

# Installation Instructions



**Please read and understand this entire manual before attempting to assemble, operate or install the product.** WARNING - RISK OF FIRE OR ELECTRIC SHOCK. INSTALLATION OF THIS RETROFIT KIT 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 ELECTRICIAN.

DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.

## Dimensions of Light Engine + Reflector Kits

NO.	LIGHT ENGINES	REFLECTOR KITS	SIZE	LIGHT ENGINES + REFLECTOR KITS	DIMENSIONS (INCH)	CUT-OUTS (INCH)
1		CADM-4-CSH/CADM-4-WH	4"		Ø6.85"W X 5.47"H	Ø4.72"-5.46"
2	LED-CADM-3M20-5CCT-UNV	CADM-6-CSH/CADM-6-WH	6"		Ø8.46"W X 5.97"H	Ø6.3"-7.01"
3	LED-CADM-3M35-35K-UNV LED-CADM-3M35-40K-UNV	CADM-8-CSH/CADM-8-WH	8"		Ø10.28"W X 6.76"H	Ø7.87"-8.74"
4		CADM-10-CSH/CADM-10-WH	10"		Ø11.81"W X 7.25"H	Ø8.66"-9.96"
5		CADM-6-CSH/CADM-6-WH	6"		Ø8.46"W X 5.97"H	Ø6.3"-7.01"
6	LED-CADM-3M55-35K-UNV LED-CADM-3M55-40K-UNV	CADM-8-CSH/CADM-8-WH	8"		Ø10.28"W X 6.76"H	Ø7.87"-8.74"
7		CADM-10-CSH/CADM-10-WH	10"		Ø11.81"W X 7.25"H	Ø8.66"-9.96"

### LIGHT ENGINES

Reference Picture	Model #	Dimensions
	LED-CADM-3M20-5CCT-UNV LED-CADM-3M35-35K-UNV LED-CADM-3M35-40K-UNV	Ø4.31" X 3.08"
	LED-CADM-3M55-35K-UNV LED-CADM-3M55-40K-UNV	Ø5.53" X 3.08"

### REFLECTOR KITS

Reference Picture	Model #	Dimensions
	CADM-4-CSH CADM-4-WH	Ø6.85" X 3.2 H"
	CADM-6-CSH CADM-6-WH	Ø8.46" X 3.7 H"
	CADM-8-CSH CADM-8-WH	Ø10.28" X 4.87 H"
	CADM-10-CSH CADM-10-WH	Ø11.81" X 4.87 H"

Changes or modifications to this unit not 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, 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 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:

- 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:**

1. Connect VIOLET lead to supply POSITIVE dimming lead
2. Connect GREY lead to the supply NEGATIVE dimming lead.

**NOT Using 0-10V Dimming:**

1. Ensure VIOLET and GREY 0-10V dimming leads are properly capped.

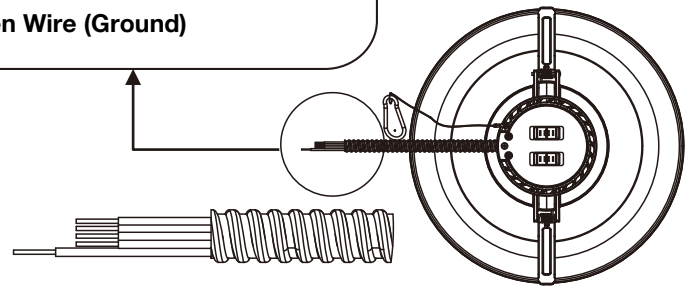
Grey Wire (Negative dimming lead)

Violet Wire (Positive dimming lead)

Black Wire (Hot)

White Wire (Neutral)

Green Wire (Ground)



