



# LED VAPOR RETROFIT KIT SERIES



## TiHO - VPHBRK - 90 Watts

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### Product Description:

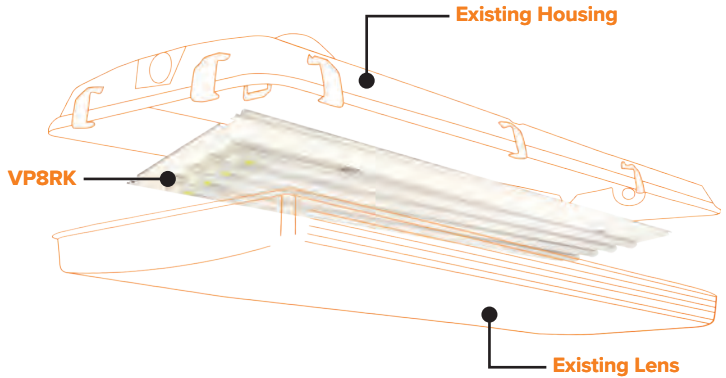
Premium grade LED retrofit for existing fluorescent vapor tight fixtures. Upgrade existing vapor tight fixtures to LED in under 5 minutes.



Project: \_\_\_\_\_ Date: \_\_\_\_\_  
Catalog #: \_\_\_\_\_  
Notes: \_\_\_\_\_

### Key Features & Benefits:

- Single Piece Design
- 0-10v Dimming Driver with 12v Aux
- 7 Year Warranty
- Frosted Ti Bars Enables Use of Existing Clear Lens
- Control Options
  - Photocell
  - Occupancy
- Emergency Capable



### Performance Summary:

Wattage: 90  
 Lumens: Up to 13,765 Lumens  
 Efficacy: Up to 155 Lumens per Watt  
 Kelvin: 4000K, 5000K  
 Color Rendering Index (CRI): >82  
 Rated Life: > 80,000 hrs

### High Bay (VPHBRK) Fixture Retrofit Compatibility:

- ILP Blizzard Series
- Lithonia FHE Series
- Cooper VT4 Series
- Columbia XEW4 Series
- Philips DayBrite CFI Series

### Ordering Guide:

<b>ESL</b>	-	<b>TiHO</b>	-	<b>VPHBRK</b>	-	<b>P</b>	-	<b>90W</b>	-	<b>F</b>	
ESL		TYPE		SERIES		PERFORMANCE		WATTS		Ti LENS	KELVIN
		TiHO Series		VPHBRK (High Bay Vapor Retrofit)		P (Premium)		60W (60 Watts) 90W (90 Watts) 120W (120 Watts) 150W (150 Watts) 180W (180 Watts)		F (Frosted)	40 (4000 Kelvin) 50 (5000 Kelvin)

### Accessories (Field Installed)

<b>Sensors:</b>
ESL-REM-100 (Hand Held Remote to Control ESL-4OCC-LDD)
<b>Lens:</b>
ELS-VPHB-LENS-PC-CL (Highbay Polycarbonate Clear Lens)
ELS-VPHB-LENS-PC-FR (Highbay Polycarbonate Frosted Lens)
ELS-VPHB-LENS-AC-CL (Highbay Acrylic Clear Lens)
ELS-VPHB-LENS-AC-FR (Highbay Acrylic Frosted Lens)

\*Not all lenses are stocked items. Alternative lens options available. Please contact factory for more information.

### Options (Factory Installed)

<b>Emergency BBU:</b>
ESL-EMG-SL1-OTB-9W (9 Watts Output, 90Min, 120-277VAC Input, 10-300VDC Output, Open Terminal Block Wiring)
ESL-EMG-SL2-CLW-5W (5 Watts Output, 90Min, 120-277VAC Input, 20-250VDC Output, Closed Lead Wiring)
ESL-EMG-SL3-CLW-5W (5 Watts Output, 90Min, 120-277VAC Input, 20-50VDC Output, Closed Lead Wiring)
ESL-EMG-SL1-CDC-18W (18W Output, 90Min, 120-277VAC Input, 20-300VDC Output, Closed Frame with Dual Flex Conduits)
<b>Sensors:</b>
ESL-3OCC (IP65 0-10v Occupancy Dimming Sensor. 8'- 50' Mounting, Wire From Side)
ESL-3OCCB (IP65 0-10v Occupancy Dimming Sensor. 8'- 50' Mounting, Wire From Top)

