

Lumination® LED Luminaire

Installation Guide for Direct-Mount / Retrofit / Frame-Kit (LRXB Series)



BEFORE YOU BEGIN / AVANT DE COMMENCER

Read these instructions and IOTA ILB-CP instruction manual completely and carefully.
Wear work gloves to prevent dirt and oil from being transferred to the luminaire.

⚠ WARNING / AVERTISSEMENT

RISK OF FIRE OR ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- Install this kit only in the luminaire that has the construction features and dimensions shown in the photographs and/or drawings.
- Installation of this product 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.
- 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.
- Installation requires input rating of the retrofit kit to not exceed the input rating of the luminaire.

RISQUES D'INCENDIE OU DE DÉCHARGES ÉLECTRIQUES

- Couper l'alimentation avant l'inspection, l'installation ou d'effectuer de la maintenance
- N'installer cette trousse que sur des luminaires qui ont les caractéristiques de construction et les dimensions telles que montrées sur les photographies et dessins présentés.
- Risque d'incendie ou d'électrocution. L'installation du produit nécessite la connaissance de la construction et le fonctionnement de l'installation électrique du luminaire. Contactez un(e) électricien(ne) qualifié(e).
- Pour prévenir les dommages ou l'abrasion de fils électriques, ne pas exposer les fils aux arêtes de pièce de tôle ou n'importe quels autres objets tranchant.
- Ne pas percer ou altérer les trous d'un boîtier contenant fil ou composant électrique durant l'installation.
- L'installation nécessite que la valeur nominale d'entrée du kit ne dépasse pas la valeur nominale d'entrée du luminaire originale.

⚠ CAUTION / ATTENTION

- Fixture suitable for wet locations, covered ceiling mount only.
- Fixture may fall down if not installed properly, follow installation instructions.
- Wear appropriate Personal Protective Equipment (PPE) during installation and maintenance.
- Use only UL certified wires, wire connectors, minimum 18AWG, minimum rated 90°C.

- Les luminaires sont adaptés aux endroits humides et ne s'appliquent qu'aux plafonds couverts.
- Le luminaire peut tomber s'il n'est pas installé correctement, suivre les instructions d'installation.
- Porter les Équipements de Protection Individuelle (EPI) adaptés lors de l'installation et de l'entretien.
- N'utilisez que des fils et connecteurs approuvés par UL. Calibre minimum 18AWG (0.75mm²) et température minimale de 90°C.

Prepare Electrical Wiring



Electrical Requirements

- The LED luminaire must be connected to the mains supply according to its ratings on the product label.
- Class 1 wiring should be in accordance with NEC.



Grounding Instructions

- The grounding and bonding of the overall system shall be done in accordance to local electric code of the country where the luminaire is installed.

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. CAN ICES-005(A)/ NMB-005(A)

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

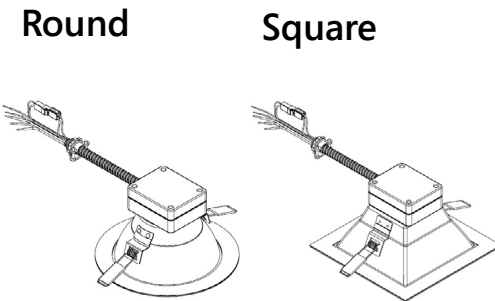
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1. Direct-Mount Installation

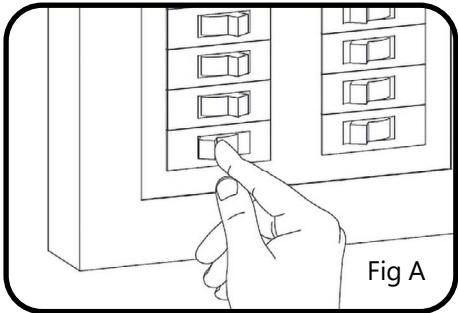
- ① Provided Components
- The components have been properly packed to avoid damage during transit. Inspect the components to confirm there is no physical damage. Do not install damaged components.

- Components List
- LRXB Fixture Kit
 - Installation Instructions



- ② Luminaire Installation
- Before installation, check the fixture size and the diameter of ceiling opening according to below Tab1.