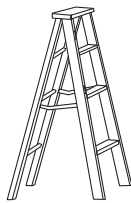
**Tools Required (Not Included)**



Gloves



Safety Goggles



Ladder



Wire Cutter



Wire Stripper



Wire Nuts

**Packing List**

**For Engine**

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

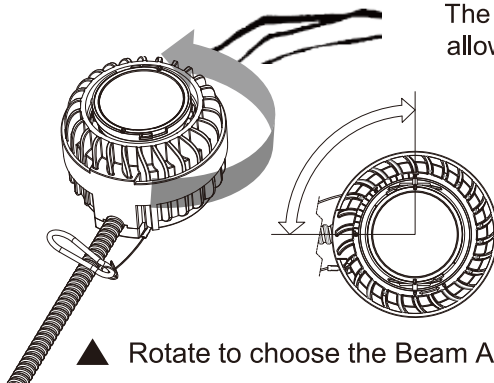
**For Reflector Kit**

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

# Pre-Installation

**First, Select the light engine what you want. The spec. of the light engines as below:**

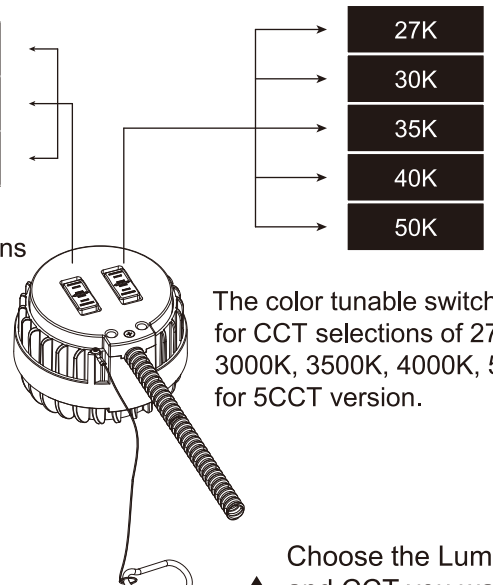
No.	Light Engines	Input Voltage	Dimmable	CCT Selectable 5CCT / Single CCT	Power Selectable	Lumens Output @4000K	Beam Angle	Type IC
1	LED-CADM-3M20-5CCT-UNV	120-277V @50/60Hz	0-10V, 5-100%	5CCT: 27K+30K+35K+40K+50K	10/12/25W	750/1000/1500lm	24-45°	YES
2	LED-CADM-3M35-35K-UNV			3500K	13/20/35W	1250/2000/3000lm	25-50°	NO
3	LED-CADM-3M35-40K-UNV			4000K	13/20/35W	1250/2000/3000lm	25-50°	NO
4	LED-CADM-3M55-35K-UNV			3500K	32/40/55W	3200/4000/5000lm	30-50°	NO
5	LED-CADM-3M55-40K-UNV			4000K	32/40/55W	3200/4000/5000lm	30-50°	NO



▲ Rotate to choose the Beam Angle you want

LOW	7L	12L	32L
MED	10L	20L	40L
HIG	15L	30L	50L

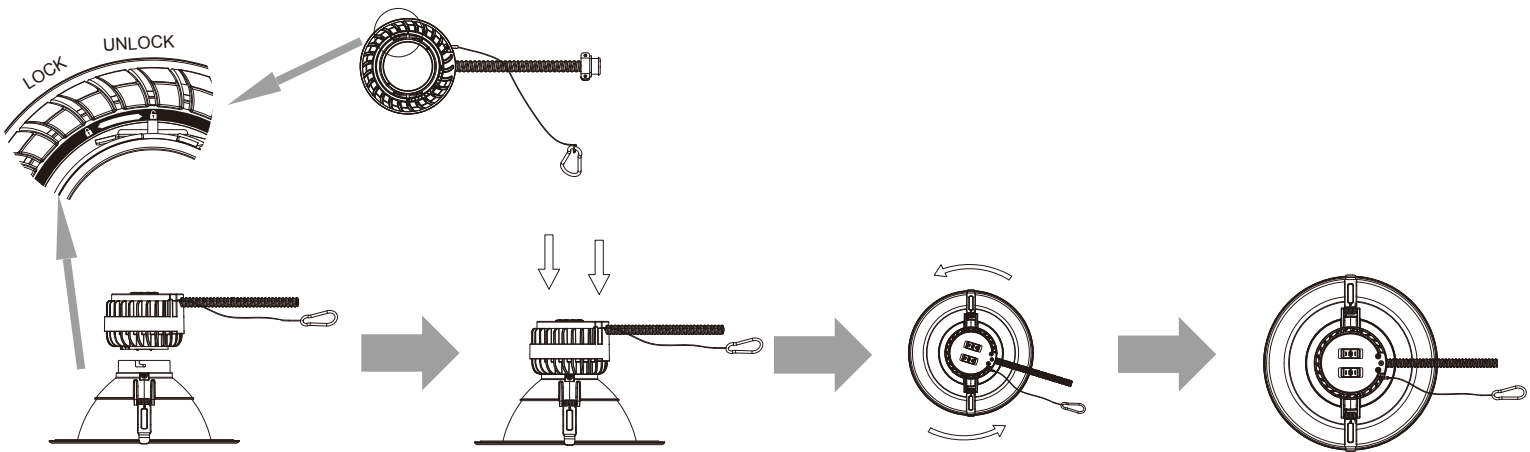
The Wattage/Lumen tunable switch allows for wattage or Lumens selections



▲ Choose the Lumens and CCT you want

The color tunable switch allows for CCT selections of 2700K, 3000K, 3500K, 4000K, 5000K for 5CCT version.

