

S7 Shoebox Retrofit Kit

INSTALLATION GUIDE

The S7 Shoebox Retrofit Kit from Vega Light Control Systems

- Designed as an easy and reliable way to convert existing fixtures
- Alternative to HID lamps, up to 400W MH and 250W HPS
- · Eliminates mercury & lead
- Reduce carbon footprint & light pollution.
- Tested to the most demanding industry standards:
 - LM-79, LM-80, In-Situ, TM-21 (pending)
 - surge testing to UL 1449 3rd edition
 - · Designed to meet UL 1598C 1st Ed. and , CSA TIL B-79A



PLEASE READ ALL INSTRUCTIONS BEFORE ATTEMPTING INSTALLATION



- RISK OF FIRE OR ELECTRIC SHOCK. INSTALLATION OF THIS RETROFIT ASSEMBLY REQUIRES A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE LUMINAIRE'S ELECTRICAL SYSTEM AND THE HAZARD INVOLVED. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED PERSON.
- RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRES THAT HAS 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.
- DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.
- TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.
- THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION.

AVERTISSEMENT

- RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. L'INSTALLATION DE CE NÉCESSAIRE DE MODERNISATION EXIGE UNE PERSONNE FAMILIÈRE AVEC LA CONSTRUCTION ET LE FONCTIONNEMENT DU SYSTÈME ÉLECTRIQUE DU LUMINAIRE ET DES RISQUES ASSOCIÉS. TOUTE PERSONNE QUI N'EST PAS QUALIFIÉE NE DOIT FAIRE AUCUNE TENTATIVE D'INSTALLATION ET DOIT CONTACTER UNE PERSONNE QUALIFIÉE.
- RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. N'INSTALLER CE NÉCESSAIRE QUE DANS LES LUMINAIRES DONT LES CARACTÉRISTIQUES DE CONSTRUCTION ET LES DIMENSIONS SONT CONFORME À CELLES ILLUSTRÉES DANS LES PHOTOS ET/OU LES DESSINS ET DONT LA PUISSANCE D'ENTRÉE NOMINALE DU NÉCESSAIRE DE MODERNISATION NE DÉPASSE PAS CELLE DU LUMINAIRE.
- IL EST INTERDIT DE FAIRE OU DE MODIFIER UNE OUVERTURE DANS UN BOÎTIER DE CÂBLAGE OU DE COMPOSANTS ÉLECTRIQUES AU COURS DE L'INSTALLATION DU NÉCESSAIRE.
- AFIN DE PRÉVENIR L'ENDOMMAGEMENT OU L'ABRASION DES CÂBLES, ÉVITER TOUT CONTACT ENTRE CES DERNIERS ET LE BORD D'UN OBJET TRANCHANT TEL QU'UNE TÔLE.
- LE NÉCESSAIRE DE MODERNISATION EST ACCEPTÉ À TITRE DE COMPOSANT D'UN LUMINAIRE LORSQUE LA PERTINENCE DE LA COMBINAISON DOIT ËTRE DÉTERMINÉE PAR PAR LES AUTORITÉS COMPÉTENTES







NOTICE

- > TO AVOID ELECTRIC SHOCK DISCONNECT POWER BEFORE ATTEMPTING INSTALLATION OR SERVICING.
- > TO PREVENT PRODUCT MALFUNCTION AND / OR ELECTRICAL SHOCK THIS PRODUCT MUST BE PROPERLY GROUNDED.
- > INSTALLATION MUST BE STRUCTURALLY SOUND TO PREVENT DAMAGE OR PERSONAL INJURY DUE TO FIXTURE COLLAPSE.
- > USE CAUTION WHEN HANDLING THIS PRODUCT DURING OR AFTER OPERATION AS IT MAY BECOME HOT AND CAUSE BURNS.
- > FAILURE TO INSTALL THIS PRODUCT IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), OR THE CANADIAN ELECTRICAL CODE (CSA 22.1), ALL APPLICABLE FEDERAL, STATE AND LOCAL ELECTRIC CODES AS WELL AS THE SPECIFIC UNDERWRITERS LABORATORIES (UL) SAFETY STANDARDS FOR THE INSTALLATION, LOCATION AND APPLICATION MAY CAUSE UNSAFE SITUATIONS LEADING TO SERIOUS PERSONAL INJURY, DEATH, PROPERTY DAMAGE AND/OR PRODUCT MALFUNCTION.
- > THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.
- > FAILURE OF FIXTURE TO PROVIDE SUFFICIENT WEATHER PROTECTION VOIDS WARRANTY.
- > TO PREVENT EARLY PRODUCT FAILURE, THIS PRODUCT SHOULD BE INSTALLED IN OPERATING ENVIRONMENTS WITH MAXIMUM MEAN FIXTURE AMBIENT OPERATING TEMPERATURE FOR LED RETROFIT MODULE: 104°F (40°C); MAXIMUM AMBIENT OPERATING TEMPERATURE CANNOT EXCEED 140°F (60°C).
- > INSTALLATION REQUIREMENTS MAY VARY DEPENDING ON THE LUMINAIRE RETROFITTED.
- ➤ IF INSTALLED IN FIXTURE OTHER THAN INTENDED, CONTACT VEGA CUSTOMER SERVICE TO EVALUATE APPLICABILITY TO FIXTURE. SUPPORT@VEGALIGHTCONTROL.COM, PHONE: 616-259-0700

