Installation Manual for Energy Focus
LEDWP-656VFL-RFK, or similar (LEDWP-XXXyyy-RFK)
US Patent #7182484 B2

Important Product Statement:

This LED retrofit kit is designed to replace / upgrade the original light source and electronics to drive said light source for many different Wall Pack type lights. It is the responsibility of the installer to verify proper application and maintain the original manufacturer's wet location / IP rating for the enclosure or fixture. This kit may not be used if it requires extensive modification to the enclosure that includes drilling through the exterior and/or exposing a pathway for outdoor elements to enter the fixture.

WARNING – Risk of fire or electric shock. Install this kit only in the luminaries that has the construction features and dimensions similar to those shown in the photographs and/or drawings.

WARNING – Risk of fire or electric shock. Reflector kit installation requires knowledge of lighting luminaries electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

Input Voltage: 100 – 240Vac, 0.5A or 277Vac, 0.2A @ 50/60Hz
Nominal LED Array Voltage: Less than 24Vdc
Total Power Consumption: Typical 33 Watts or less
Ambient Operation Temperatures: -20 to 50C

Helpful tools to have on hand:

Offset #2 Phillips head driver (new sharp tip)
Short #2 Phillips head screw driver (new sharp tip)
Heavy Duty Tin Snips

Parts List:

qty.	description
1	LED Light Engine w/ heat sink and circulation fan w/ polarized connector.
1	Isolated Class 2, AC-to-DC power supply (Driver) w/ polarized connector.
1	Bracket kit (consists of two brackets).
1	Hardware pack consisting of: (2) wire nuts (2) 6-32 x 1/2" screws (2) 6-32 nuts (4) star type lock washers (2 smaller, 2 larger sized) (2) 8-32 x 5/8" self-tapping screws (for mounting driver)

Installation Steps:

1) Make certain power is OFF before starting the installation process. Failure to do this may lead to electrical shock and injury.

2) Confirm that the LEDWP product is appropriate for the application and will not disrupt the fixture's original wet / IP rating.

3) Start the conversion process by removing all electrical components inside the fixture including the lamp socket (typically ceramic, removed by 2 short screws), *the bracket the socket was connected to will need to remain*. Be sure to keep as much of the hot and neutral supply line wire accessible as they will need to be connected to. The grounding line to the enclosure needs to be maintained and not removed. Figures 1-5

4) Reflectors may or may not need to be removed if they do not interfere with the LED light engine or impede with the closure and sealing of the fixture. Figures 1-2

5) Due to the issue of unknown hole and interior configurations, a driver support bracket has been supplied for use when only a single screw location is available. Most enclosures have blind hole sockets and/or threaded stand-off locations as well as recently vacated screw sockets for interior component mounting. Chose a location at the back (building wall side) of the enclosure as low as practical to mount the power supply (driver). Use the self-threading 8-32 screws and lock washers to mount into an open hole socket. Using both screws (one at each end) is preferable but if only one is available, use the support bracket to add security and stability to the driver. It must be securely mounted to the interior of the enclosure without penetrating any exterior walls. Figure 6

6) Use the supplied wire nuts to connect the input of the Power Supply to the source line voltage wires. The black wire of the Power Supply connects to the line or Hot wire. The white wire of the Power Supply connects to the neutral wire of the source line.

7) The LED light engine bracket is designed to fit in many different configurations from either left or right sides and in rotation by 90 degree in most cases. Based on the location of the original lamp socket and proximity of the fixture lens, mount the bracket in the appropriate position for that fixture, experimentation may be necessary to find the best position. Use the two supplied 6-32 x 0.5" machine screws, lock washers, and nuts to securely mount the light engine bracket to the original lamp socket bracket. Figure 7

8) Choose a yoke mounting hole on the main bracket that is the most centered within the fixture. If necessary for clearance, the unused ear of the main bracket may be removed with a pair of HD Tin Snips. Use the remaining 6-32 x 0.5" screw, locking washers, and nut to securely mount the light engine yoke to the main bracket.

9) Align/aim the tilt of the light engine to the desired angle and tighten the yoke screws on the light engine. Ensure that all brackets and screws are firm – take care to not over tighten. Figure 8

10) Connect the light engine with the power supply via the polarized, 2-pin connector. Close and seal the fixture, re-apply power to the circuit and test for function and aim. Aiming adjustments may give different lighting results, test for best output per application. Figure 8


Fig. 1

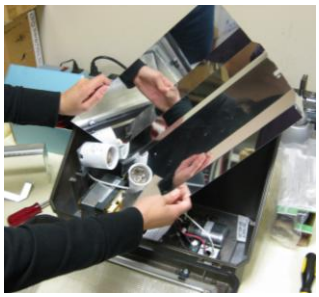
Fig. 2


Fig. 3


Fig. 4


Fig. 5


Fig. 6

Fig. 7

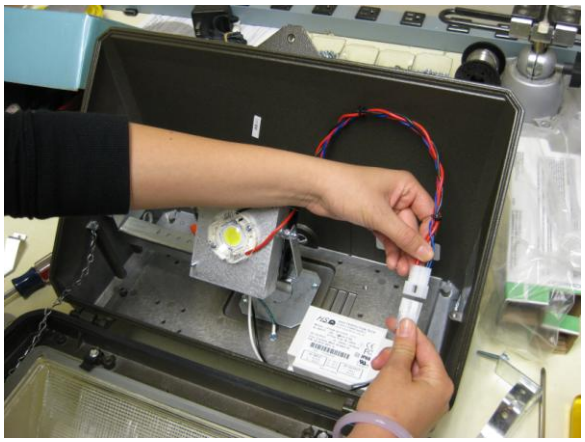

Fig. 8

Troubleshooting Tips:

1. If the LED fails to light, turn off power at the breaker and check for loose connections at the wire nuts and connector.

2. If a 'heart beat' like flicker is seen at the LED light source, the circulation fan may be stuck (a loose wire or foreign object may have jammed the fan rotor). Turn off power at the breaker and check for a stuck fan rotor condition. Correct and return to normal service.

3. If any other abnormal conditions are noticed, remove power immediately and call your service company.