**Second, Select the Reflector Kit and assemble with Light Engine.**

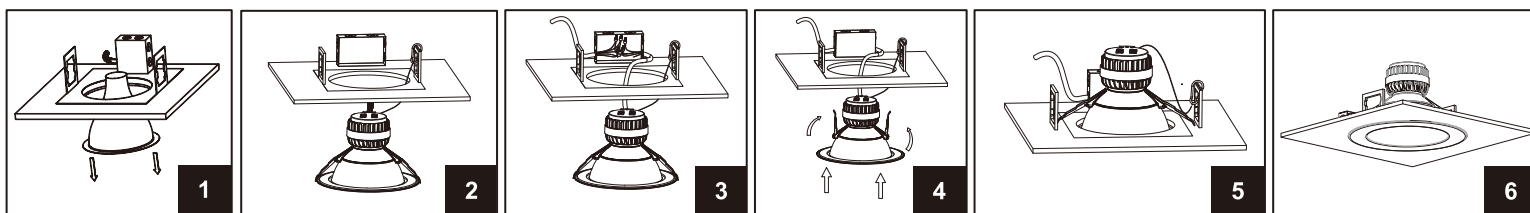


1. Align the notch of the Reflector Kit with the "unlock" position of the light Engine.
2. Push the Reflector Kit down.
3. Turn the Reflector Kit counterclockwise to align the notch with the locked position.
3. Finished

## Retrofit Installation(A)

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

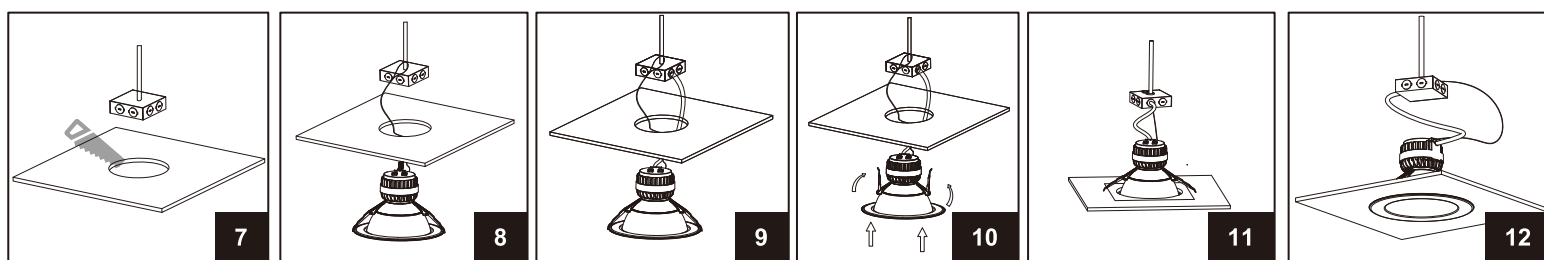
1. Remove existing lamp and reflector. If existing trim or can are present, remove from the ceiling or move it out of the way. Make sure to retain existing rough-in kit components. (Figure 1)
2. Measure the ceiling opening and ensure the edge of the downlight retrofit will cover the entire hole and sit firmly in the ceiling. (Figure 2)
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. (Figure 3)
5. Connect incoming AC mains power to fixture input leads. Insert the downlight conduit into the J-box and wire to the 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. Bend the spring clips upward so they are in an upright and insert downlight into 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)



## New Construction Installation(B)

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

1. If using a new construction plate, install it in the ceiling first.
2. If a new hole is needed, cut hole according to downlight cut-out dimension or "Ceiling Cut-out Template" per model number. (Figure 7)
3. Attach the carabiner safety lanyard to secure place inside the ceiling. (Figure 8)
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 fixture input leads. Insert the downlight conduit into the J-box and wire to the 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 9)
6. Bend the spring clips upward so they are in an upright and insert downlight into hole in the ceiling / housing. (Figure 10)
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 11)
8. Restore power at the source. The installation is complete. (Figure 12)



**WARNING – RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRE 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.**

**WARNING – TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.**

THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.