1. PRODUCT OVERVIEW

LED Light Engine

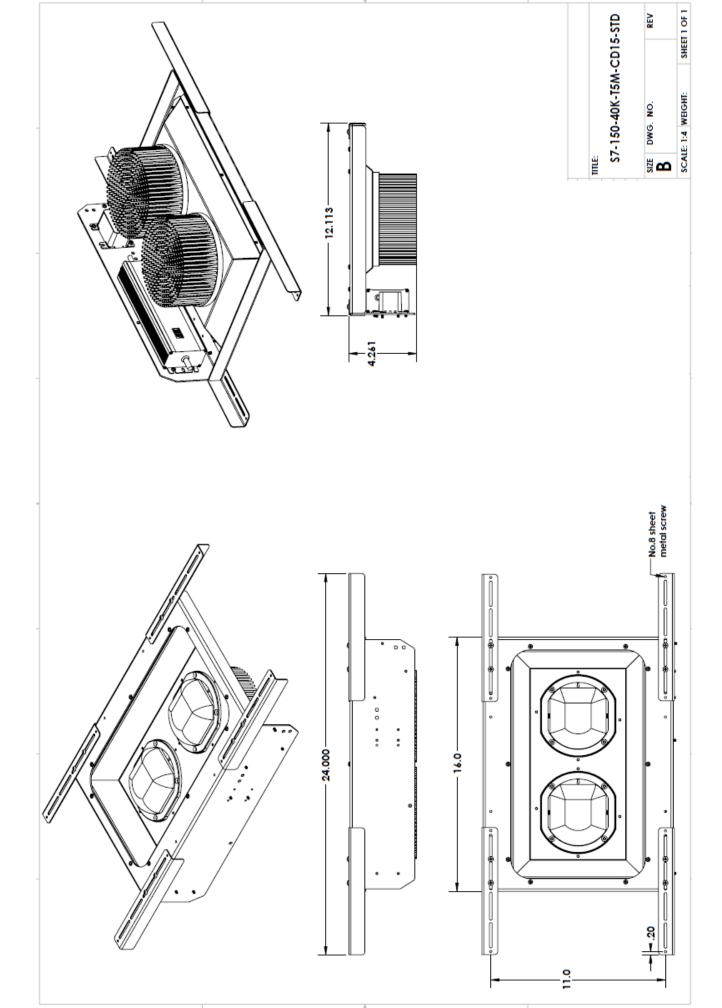
- 80W, 120W, and 150W Versions
- 3000K, 4000K and 5000K CCT Available
- Type 3 and Type 5 Available
- True photometric performance through silicone optics
- Dimming Options:
 - 0-10vdc dimming available

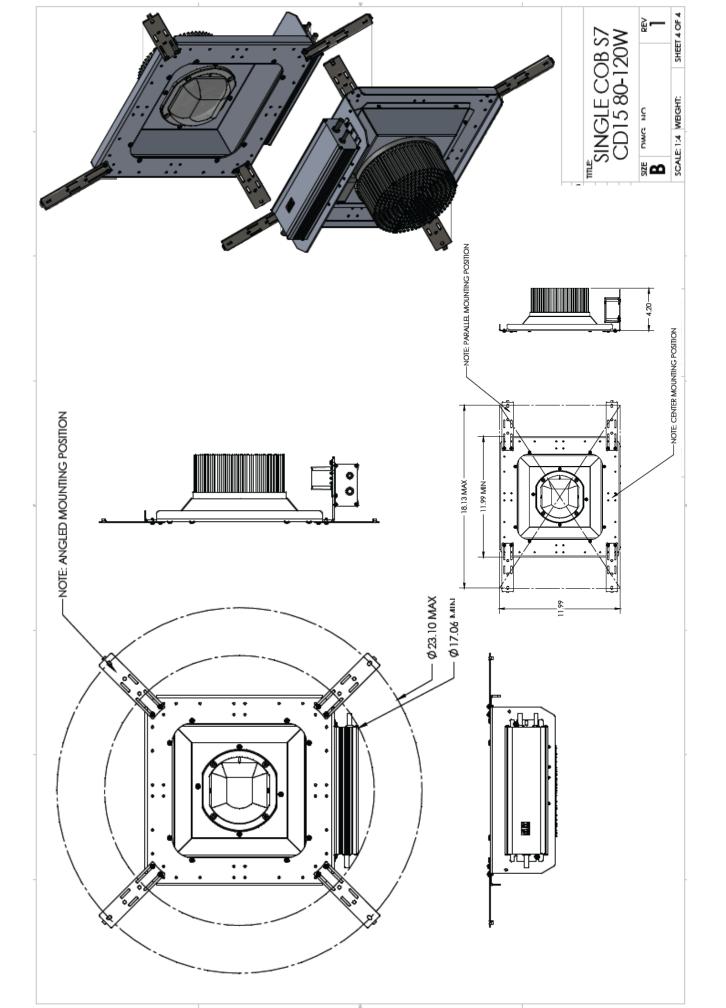
Mechanical Details

- Adjustable Light Engine Assemblies to minimize rework of fixture
- Brand specific bracket designs available in some instances
- Installer must provide sealant/gasket of lens to light engine to restore resistance to water intrusion