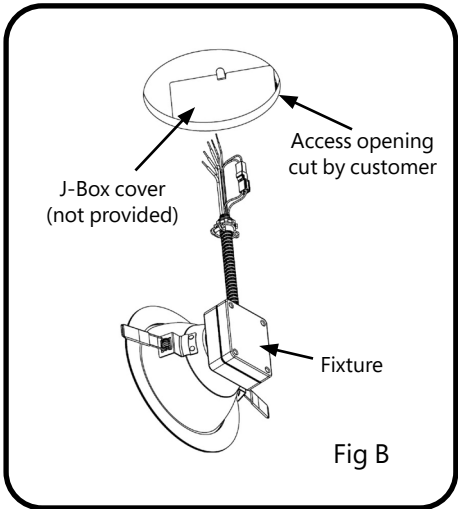
Tab 1				
Fixture Size	Fixture Type	Opening Size in Ceiling (inch)	Fixture weight (kg)	Suitable Ceiling Max Thickness
4	Round	4.5~5.0	0.475	5/8"
6	Round	6.0~6.7	0.525	3/4"
8	Round	7.8~8.8	0.615	1"
10	Round	10.2~11.2	1.260	1"
12	Round	12.2~13.2	1.410	1"
4	Square	4.5~5.0	0.600	5/8"
6	Square	6.0~6.8	0.700	3/4"
8	Square	8.0~9.0	0.870	1"



NOTE: For 10" and 12" fixtures, a suitable UL Listed **frame-kit** is recommended to be used with the fixture for installation safety.

- A
- Ensure that the power to the unit is turned off. Use proper lockout/tagout procedures. See fig A.
- B
- Cut an access opening in the ceiling with the diameter listed in Tab 1, and install the fixture to the ceiling per the codes. Make sure the ceiling can withstand the weight of the fixture and the thickness of ceiling be less than the list in Tab1.

Ensure the center of existing J-Box cover is visible through the access opening, and the connections to the branch circuit supply are visible through the access opening.

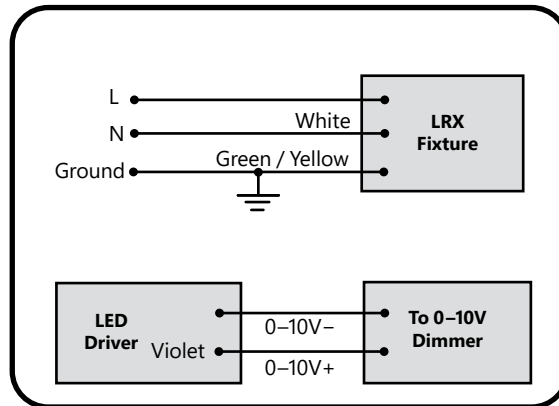
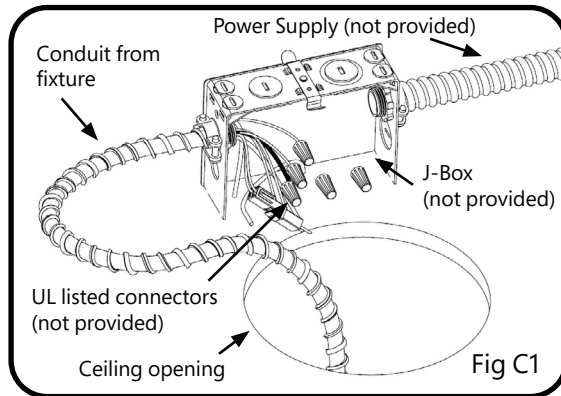


- C** Connect the black, white, yellow/green leads from the conduit to the power-supply with UL listed wire connectors according to the wiring diagram C2. Be sure all connection are made inside the existing J-Box.

Optional Dimmer: When connecting a dimming Controller, connect the violet (dimming+) and pink (dimming-) wires to the violet and pink wires of the fixture.

