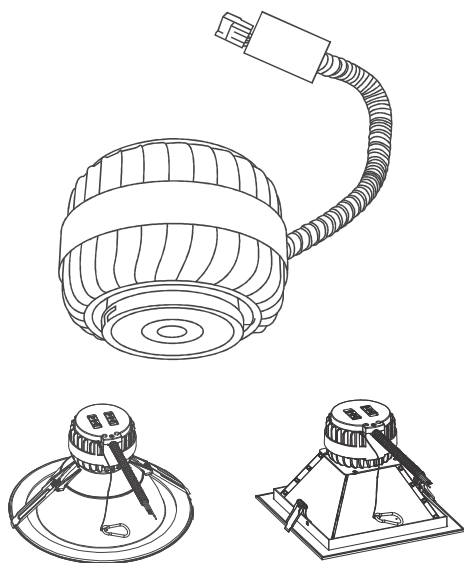


ELCO Lighting

Birch Series Downlight



INSTALLATION MANUAL

Please read and understand this entire manual before attempting to assemble, operate or install the product.



WARNING: First please read all product labels and instruction before installing fixture. Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaires electrical systems. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and relevant local code. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation. The recessed luminaire is intended for mounting only in a covered ceiling where only the led side of the luminaire will be exposed to damp or dry locations.

INSTALLATION SHOULD ONLY BE PERFORMED AFTER POWER TO THE FIXTURE HAS BEEN DISCONNECTED. THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION.

Product Information

Illustrations on the manual are for installation purpose only. It may not be identical to the fixture purchased. For information, please visit website elcolighting.com.

DIMMABLE

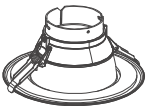
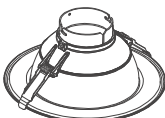
Compatible with most wall based 0-10V dimming controllers

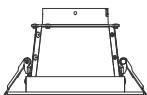
ELCO Lighting Birch series downlight is a modular design. The dimensions of Light Engines + Reflector kits are as shown below:

No.	Light Engines	Reflector Kits	Size	Light Engines+Reflector Kits	Dimensions (Inch)	Cut-outs (Inch)
1	ELB15RCT5ICA	ELB410W or ELB410H or ELB410HW or ELB410BB	4"		Φ6.85*H5.47	Φ4.72-5.46
2	ELB30R30	ELB610W or ELB610H or ELB610HW or ELB610BB	6"		Φ8.45*H5.97	Φ6.3-7.01
3	ELB30R35	ELB810W or ELB810H or ELB810HW or ELB810BB	8"		Φ10.28*H6.76	Φ7.87-8.74
4	ELB50R30	ELB440W or ELB440H or ELB440HW or ELB440BB	4"		L149*W149*H152	4.84*4.84
5	ELB50R35					
	ELB50R40					

The dimensions of Light Engines and Reflector kits are as shown below:

Light Engines		
Reference Picture	Model No.	Dimensions (Inch)
	ELB15RCT5ICA ELB30R30 ELB30R35 ELB30R40 ELB50R30 ELB50R35 ELB50R40	Φ4.31*H3.08

Reflector Kits (Round)		
Reference Picture	Model No.	Dimensions (Inch)
	ELB410W or ELB410H or ELB410HW or ELB410BB	Φ6.85*H3.2
	ELB610W or ELB610H or ELB610HW or ELB610BB	Φ8.46*H3.7
	ELB810W or ELB810H or ELB810HW	Φ10.28*H4.48

Reflector Kits (Square)		
Reference Picture	Model No.	Dimensions (Inch)
	ELB440W or ELB440H or ELB440HW or ELB440BB	L149*W149*H76

Product Information (Cont.)

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Electrical Connection Wiring:

1. Connect BLACK (line) driver lead to voltage supply Line position (HOT).
2. Connect driver WHITE lead to the NEUTRAL supply position.
3. Connect the GREEN ground lead to the supply ground lead.

0-10V Dimming:

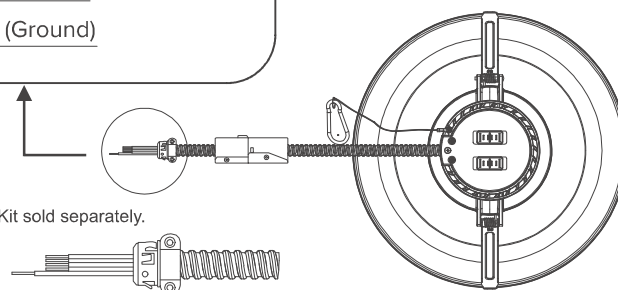
4. Connect PURPLE lead to supply POSITIVE dimming lead.
5. Connect PINK lead to the supply NEGATIVE dimming lead.

