

12V AC Retrofit Koto™ LED Module

Works with 3" and 4" ELCO 12V AC Housings with 3" and 4" Koto™ Trims as a retrofit option



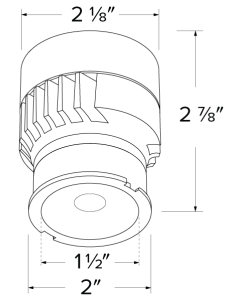
Features

- 9W, 800 lm, 3000K
- Integrated 12V AC Dimmable Driver
- Works with Electronic and Magnetic 12V AC transformers
- Works in 3" and 4" ELCO Low Voltage Housings with GU5.3 Base.
- Excellent color rendering 93+ CRI
- Standard 38° Lens installed, 25° and 60° lens included with each module - Optional Lens: 18° (EP731C).
- Optional: Louver (L45), Linear Lens (L46), Spread Lens (L47), Clear Lens (L48), Frosted Lens (L49), White Koto Snoot (L50W), Black Koto Snoot (L50B), Color Shifter (L51), Blue Lens (L52), Pink Lens (L53), Single Asymmetric Lens (L54), Double Asymmetric Lens (L55)
- Title 24 JA8-2019 Compliant
- Meets Energy Star Requirements
- Covered by U.S. PATENTS and Patents Pending

Specifications

Wattage	9W
Lumens	800 lm
Voltage	12V AC
Color Temp.	2700K
Lamp Type	LED
Beam Angle	25°, 38°, 60°
CRI	90

Dimensions



Technical Details

Optics: Frosted polycarbonate module lens diffuses light evenly throughout while reducing glare with LED technology.

Construction: Integrated 12V AC driver and light engine. Diecast aluminum body with heat fins allow for efficient cooling.

Installation: Twist-lock design for toolless trim installation. Works in 3" and 4" ELCO Low Voltage Housings with GU5.3 Base using 3" and 4" Koto™ Trims.

Electrical: Module connects to 12V AC power supply. High efficiency driver with a power factor >0.9. Start time of less than 0.75 seconds.

LED Technology: Extremely accurate Color Rendering Index of 90+. Lumen Maintenance of 50,000 hours L70 Life based on LM80 standardized test results. Superior Thermal Management by utilizing integrated heat sink. Instant On to Full Brightness technology. No LED pixilation.

Sunset: Sunset color temperature is our dim-to-warm LED technology that allows the color temperature to become warmer as the product is dimmed. Our SUNSET items start at 3000K and go as low as 1800K when dimmed. For Sunset dim technology be sure to order an item with "Sunset" in the Color Temperature (CCT) attribute.

Dimmability: Dims down to 10%. For full list of dimmers, refer to the Dimmer Compatibility List. Industry leading dimming.

Warranty: ELCO Products are built to last with a 5-year Limited Warranty.

Product Number

Item	Lamp type	Lumens	CCT	Watts	Voltage	Beam Angle
ELK0827-12	LED	800 lm	2700K	9W	12V AC	25°, 38°, 60°

Product Number Builder Example: **ELK0827-12**

12V AC Retrofit Koto™ LED Module	Lumens	Color Temp.	Voltage
ELK	08 800 (9W)	27 2700K 30 3000K SD Sunset ¹	-12 12V AC

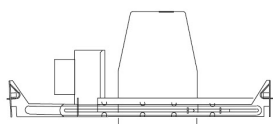
¹ Sunset, Dim to Warm technology, automatically transitions from 3000K to 1800K when dimmed

Compatible Products



For use with **Koto™ 12V AC Retrofit LED Light Engine**

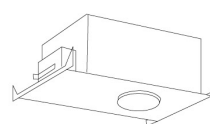
For Retrofitting 3" Bi-Pin 12V AC GU5.3 Housings



3" Low Voltage Housing
New Construction



3" Low Voltage Housing
Remodel



3" Low Voltage Housing
New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
EL2699LDICA	Magnetic Transformer	EL2699LDRICA	Magnetic Transformer	EL2699ICA	Magnetic Transformer, 50W Max.
EL2699LDICEA	Electronic Transformer	EL2699LDRICEA	Electronic Transformer	EL2699ICEA	Electronic Transformer, 50W Max.
EL2699A	120V Magnetic Transformer	EL2699RA	120V Magnetic Transformer		
EL2699-277A	277V Magnetic Transformer	EL2699R-277A	277V Magnetic Transformer		
EL2699EA	120V Electronic Transformer	EL2699REA	120V Electronic Transformer		

