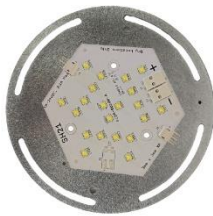




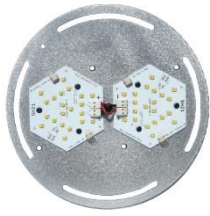
# GENPRO

ADVANCED TECHNOLOGIES

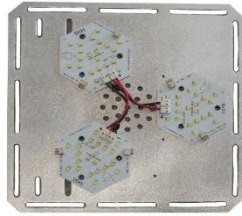
## UNIVERSAL RETROFIT INSTALLATION INSTRUCTIONS



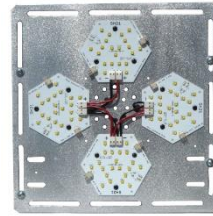
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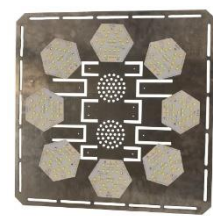
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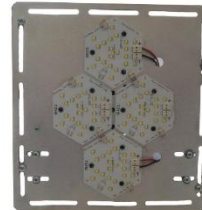
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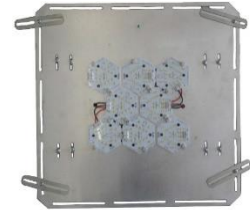
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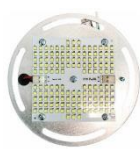
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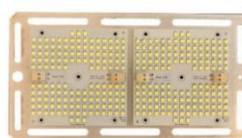
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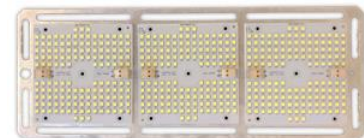
R24024



S150



S300



S450



**IMPORTANT SAFEGUARDS:**

Read and follow all safety instructions below. before installation!  
Save these instructions and handover to owner after installation.

- **WARNING - RISK OF FIRE OR ELECTRIC SHOCK. LED RETROFIT KIT INSTALLATION REQUIRES KNOWLEDGE OF LUMINAIRES AND ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN FOR SAFE INSTALLATION OF RETROFITS.**
- **THIS LUMINAIRE IS PROVIDED WITH A FACTORY-INSTALLED EMERGENCY LIGHTING BATTERY PACK. EMERGENCY LIGHTING BATTERY PACK IS AN OPTIONAL ACCESORY**
- **WARNING - 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.**
- **ONLY THOSE OPEN HOLES INDICATED IN THE PHOTOGRAPHS AND/OR DRAWINGS MAY BE MADE OR ALTERED AS A RESULT OF KIT INSTALLATION. DO NOT LEAVE ANY OTHER OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS.**
- **DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.**
- **WARNING - RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN LUMINAIRES THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND/OR DRAWINGS AND WHERE THE INPUT RATING OF THE RETROFIT KIT DOES NOT EXCEED THE INPUT RATING OF THE LUMINAIRE.**
- **WARNING - TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.**
- **WARNING: TO AVOID POTENTIAL FIRE OR SHOCK HAZARD, DO NOT USE THIS RETROFIT KIT IN LUMINAIRES EMPLOYING SHUNTED BI-PIN LAMPHOLDERS. NOTE: SHUNTED LAMP HOLDERS ARE FOUND ONLY IN FLUORESCENT LUMINAIRES WITH INSTANT-START BALLASTS. INSTANT-START BALLASTS CAN BE IDENTIFIED BY THE WORDS "INSTANT START" OR "I.S." MARKED ON THE BALLAST. THIS DESIGNATION MAY BE IN THE FORM OF A STATEMENT PERTAINING TO THE BALLAST ITSELF, OR MAY BE COMBINED WITH THE MARKING FOR THE LAMPS WITH WHICH THE BALLAST IS INTENDED TO BE USED, FOR EXAMPLE F40T12/IS. FOR MORE INFORMATION, CONTACT THE LED LUMINAIRE RETROFIT KIT MANUFACTURER.**
- **FOR RETROFIT KITS CERTIFIED TO CANADIAN REQUIREMENTS: THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.**