NOT Using 0-10V Dimming:

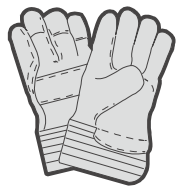
6. Ensure PURPLE and PINK 0-10V dimming leads are properly capped.

Pink Wire (Negative dimming lead)
 Purple Wire (Positive dimming lead)
 Black Wire (Hot)
 White Wire (Neutral)
 Green Wire (Ground)

ELBRT Retrofit Kit sold separately.



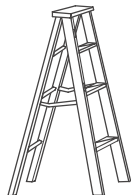
Tools Required (Not Included)



Gloves



Safety goggles



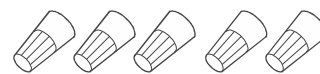
Ladder



Wire
Cutter



Wire
Stripper



Wire Nuts

Packing List(1PK)

For Engine

No.	Descriptions	Qty.
1	LED Engine	1
2	Installation Manual	1

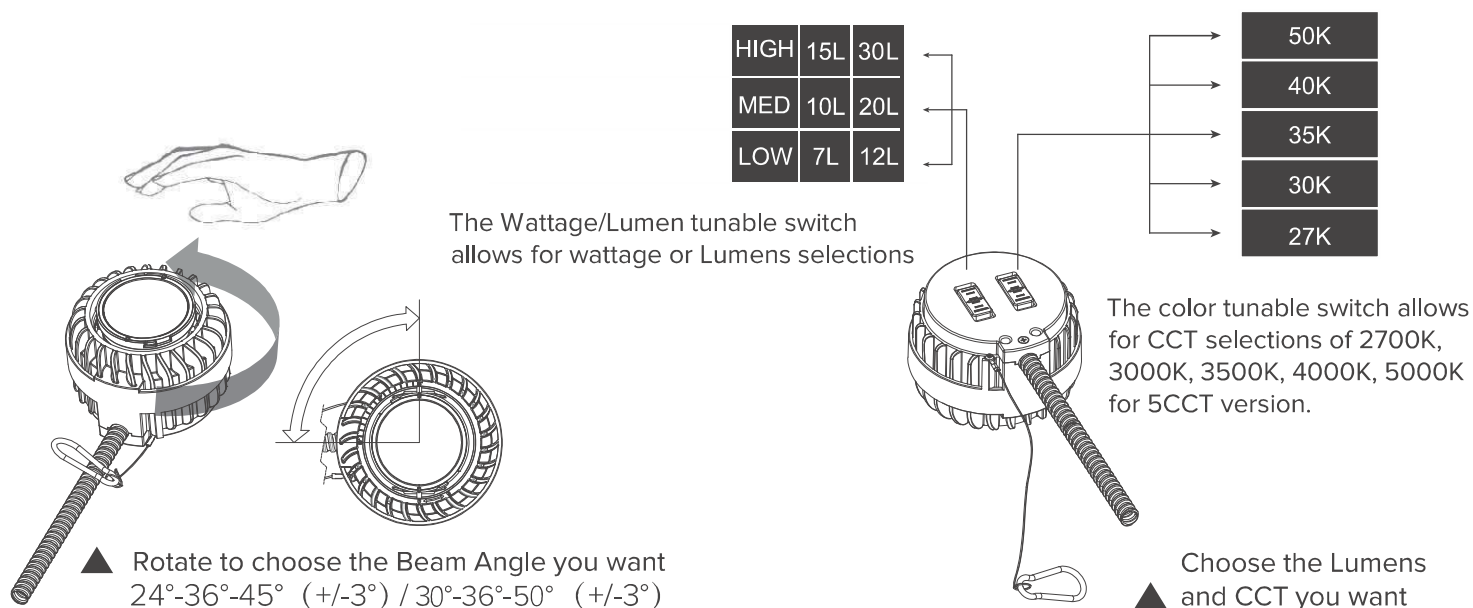
For Reflector Kit

No.	Descriptions	Qty.
1	Reflector Kit	1
2	Installation Manual	1
3	Ceiling Cut-out Template	1