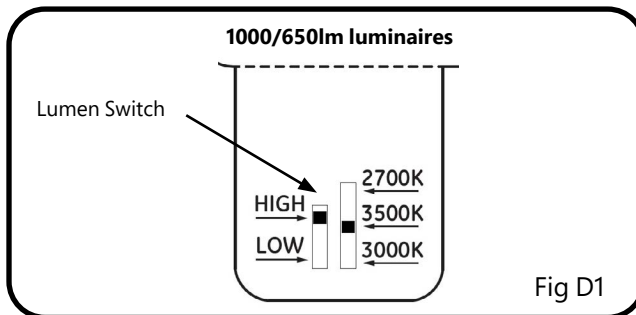
Note: Cap all unused dimming leads with wire nuts.

Note: Phase cut dimmers must be wired to the power feed "hot" line (L). For 0-10V and phase cut dimming compatibility, please visit: www.led.com/dimming

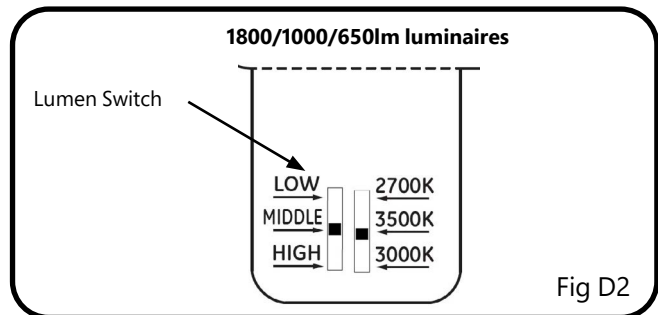


- C** Select Lumen (8" luminaires with 3000lm are not lumen selectable):

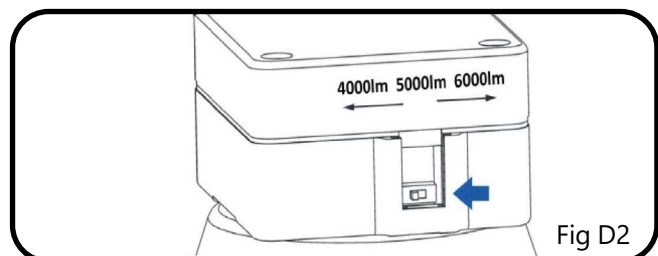
NOTE: For 1000/650lm luminaires, the default lumen is 1000lm. Push the switch down to activate 650lm. See fig D1.



NOTE: For 1800/1000/650lm luminaires, the default lumen is 1000lm. Push the switch up to activate 650lm. Push the switch down to activate 1800lm. See fig D2.

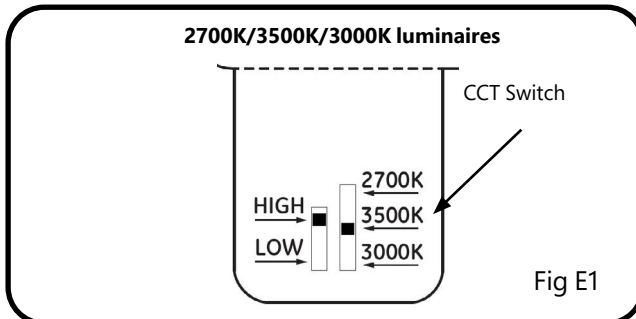


NOTE: For 4000/5000/6000lm luminaires, the default lumen is 6000lm. Push the switch left to activate 4000lm and 5000lm respectively. See fig D3.

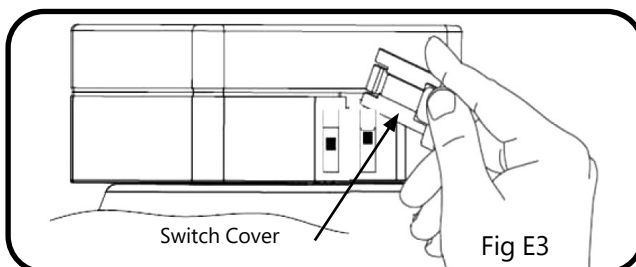


C Select CCT

NOTE: For 2700K/3000K/3500K luminaires, the default CCT is 3500K. Push the switch up to activate 2700K, push the switch down to activate 3000K. See fig E1 or E4.



NOTE: The cover of the lumen/CCT switches can be used as a tool to select lumen and CCT. See fig E3. Place the switch cover back after lumen and CCT setting.



ONLY FOR 10IN AND 12IN FIXTURES: The CCT switch plug must be placed back after CCT selection to avoid light leakage and dust/bug ingress. See fig E5.