**NOTE:**

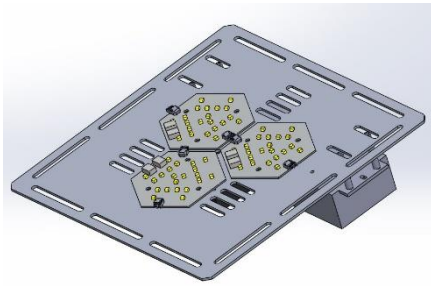
- **THOROUGHLY INSPECT THE RECEIVED PRODUCT FOR ANY DAMAGE. FREIGHT DAMAGE SHOULD BE REPORTED TO THE DELIVERY CARRIER.**
- **AVOID EXPOSURE OF THE RETROFIT KIT TO MOISTURE. ENSURE THE RETROFIT HOUSING IS ADEQUATELY SEALED TO AVOID MOISTURE INGRESS.**
- **PROPER SELECTION OF A LIGHT POLE, BRACKETS AND ARM MOUNTS FOR AN APPLICATION IS BASED ON INFORMATION SUCH AS EPA, WIND ZONE AND MOUNTING HEIGHT. LIGHT POLE VIBRATION PROBLEMS ARE CAUSED BY ENVIRONMENTAL FACTORS THAT VARY BY GEOGRAPHY. THEY DO NOT RESULT FROM IMPROPER MATERIALS AND/OR POOR MANUFACTURING PROCESSES.**
- **GENPRO ADVANCED TECHNOLOGIES AND ITS VENDORS ASSUME NO RESPONSIBILITY FOR PROPER LOADING ANALYSIS AND/OR PRODUCT SELECTIONS. DESIGN INFORMATION SUCH AS EPA RATING FOR A PRODUCT CAN BE FOUND ON THE PRODUCT DATASHEETS. IF YOU HAVE CONCERNS ABOUT LIGHT POLE VIBRATION FOR A SPECIFIC PROJECT YOU ARE WORKING ON, PLEASE CONTACT OUR CUSTOMER SUPPORT.**
- **THE CUSTOMER REMAINS SOLELY RESPONSIBLE FOR PROPER SELECTION OF THE LIGHT POLE, LUMINAIRE AND/OR RELATED ACCESSORIES THAT ADHERE TO ALL APPLICABLE REQUIREMENTS, INCLUDING (BUT NOT LIMITED TO) EPA DESIGN CRITERIA, JOB SPECIFICATIONS AND ENGINEERING REQUIREMENTS. TO ENSURE PROPER SELECTION OF THE LIGHT POLE, LUMINAIRE, ACCESSORIES AND/OR FOUNDATION, WE RECOMMEND THE CUSTOMERS CONSULT A QUALIFIED ENGINEER TO ANALYZE THE LOADING AND DESIGN CRITERIA FOR THE SPECIFIC APPLICATION.**
- **RETROFIT KITS ARE ONLY SUITABLE FOR LUMINAIRES WITH GLASS LENS.**

**MINIMUM LAMP COMPARTMENT DIMENSIONS FOR RETROFITS**

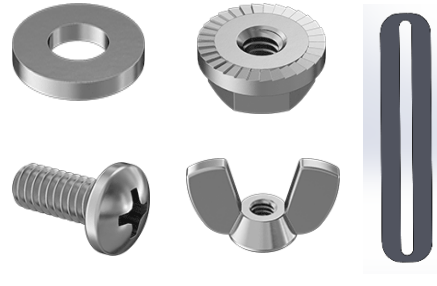
Please ensure your existing fixture/housing meets the following minimum box dimensions for safe operation of the retrofits:

<b>MODEL NUMBER</b>	<b>MINIMUM LAMP COMPARTMENT DIMENSIONS (L x W x H)</b>
UKit-R24O24-XX-XX-XX-XX, CRKit-R24O24-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-S16O16-XX-XX-XX-XX, CRKit-S16O16-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-S8O8-XX-XX-XX-XX, CRKit-S8O8-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-SHW-042-XX-XX-XX-XX, CRKit-SHW-042-XX-XX-XX-XX, UKit-SHB-042-XX-XX-XX-XX, CRKit-SHB-042-XX-XX-XX-XX	12.50 inches x 12.50 inches x 5.52 inches
UKit-R12O12-XX-XX-XX-XX, CRKit-R12O12-XX-XX-XX-XX	12.50 inches x 12.50 inches x 5.52 inches
UKit-SHB-168-XX-XX-XX-XX, CRKit-SHB-168-XX-XX-XX-XX	24.00 inches x 24.00 inches x 10.25 inches
UKit-SHW-063-XX-XX-XX-XX, CRKIT-SHW-063-XX-XX-XX-XX, UKit-SHB-063-XX-XX-XX-XX, CRKIT-SHB-063-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-SHW-084-XX-XX-XX-XX, CRKIT-SHW-084-XX-XX-XX-XX, UKit-SHB-084-XX-XX-XX-XX, CRKit-SHB-084-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-S4O4-XX-XX-XX-XX, CRKit-S4O4-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-SHW-021-XX-XX-XX-XX, CRKIT-SHW-021-XX-XX-XX-XX, UKit-SHB-021-XX-XX-XX-XX, CRKIT-SHB-021-XX-XX-XX-XX	16..55 inches x 16.55 inches x 6.50 inches
UKit-S24O24-XX-XX-XX-XX, CRKit-S24O24-XX-XX-XX-XX	24.00 inches x 24.00 inches x 10.25 inches

Where, "XX" denotes retrofit configurations like Wattage, Color Temp, Input Voltage, etc.



Picture 1



Picture 2



Picture 3

**INSTALLATION KIT**

Universal Retrofit Kits (UKits) are designed in various shapes and sizes to fit any fixtures/housings. The UKits will typically have an Aluminum plate with mounting holes or slots along the edges of the plate, that would align with the mounting holes in your custom fixture/housing. In case a UKit is too small to align with the mounting points in your fixture/housing, the universal mounting tabs included in this package should help bridge the gap between the mounting slots on the Ukit plate and the mounting holes in the fixture. Please choose and have appropriate screws, washers and nuts available for mounting the kits into your custom fixture. Ukits are shipped with a set of mounting hardware shown in pictures 1, 2 and 3. Check the received package for items listed below. Please contact the supplier if any of item(s) are missing in the package. If the provided hardware does not work with your custom fixture/housing, please retain and reuse the existing hardware for mounting the retrofits.

#	ITEM	NOT INCLUDED WITH	QTY
1	LED Retrofit Kits – per ordered items	-	Per order
2	2.50" Universal Mounting Tabs	-	4 pcs. per kit
3	4.75" Universal Mounting Tabs	-	4 pcs. per kit
4	7.50" Universal Mounting Tabs	SHW/SHB-021, SHW/SHB-042, S150, S300	4 pcs. per kit
5	8-32 x 3/8" Philips Pan Screws	-	8 pcs. per kit
6	#8 Aluminum Washers	-	8 pcs. per kit
7	#8 Wing Nuts / # Flange Nuts	-	8 pcs. per kit

**TOOLS USEFUL FOR INSTALLATION**

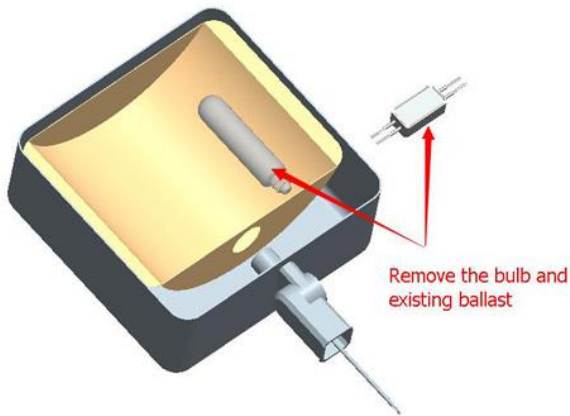
1. #8 Philips Head Screwdriver / Power Drill
2. Pliers, Wire Strippers and Wire Cutters
3. Industrial Hand Gloves