### Options & Accessories:



#### ESL-30CC / ESL-30CCB

Sensor Type: Microwave

Sensitivity Adjustment: 20% / 50% / 75% / 100%

Dimming Control Output: 0-10V Max. 25mA sinking current

Detection Radius/angle: 26.2ft@50ft Height/360°

Detection Area (square footage): 2155ft<sup>2</sup>@50ft Height/360°

Mounting Height: 50ft Max

Remote Range: 50ft

For more information please see the  
ESL-30CC cut sheet



#### ESL-REM-100



#### ESL-EMG-SL1-OTB-9W

#### ESL-EMG-SL2-CLW-5W

#### ESL-EMG-SL3-CLW-5W

#### ESL-EMG-SL1-CDC-18W

For more information please see the  
ESL-EMG-SL1-OTB-9W cut sheet  
ESL-EMG-SL2-CLW-5W cut sheet  
ESL-EMG-SL3-CLW-5W cut sheet  
ESL-EMG-SL1-CDC-18W cut sheet

### VP4RK - Catalog Data:

ESL	TYPE	SIZE	WATTAGE	FROSTED	KELVIN		KELVIN		KELVIN		KELVIN	
					3000K (30)		3500K (35)		4000K (40)		5000K (50)	
					LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
ESL-Ti-VP4RK-S-26W-F					3,620	139	3,665	141	3,720	143	3,750	144
ESL-Ti-VP4RK-S-36W-F					4,645	129	4,610	128	4,570	127	4,550	126
ESL-Ti-VP4RK-S-44W-F					6,070	138	6,200	141	6,350	144	6,450	144
ESL-TiHO-VP4RK-P-60W-F					N/A	N/A	N/A	N/A	8,020	133	8,165	136

### VP8RK - Catalog Data:

ESL	TYPE	SIZE	WATTAGE	FROSTED	KELVIN		KELVIN		KELVIN		KELVIN	
					3000K (30)		3500K (35)		4000K (40)		5000K (50)	
					LUMENS	LPW	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
ESL-Ti-VP8RK-S-36W-F					4,595	127	4,610	128	4,645	129	4,680	130
ESL-Ti-VP8RK-S-44W-F					5,725	130	5,765	131	5,810	132	5,650	133
ESL-Ti-VP8RK-S-60W-F					7,785	130	7,860	131	7,920	132	7,980	133
ESL-Ti-VP8RK-S-88W-F					10,950	124	11,000	125	11,090	126	11,175	127
ESL-TiHO-VP8RK-P-120W-F					N/A	N/A	N/A	N/A	15,750	131	15,600	130
ESL-TiHO-VP8RK-P-180W-F					N/A	N/A	N/A	N/A	23,800	132	24,300	135

### VPHBRK - Catalog Data:

ESL	TYPE	SIZE	WATTAGE	FROSTED	KELVIN		KELVIN	
					4000K (40)		5000K (50)	
					LUMENS	LPW	LUMENS	LPW
ESL-TiHO-VPHBRK-P-60W-F					9,013	150	9,216	154
ESL-TiHO-VPHBRK-P-90W-F					13,525	150	13,765	155
ESL-TiHO-VPHBRK-P-120W-F					17,876	150	18,125	151
ESL-TiHO-VPHBRK-P-150W-F					22,821	152	23,019	151
ESL-TiHO-VPHBRK-P-180W-F					27,128	151	27,320	152

### 4' (VP4RK) & 8' (VP8RK) Fixture Retrofit Compatibility:

- Columbia XEM & HEM Series
- LSI EG3 Series
- HE Williams 96 Series
- Simkar ENZ Series
- Texas Fluorescents CIT Series
- Atlas IFW Series
- LDPI 376 Series
- Daybrite DW Series
- Contact factory for custom configurations

### High Bay (VPHBRK) Fixture Retrofit Compatibility:

- ILP Blizzard Series
- Lithonia FHE Series
- Cooper VT4 Series
- Columbia XEW4 Series
- Philips DayBrite CFI Series