ATTACH THE SAFETY TETHER TO THE RECOMMENDED FRAME-KIT FOR REDUNDANT INSTALLATION SAFETY.

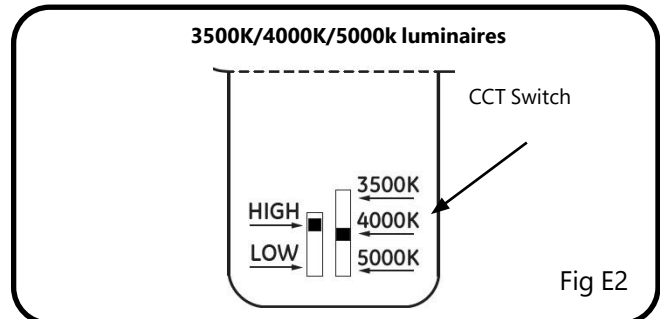
⚠ CAUTION/ATTENTION

RISK OF PERSONAL INJURY - Operators shall ensure no appendages are in the path of the torsion springs as they are a pinch hazard when released. The springs will release when the arm is flexed downward. Be cautious that no body part is in the path of the spring when released.

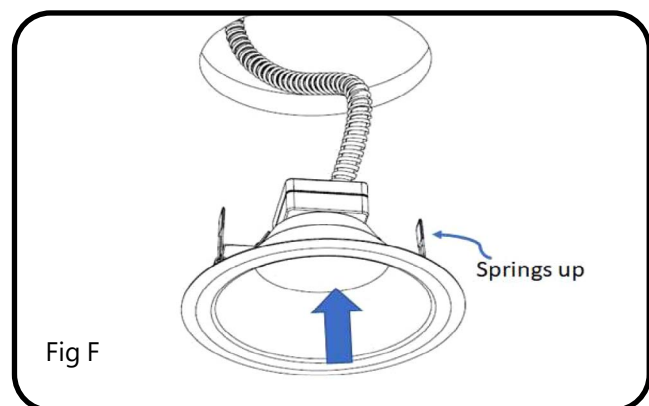
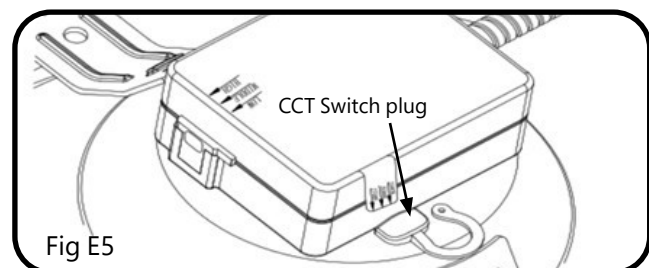
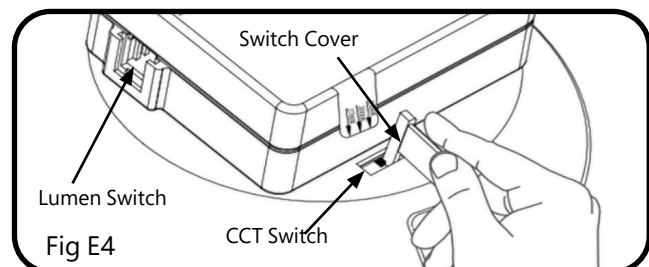
RISQUE DE BLESSURE CORPORELLE - Les techniciens veilleront à ce qu'aucun appendice ne se trouve sur le chemin des ressorts de torsion, car ils présentent un risque de pincement lorsqu'ils sont libérés. Les ressorts seront libérés au moment de fléchir le bras vers le bas. Faites attention à ce qu'aucune partie du corps ne se trouve sur le chemin du ressort à sa libération.

- C** Load springs into upright position by twisting the springs upward and carefully insert the fixture into ceiling opening. The springs will rotate back into position and hold the fixture tight to the ceiling.

NOTE: For 3500K/4000K/5000K luminaires, the default CCT is 4000K. Push the switch up to activate 3500K, push the switch down to activate 5000K. See fig E2 or E4.