Picture 3



Picture 4



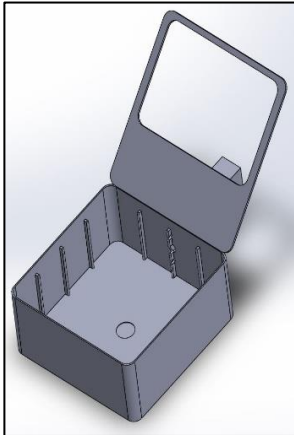
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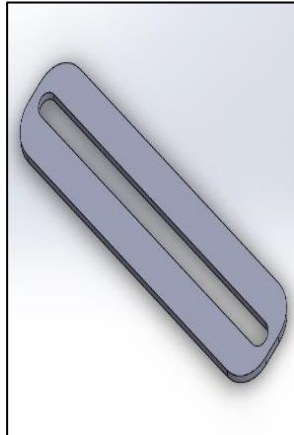
Picture 6

### **PREPARING YOUR FIXTURE/HOUSING FOR RETROFIT INSTALLATION**

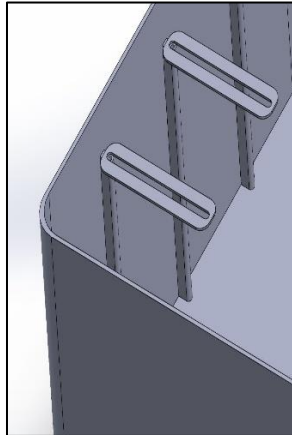
1. Make sure all active power is OFF
2. Open the fixture to be retrofitted as shown in pictures 3 and 4.
3. Note existing mounting locations inside the fixture (highlighted in Picture 4).
4. Remove the existing lamp, ballast, reflector and all other internal parts / lamp components installed inside the fixture as shown in picture 5. **Retrofit warranty is void if the fixture's reflector is not removed.** Under no circumstances is it ok to leave the reflector in the fixture. Removing the reflector provides extra air capacity that is used to keep the led head and driver cool.
5. Please retain and reuse the mounting hardware available in the fixture, to mount the retrofits.
6. Retain the Green Ground connection wire inside the fixture (if available)