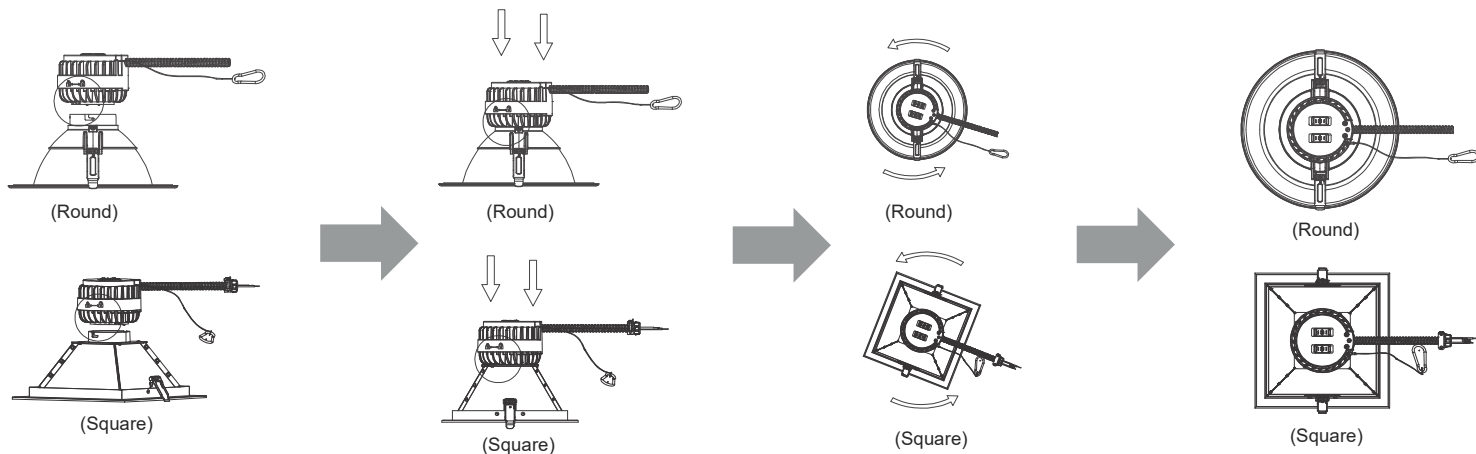
Pre-Installation

First, select the desired light engine. The specifications of the light engines are as shown below:

No.	Light Engines	Size	Input Voltage	Dimmable	Beam Angle	CCT	Lumens Output
1	ELB15RCT5ICA	4"	120 - 277V @50/60Hz	0-10V, 5-100%	24°-36°-45° (+/-3°)	5CCT:27K+30K+35K+40K+50K	750/1000/1500lm
2	ELB30R30					30K	1250/2000/3000lm
3	ELB30R35					35K	1250/2000/3000lm
4	ELB30R40					40K	1250/2000/3000lm
5	ELB50R30	6"	120 - 277V @50/60Hz	0-10V, 5-100%	30°-36°-45° (+/-5°)	30K	3200/4000/5000lm
6	ELB50R35					35K	3200/4000/5000lm
7	ELB50R40					40K	3200/4000/5000lm



Second, select the Reflector Kit and assemble with the Light Engine.



1. Align the notch of the Reflector Kit with the “unlock” position of the light Engine.

2. Push the Reflector Kit down.

3. Turn the Reflector Kit counterclockwise to align the notch with the locked position.

4. Finished

Retrofit Installation

WARNING: Make sure the POWER is TURNED OFF in which you are installing the product.

1. Remove existing lamp and reflector. If existing trim or can are present, remove from the ceiling or move it out of the way. Make sure to retain existing rough-in kit components. (Figure 1)
2. Measure the ceiling opening and ensure the edge of the downlight retrofit will cover the entire hole and sit firmly in the ceiling.
3. Attach the carabiner safety lanyard to the existing fixture housing. (Figure 2)
4. Remove the junction box faceplate. Disconnect wiring to existing ballast. Remove appropriate knock out on junction box.
5. Connect incoming AC mains power to input leads of the ELBRT retrofit kit (sold separately). Insert the conduit fitting into the J-box and wire to power source (black to hot, white to neutral, violet to 0-10V dimming positive, gray to 0-10V dimming negative). Reattach the J-box cover when done. (The grounding of the overall system shall be done in accordance with NEC and local codes). (Figure 3)
6. Mate the connector on the ELBRT with the connector on the light engine. Bend the spring clip legs upward so they are in an upright position and insert downlight into the hole in the ceiling/housing (Figure 4).
7. Once downlight is inside the ceiling and housing, release the spring clips and push the fixture up into the ceiling until securely fixed and flush with the ceiling (rotating the downlight may be necessary to properly engage the spring clips and ensure a secure fit). (Figure 5)
8. Restore power at the source. The installation is complete. (Figure 6)