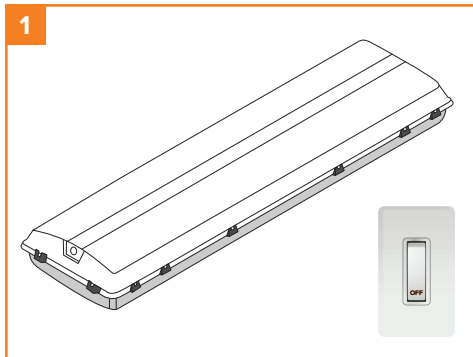
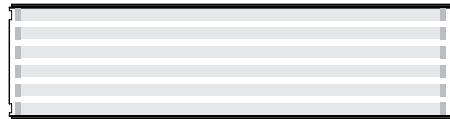


Install this retrofit kit only in fixtures that contains 4 metal retainerclips similar to this

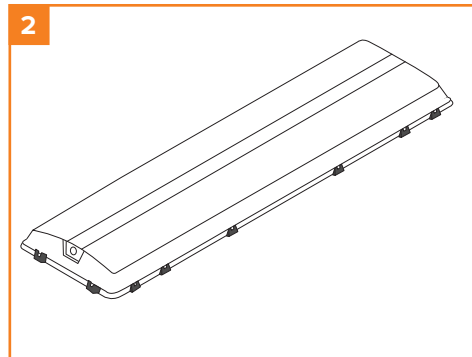
### High Bay VPHBRK Installation:

#### Included Parts:

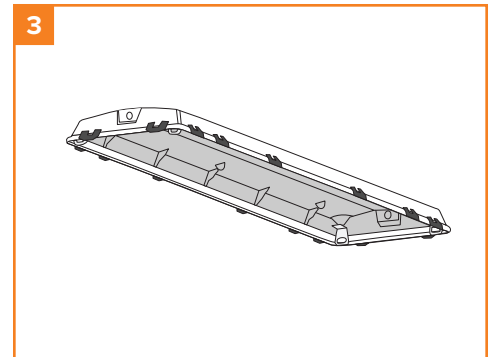
- (1) Ti LED Retrofit Plate



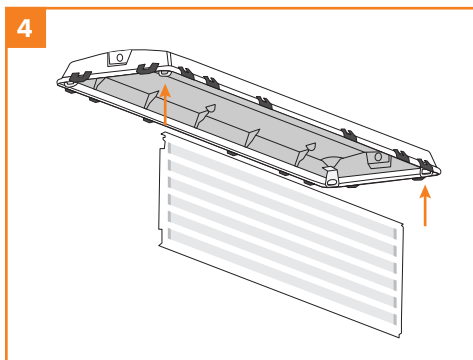
1 Disconnect power to the fixture



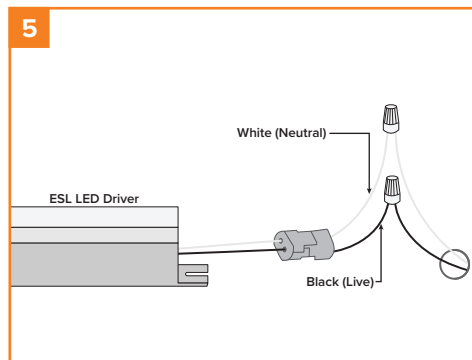
2 Unhinge latches to remove lens



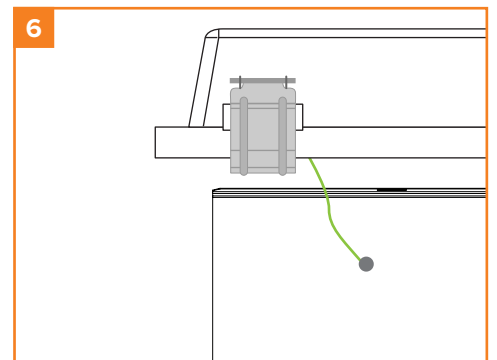
3 Disconnect ballast and remove existing gear tray from fixture. If ballast is not installed on gear tray, remove from housing.



