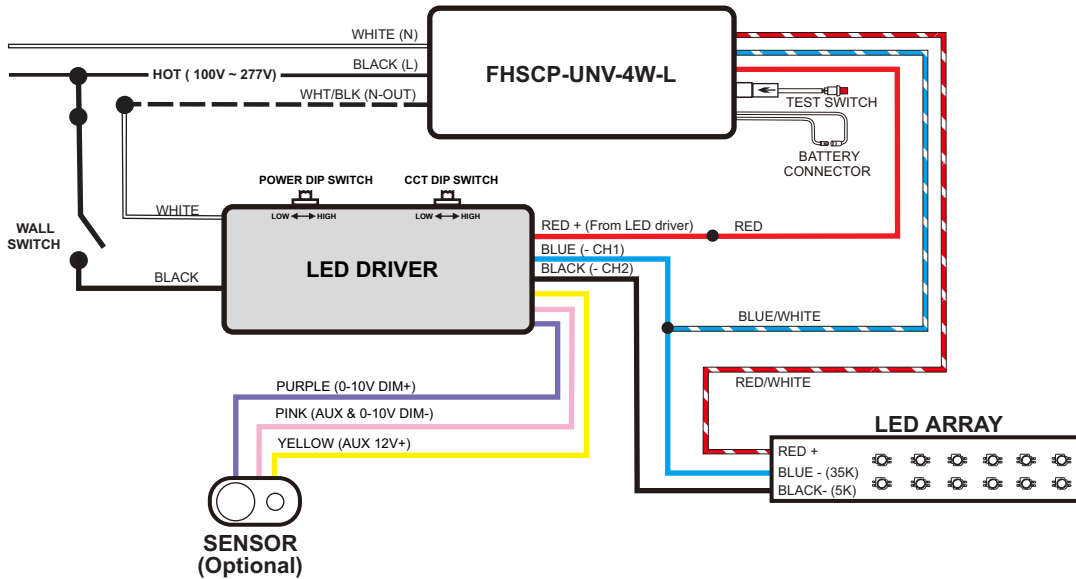
Wall plate and screw color:  
white with black lettering



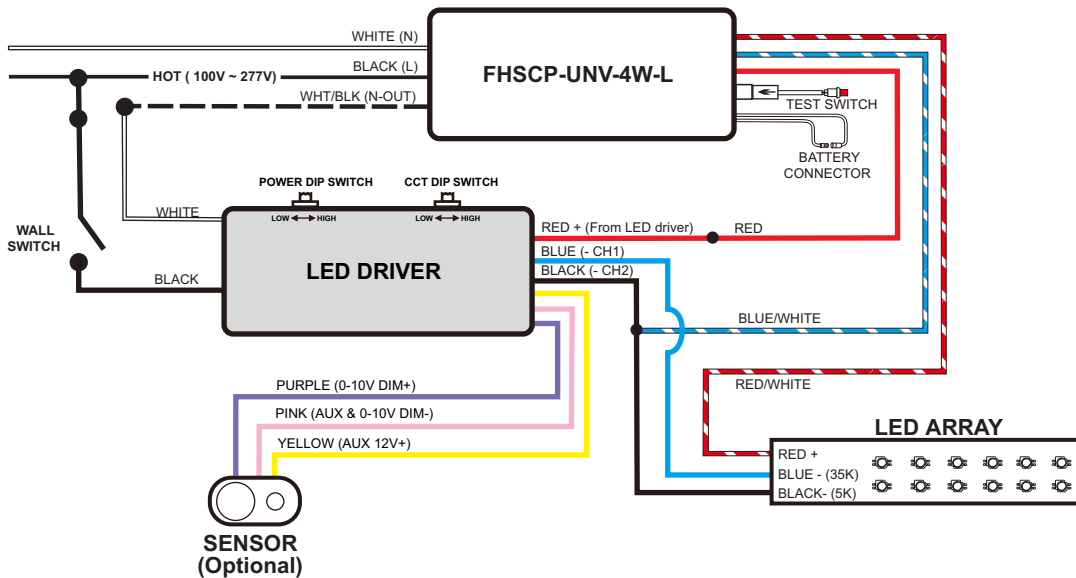
1. "Charge push to Test" plate
2. (2) 6-32 x 1/2" LG mounting screws