3" Pex™ Twist-On Trims

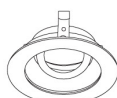


Round Deep Reflector

ELK3618

Finishes:

(W, BB, BZ, B, C, H)



Round Adjustable Gimbal

ELK3629

Finishes:

(W, BB, BZ, B, C, H)



Round Adjustable Pinhole

ELK3627

Finishes:

(B, BB, BZ, B, H)



Round Adj. Slot Aperture

ELK3620

Finishes:

(W)

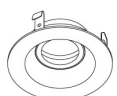


Round Adj. Wall Wash

ELK3622

Finishes:

(W)

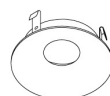


Round Regressed Eyeball

ELK3653

Finishes:

(W, BB, B)

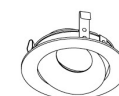


Round Curved Reflector

ELK3672

Finishes:

(W, B)

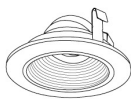


Round Directional Gimbal

ELK3679

Finishes:

(W, BB, B, H)

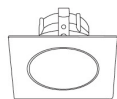


Round Adjustable Baffle

ELK3693

Finishes:

(W)

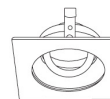


Square Deep Reflector

ELK3318

Finishes:

(W, BB, BZ, B, C, H)

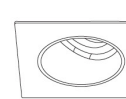


Square Adjustable Reflector

ELK3329

Finishes:

(W, BB, BZ, B, C, H)



Square Adj. Wall Wash

ELK3322

Finishes:

(W)

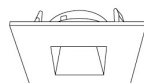


Square Adjustable Pinhole

ELK3327

Finishes:

(W, BB, BZ, B, H)

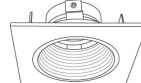


Square Reflector

ELK3341

Finishes:

(W, BB, BZ, B)



Square Adjustable Baffle

ELK3393

Finishes:

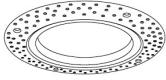
(W)

*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

Compatible Products

For use with **Koto™ 12V AC Retrofit LED Light Engine**

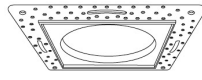
3" Pex™ Flush Mount Trim Adaptors



Round Flush Mount Trim Adaptor

EL3FMR

Compatible 3" Pex™ Round trims:
ELK3618, ELK3629, ELK3627, ELK3693,
ELK3620, ELK3622 Series



Square Flush Mount Trim Adaptor

EL3FMS

Compatible 3" Pex™ Square trims:
ELK3318, ELK3329, ELK3322, ELK3327,
ELK3341, ELK3393 Series

3" Pex™ Trimless



Recommended to be
used with Maximum
Adjustability Housing



Round Trimless Reflector

ELK308

Finishes:
(W, B, H)



Round Adjustable Trimless Reflector

ELK315

Finishes:
(W, B, H)



Round Trimless Spackle Frame

EL3SFR

For use with ELK315



Round Knife Edge Wood Ceiling Trim w/Mounting Clips

EL3WCR

Finishes:
(W, B)



Square Trimless Reflector

ELK370

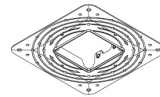
Finishes:
(W, B, H)



Square Adjustable Trimless Reflector

ELK381

Finishes:
(W, B, H)



Square Trimless Spackle Frame

EL03SFS

For use with ELK370 & ELK381

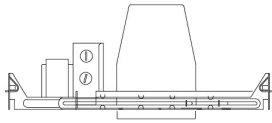
Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B*** - All Black (For ELK315, ELK370, & ELK381)

Compatible Products



For use with **Koto™ 12V AC Retrofit LED Light Engine**

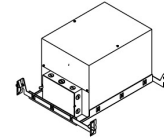
For Retrofitting 4" Bi-Pin 12V AC GU5.3 Housings