Performance Details

- 5 Year replacement warranty, extended warranties available
- 18kA series surge suppression designed to UL1449 3rd edition
- Wet Location rated
- Universal 120-277 VAC, and 480 VAC options
- Drivers qualified to:
 - Life > 50,000 hours
 - power factor of ≥0.9
 - THD of ≤20%
- LEDs qualified to:
 - L70 of 100,000 hours minimum, L90 of 36,000 hours min.





2. INSTALLATION INSTRUCTIONS

Refer to fixture installation manual for fixture mounting procedures

STEP 1: Prepare fixture for installation

- Turn power off before attempting installation
- Remove lamp, original optical components, socket, and ballast
- Separate reflector from lens as shown or replace with new lens





The S7..CD15 retrofit kit must be installed in NRTL Listed Shoebox style fixtures.

The fixture must meet all of the following requirements –

- The fixture must be constructed of metal
- · Must incorporate a glass lens
- · Have minimum dimensions of:
 - 80W Model 16" x 16" x 6"H, 17" Diameter x 7"H, or 1500 cubic inches
 - 120W Model 16" x 16" x 9"H, 17" Diameter x 9"H, or 2400 Cubic Inches
 - 150W Model 18" x 18" x 9.5"H, 22" Diameter x 9"H, or 3000 Cubic Inches

Add Sliding brackets

- The sliding brackets are mounted to the light kit on the 4 corners as shown in drawings.
- Eight #8-18 thread-cutting screws are provided for mounting the brackets to the kit.
- If the rim of the shoebox will allow directly mounting the light kit, then measure the distances to the screw holes at the end of the sliding brackets.
- Mark the shoebox as need and drill 3/16" clearance holes for the four #8-18 threadcutting screws that are provided.

Add Flanges if required for the 150W Model.

- The flanges are designed to be mounted to bosses in the fixture housing.
- Four #8-18 thread-cutting screws are provided for mounting the flanges.
- If the bosses are not drilled then drill them with a #28 (0.1405) drill to a depth of 1".
- Do not use mounting screws smaller than #8



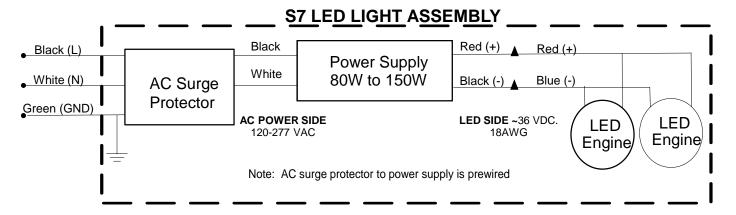
- 1. Place the D15 in the fixture and adjust the brackets such that each bracket rests on the flange of the fixture. The D15 will be attached to the flange using the end holes in the adjustable brackets.
- 2. Mark the positions of the mounting screws and remove the D15.
- 3. Drill four clearance holes for the mounting screws (0.177" #16 drill)
- 4. Place the D15 in the fixture and adjust the brackets.
- 5. Fasten the adjustable brackets to the fixture using the four #8 screws
- Tighten the eight screws (Part F) that hold the adjustable brackets to the D15.

The usable adjustment range of the bracket set is 17" to 24". If Type 3, orient STREET SIDE markings properly

Make all electrical connections as shown in wiring diagram. Apply power to test installation

3. ELECTRICAL INSTRUCTIONS

Wiring diagram for installation



4. RELATED INFORMATION

Maintenance and Cleaning

- Periodic cleaning of fixture will ensure operation at maximum optical efficiency
- Refer to fixture installation instructions for maintenance and cleaning guidelines
- Even though LED Retrofit Kit may continue to light after the specified lifetime has passed, it must be replaced in order to maintain appropriate light levels

5. Troubleshooting

Condition	Possible Reason(s)	Recommended Action
AC surge protector damaged	Surge protector unable to protect unit	 Verify AC voltage at both input and output of surge protector. If within warranty period, contact VEGA sales representative for RMA. If out of warranty period, contact VEGA sales representative for information to replace surge protector.
LEDs are dim or not lit	 DC Cable is unplugged. Power supply has failed LED board is damaged 	 Connect the DC Cable by plugging together the two Molex connectors To identify failed power supply, use clamp meter (tongs) to measure output current. Replace if below rated current. Before replacing power supply, verify AC voltage through surge protector. If within warranty period, contact VEGA sales representative for RMA. If not within warranty period, LED Light Engine should be replaced as it is not user serviceable.
Difficulty experienced during mounting		Contact VEGA representative for recommended action: support@vegalightcontrol.com 616-259-0700 OR visit vegalightcontrolsystems.com for additional reference designs.