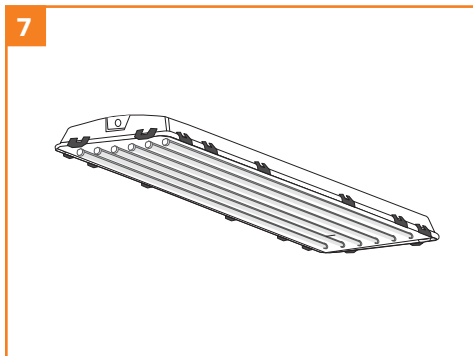
4 Attach the VPHBRK Retrofit kit plate to 2 of the metal retainer clips.



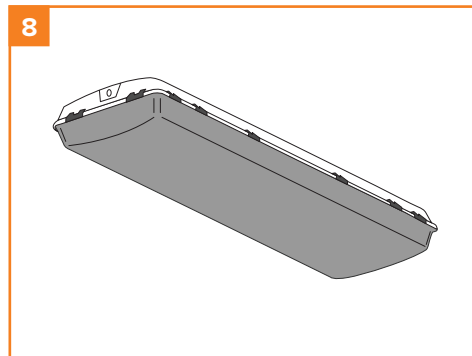
5 Connect AC input lines to incoming AC power using the proper connectors in accordance with current state and federal regulations.



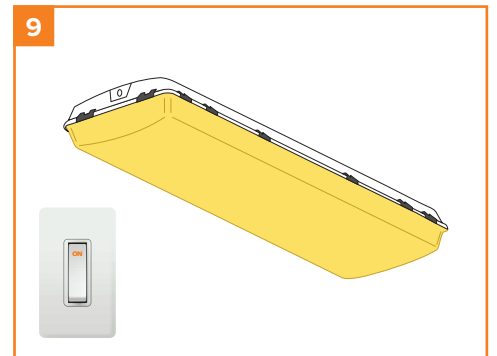
6 Ground the retrofit kit.



7 Once all electrical connections are made, attach the VPHBRK Retrofit kit plate to 2 remaining metal retainer clips.



8 Reattach the lens to the fixture body.



9 Restore power to the fixture to complete installation.

### Product Specifications:

#### Construction:

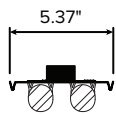
- Single piece design with pre-punched holes allowing for quick and easy installation
- Die-formed and embossed code 22 gauge steel
- High reflectance, baked white enamel finish

#### Electrical:

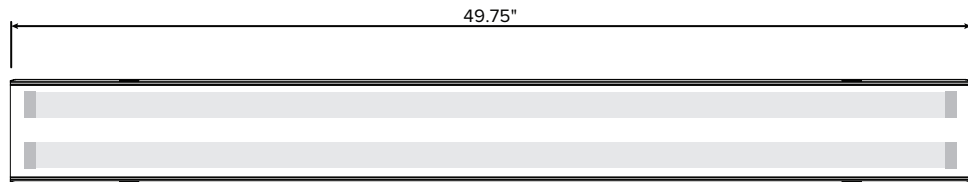
- Input Voltage: 120-277 VAC
- Power Factor @120 VAC - 0.97%, @277 VAC - 0.90%
- THD @110 VAC <10%, @277 VAC <15%
- Operating Temperature: -4°F to 122°F (-20°C to 50°C)
- CRI: >82
- Lifespan: >80,000 Hours
- Dimming: 0-10V Dimmable