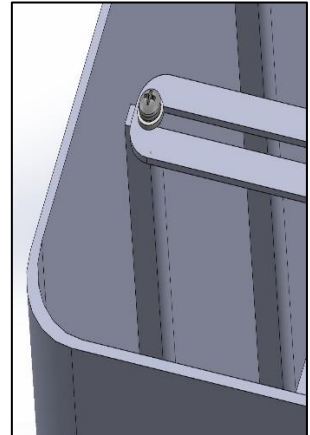
**Picture 7**



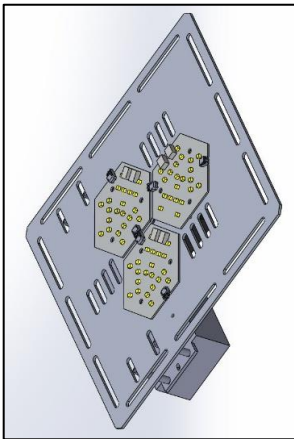
**Picture 8**



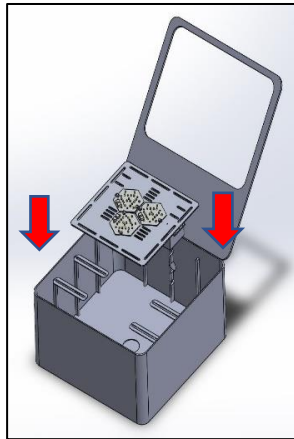
**Picture 9**



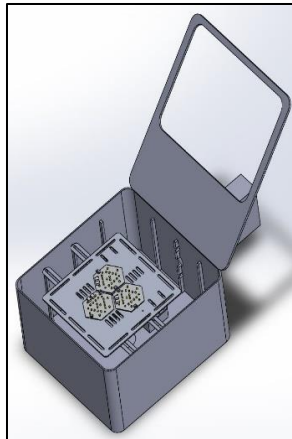
**Picture 10**



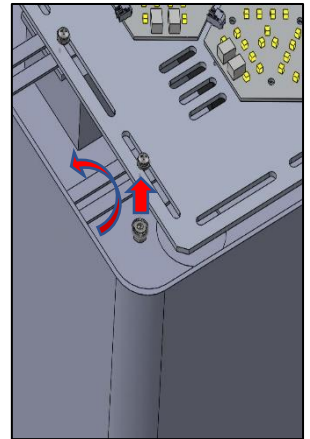
**Picture 11**



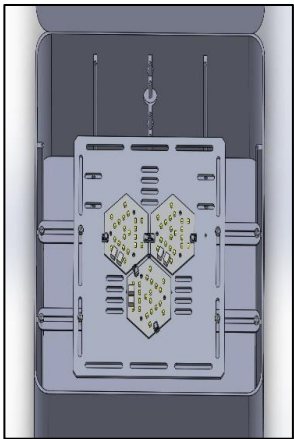
**Picture 12**



**Picture 13**



**Picture 14**



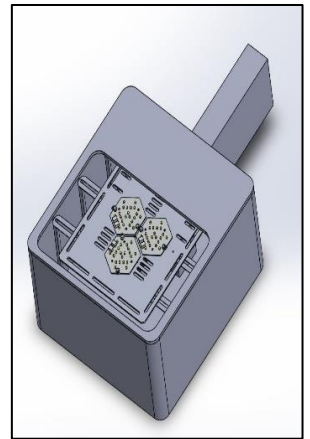
**Picture 15**



**Picture 16**



**Picture 17**



**Picture 18**

### **MOUNTING INSTRUCTIONS**

1. Please wear industrial hand gloves while handling the retrofit kit. Never take the led retrofit apart. Never touch the LEDs. **THIS MAY VOID THE WARRANTY.**
2. Choose an appropriate size mounting tab suitable for mounting locations inside your fixture, from the ones provided with the retrofit kit. Place one end of the mounting tab on one of the mounting holes inside the fixture as shown in pictures 7 - 9.
3. Loosely secure the mounting tab to the fixture using an aluminum washer and one of the retained mounting screws as shown in picture 10.
4. Repeat steps 2 and 3 for desired number of mounting locations inside the fixture.
5. Now place the retrofit kit on the mounting tabs inside the fixture as shown in pictures 11- 13. Rotate and adjust the mounting tab as needed to align with the mounting slots along the edges of the retrofit plate as shown in picture 14. Feel free to bend the tabs as desired to adjust the mounting height inside the fixture. Use a combination of various mounting tabs to reach the mounting locations inside the fixture, keeping the retrofit aligned in the center of the fixture as shown in picture 15.
6. Draw the Black, White and Green wires extending from the retrofit through the fixture opening for power connections as shown in pictures 16 and 17.
7. Tightly secure the retrofit to the mounting tabs with the screws, washers and wing nuts / flange nuts using a philips screwdriver or a power drill as shown in picture 15.
8. Tightly secure all the mounting tabs to the fixture and close the fixture as shown in picture 18.

### **WIRING CONNECTION**

**NOTE: Wire colors can vary, depending on code and circumstances. Make sure that hot, neutral, and ground wires are correctly identified.**

1. Connect the Black supply wire (Line voltage) to the Black wire from the retrofit.
2. Connect the White supply wire (Neutral) to the White wire from the retrofit.
3. Connect the Green supply wire (Ground) to the Green wire from the retrofit.
4. Connect the Positive dimming terminal wire to the connector with Purple/Violet wire from the retrofit (if applicable).
5. Connect the Negative dimming terminal wire to the connector with Grey wire from the retrofit (if applicable).
6. To wire an Emergency Battery Pack (if applicable), please refer to the Wiring Diagrams included in the package with the product.
7. Once the wiring connections are made, mount the fixture in its place as desired, and turn the power ON.

### **TROUBLESHOOTING TIPS**

1. Verify proper line voltage is present and wired to the correct input voltage lead.
2. Verify fixture wiring.
3. Verify fixture is grounded.