4" Low Voltage Housing
New Construction



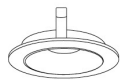
4" Low Voltage Housing
Remodel



4" Low Voltage Housing
New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
EL1499LDICA	Magnetic Transformer	EL1499LDRICA	Magnetic Transformer	EL1499ICA	Magnetic Transformer, 50W
EL1499LDICEA	Electronic Transformer	E1499LDRICEA	Electronic Transformer	EL1499ICA-277	Magnetic Transformer, 50W
EL1499A	Magnetic Transformer, 50W	EL1499RA	Magnetic Transformer	EL1499ICA-L	Magnetic Transformer, 50W
EL1499-277A	Magnetic Transformer, 50W	EL1499REA	Electronic Transformer	EL1499ICEA	Electronic Transformer, 50W
EL1499EA	Electronic Transformer, 50W				

4" Pex™ Twist-On Trims



Shallow Reflector
ELK4116
Finishes:
(W, H)



Deep Reflector
ELK4118
Finishes:
(W, BB, BZ, B, C, H)



Adjustable Reflector
ELK4129
Finishes:
(W, BB, BZ, B, C, H)



Adjustable Reflector with Clear Glass
ELK4111
Finishes:
(W, BB, BZ, B, C, H)



Adjustable Reflector with Frosted Lens
ELK4112
Finishes:
(W, BB, BZ, B, C, H)



Rotatable Slot Aperture
ELK4120
Finishes:
(W)



Adjustable Wall Wash
ELK4122
Finishes:
(W)



Adjustable Pinhole
ELK4127
Finishes:
(W, BB, BZ, B, H)



Adjustable Pinhole with Frosted Glass
ELK4125
Finishes:
(W, BB, BZ, B, H)



Slot Aperture
ELK4130
Finishes:
(W)



Adjustable Spot
ELK4188
Finishes:
(W, B, BZ)



Regressed Eyeball
ELK4153
Finishes:
(W, BB, B)



Curved Reflector
ELK4172
Finishes:
(W, B)



Directional Gimbal
ELK4179
Finishes:
(W, BB, B, H)



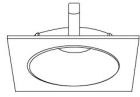
Adjustable Baffle
ELK4193
Finishes:
(W, BB, B)

*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

Compatible Products

For use with **Koto™ 12V AC Retrofit LED Light Engine**

4" Pex™ Twist-On Trims



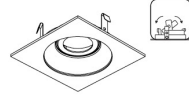
Shallow Reflector

ELK4216
Finishes:
(W, H)



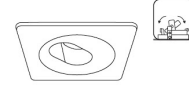
Deep Reflector

ELK4218
Finishes:
(W, BB, BZ, B, C, H)



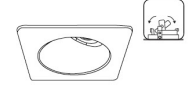
Adjustable Gimbal

ELK4229
Finishes:
(W, BB, BZ, B, C, H)



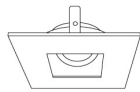
**Adjustable Slot
Rotatable Aperture**

ELK4220
Finishes:
(W)



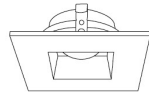
**Adjustable
Wall Wash**

ELK4222
Finishes:
(W)



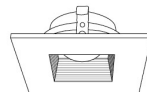
Adjustable Pinhole

ELK4227
Finishes:
(W, BB, BZ, B, C, H)



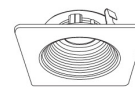
Adjustable Reflector

ELK4282
Finishes:
(W, BZ)



Adjustable Baffle

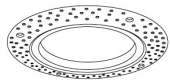
ELK4284
Finishes:
(W, B, BZ)



Adj. Phenolic Baffle

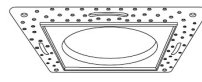
ELK4293
Finishes:
(W, BB, B)

4" Pex™ Flush Mount Trim Adaptors



Round Flush Mount Trim Adaptor

EL4FMR
Compatible 3" Pex™ Round trims:
ELK4116, ELK4118, ELK4127, ELK4129,
ELK4710, ELK4713, ELK4715 Series



Square Flush Mount Trim Adaptor

EL4FMS
Compatible 3" Pex™ Square trims:
ELK4216, ELK4218, ELK4227,
ELK4229 Series