### Dimensions:

#### VP4RK SERIES

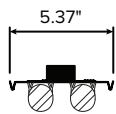


Side View

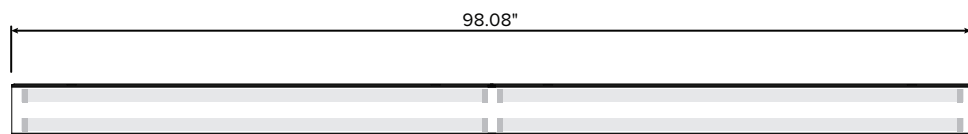


Front View

#### VP8RK SERIES

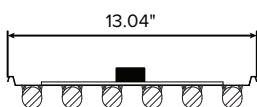


Side View

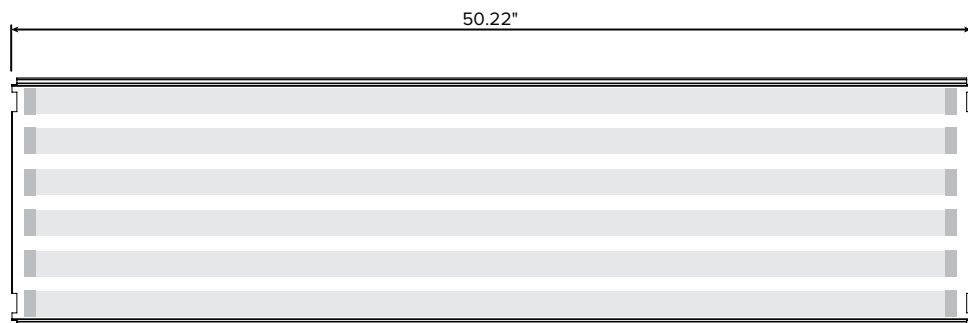


Front View

#### VPHBRK SERIES



Side View



Front View



# LED VAPOR RETROFIT KIT SERIES



## Technical Data

### Lumen Ambient Temperature (LAT) Multipliers:

AMBIENT		LUMEN MULTIPLIER
0 °C	32 °F	1.02
10 °C	50 °F	1.01
20 °C	68 °F	1
25 °C	77 °F	1
30 °C	86 °F	1
40 °C	104 °F	0.99
50 °C	122 °F	0.96

### LED Lumen Maintenance:

SYSTEM WATTS	HOURS			
	0	25000	50000	100000
<b>VP4RK</b>				
26	-	-	-	-
36				
44				
60				
<b>VP8RK</b>				
36	-	-	-	-
44				
60				
88				
120				
180				
<b>VPHBRK</b>				
60	-	-	-	-
90				
120				
150				
180				

### VP4RK - Electrical Load:

SYSTEM WATTS	INPUT CURRENT				INPUT VOLTAGE	INPUT FREQUENCY	POWER FACTOR	THD	OPERATING TEMPERATURE	DIMMING
	120 VAC	208 VAC	240 VAC	277 VAC						
26	0.22	0.13	0.11	0.09	120-277 VAC	50/60 Hz	>0.97 @120 VAC >0.90 @277 VAC	<10% @110VAC <15% @277VAC	-4°F to 122°F (-20°C to 50°C)	0-10V
36	0.30	0.17	0.15	0.13						
44	0.37	0.21	0.18	0.16						
60	0.50	0.29	0.25	0.22						

### VP8RK - Electrical Load:

SYSTEM WATTS	INPUT CURRENT				INPUT VOLTAGE	INPUT FREQUENCY	POWER FACTOR	THD	OPERATING TEMPERATURE	DIMMING
	120 VAC	208 VAC	240 VAC	277 VAC						
36	0.30	0.17	0.15	0.13	120-277 VAC	50/60 Hz	>0.97 @120 VAC >0.90 @277 VAC	<10% @110VAC <15% @277VAC	-4°F to 122°F (-20°C to 50°C)	0-10V
44	0.37	0.21	0.18	0.16						
60	0.50	0.29	0.25	0.22						
88	0.73	0.42	0.37	0.32						
120	1.00	0.58	0.50	0.43						
180	1.50	0.87	0.75	0.65						

### VPHBRK - Electrical Load:

SYSTEM WATTS	INPUT CURRENT				INPUT VOLTAGE	INPUT FREQUENCY	POWER FACTOR	THD	OPERATING TEMPERATURE	DIMMING
	120 VAC	208 VAC	240 VAC	277 VAC						
60	0.50	0.29	0.25	0.22	120-277 VAC	50/60 Hz	>0.97 @120 VAC >0.90 @277 VAC	<10% @110VAC <15% @277VAC	-4°F to 122°F (-20°C to 50°C)	0-10V
90	0.75	0.43	0.38	0.32						
120	1.00	0.58	0.50	0.43						
150	1.25	0.72	0.63	0.54						
180	1.50	0.87	0.75	0.65						