## Emergency Wiring Diagrams

**Wiring Diagram 1: 3500K Emergency Output**



**Wiring Diagram 2: 5000K Emergency Output**



### INSTALLATION INSTRUCTIONS

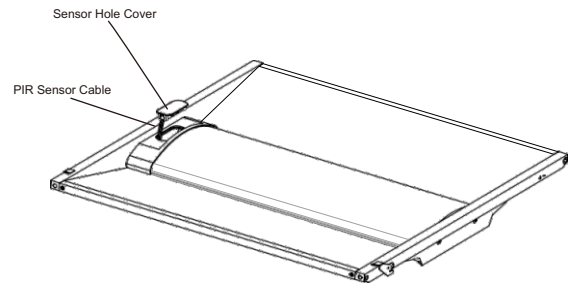
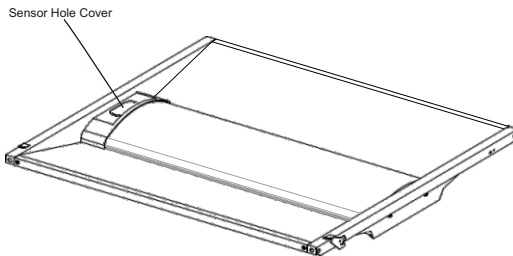
#### Additional Accessories (Sold Separately)

PIR Motion / Lux Sensor: ELMOPLX00SR

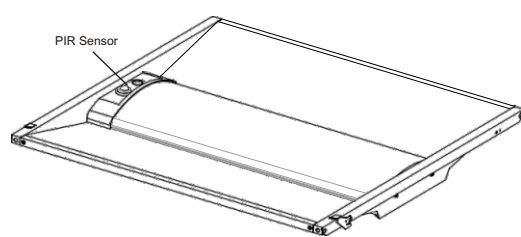
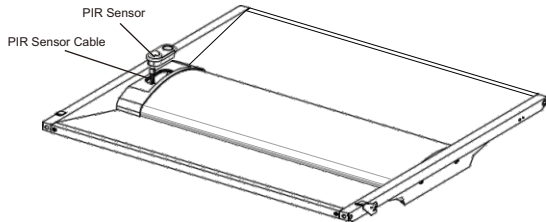
IR Remote Control: ELMOPLX00SR-RM

<b>E</b>	<b>L</b>	<b>M</b>	<b>OP</b>	<b>L</b>	<b>X</b>	<b>00</b>	<b>SR</b>
<u>Lighting Control</u>	<u>Subfamily</u>	<u>Primary Protocol &amp; Powering</u>	<u>Primary Function</u>	<u>Package</u>	<u>Secondary Protocol &amp; Powering</u>	<u>Secondary Control Channels</u>	<u>Detection Range</u>
E = EliteControl	L = Link	M = 0-10V	OP = Occupancy & Photo sensor	L = Luminaire	X = None	00 = None	SR = Short Range

Specifications	
Input	DC 12V 8mA
Dimming	0-10V, dim-to-off
Detection Range	48ft
Mounting Height	15ft
IP Rating	IP20
Operating Temperature	-30°F to 131°F (-30°C to 55°C)



**Step 1**  
Locate and remove the sensor hole cover from the retrofit kit housing.



**Step 2**  
Remove the cable that is attached to the back of the sensor hole cover and insert the terminal into the PIR sensor.

**Step 3**  
Insert the PIR sensor into the sensor hole on the retrofit kit housing and make sure its secured properly.

#### General Wiring Diagram