4" Pex™ Trimless



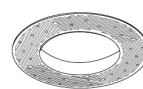
Round Trimless Reflector

ELK408
Finishes:
(W, B, H, BZ)



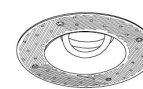
Round Adj. Trimless Reflector

ELK415
Finishes:
(W, B, H, BZ)



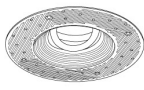
Round Trimless Spackle Frame

EL4SFR
For use with ELK408 & ELK415



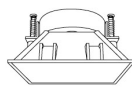
Smooth Reflector

ELK430
Finishes:
(W, B, BZ)



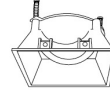
Baffle

ELK434
Finishes:
(W, B, BZ)



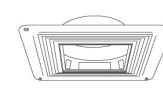
Square Trimless Reflector

ELK445
Finishes:
(W, B, H)



Square Trimless Adj. Reflector

ELK459
Finishes:
(W, B, H)



Square Trimless Spackle Frame

EL4SFS
For use with ELK445 & ELK459

*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

Compatible Products

For use with **Koto™ 12V AC Retrofit LED Light Engine**

4" Flexa™ Twist-On Trims

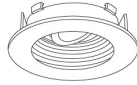


Round Reflector

ELK4721

Finishes:

(**WW, BB, BZBZ, BW, CW, HW**)

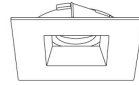


Round Baffle

ELK4723

Finishes:

(**WW, BB, BZBZ, BW**)



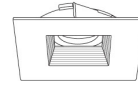
Square Reflector

ELK4741

Finishes:

(**WW, BB, BZBZ, BW, HW**)

**Not for Remodel Housing*



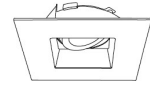
Square Baffle

ELK4743

Finishes:

(**WW, BB, BZBZ, BW**)

**Not for Remodel Housing*



Square Adj. Reflector

ELK4759

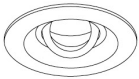
Finishes:

(**WW, BB, B, H**)

**Not for Remodel Housing*

Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B*** - All Black (For ELK408, ELK415, ELK434, ELK445, ELK459)

4" Unique™ Twist-On Trims

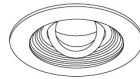


Round Adjustable Reflector

ELK4710

Finishes:

(**W, B, BZ**)

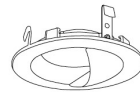


Round Adjustable Baffle

ELK4713

Finishes:

(**W, BZ**)

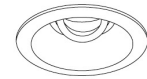


Round Wall Wash

ELK4715

Finishes:

(**W, BZ**)

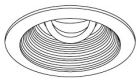


Round Adj. Deep Reflector

ELK4717

Finishes:

(**W, BZ**)

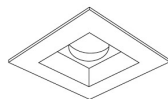


Round Adj. Deep Baffle

ELK4719

Finishes:

(**W**)



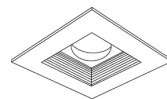
Square Reflector

ELK4714

Finishes:

(**W, B, BZ**)

**Not for Remodel Housing*



Square Baffle

ELK4716

Finishes:

(**W, BZ**)

**Not for Remodel Housing*

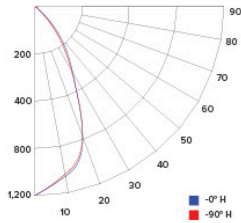
Finishes: **W** - All White, **B** - All Black, **BZ** - All Bronze

Photometric Report

12V AC Retrofit Koto™ LED Module

PHOTOMETRIC REPORT

Product #: ELK0830-12
 Wattage / Lumens: 10W / 971.7 lm
 Luminaire LPW: 97 lm/W



CANDLE POWER SUMMARY

Degree Vertical	0°
0	1199
5	1152
15	968
25	540
35	252
45	95
55	31
65	13
75	6
85	2
90	1

ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	103.3	3.1'
6'	36.4	4.7'
8'	18.7	6.3'
10'	12.6	7.8'

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	565.3	70.6
0-40°	697.3	87.1
0-60°	780.3	97.5
0-90°	796.0	99.4