NOTE: For 10in and 12in fixtures, the CCT switch is located on the housing sealed by a plug, and the cover of the lumen switch can be used as a tool to select lumen and CCT. See fig E4.



2. Retrofit Installation

Note: Installers should examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.

② Luminaire Installation

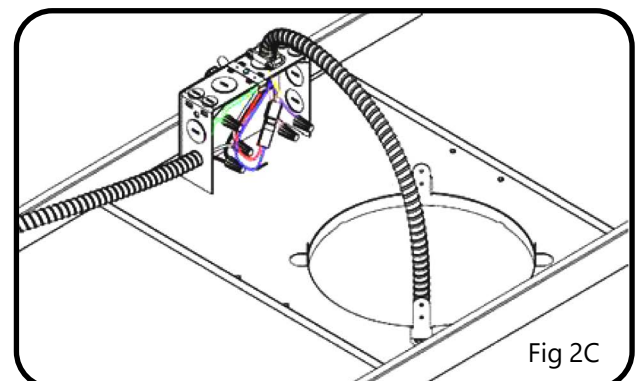
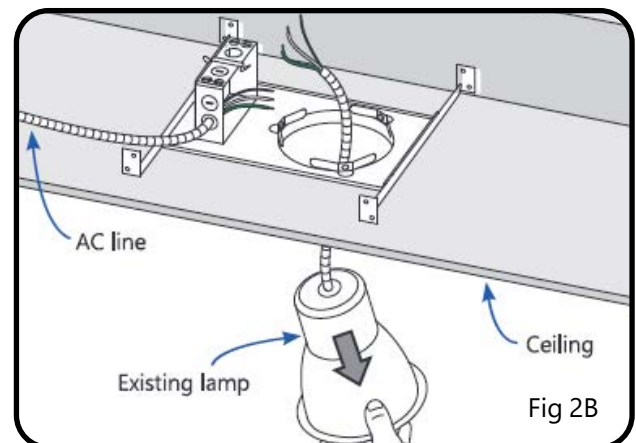
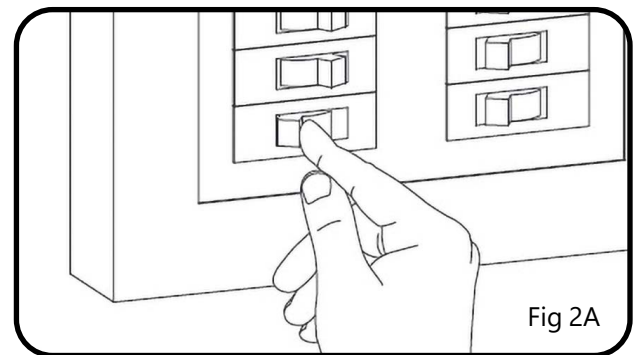
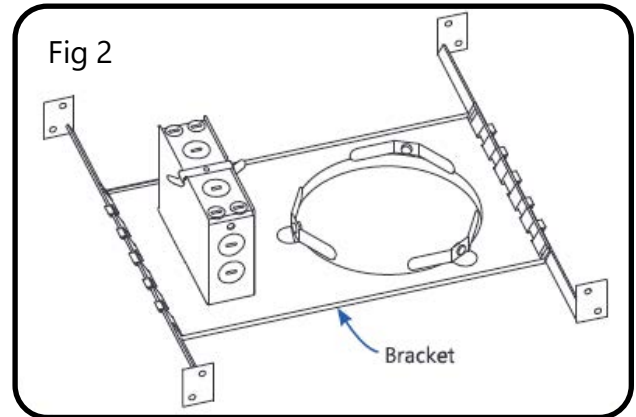
Before installation, verify that the existing junction box and frame-kit are metal construction, designed similarly to fig 2.

Fixture Size	Fixture Type	Existing Bracket Hole Size (inch)
4	Round	4.5~5.0
6	Round	6.0~6.7
8	Round	7.8~8.8
10	Round	10.2~11.2
12	Round	12.2~13.2
4	Square	4.5~5.0
6	Square	6.0~6.8
8	Square	8.0~9.0

- A** Ensure that the power to the unit be turned off. Use proper lockout/tagout procedures.
- B** Remove existing lamps, fixture and ballast. Leave wiring in junction box. Verify that the AC supply line is provided with a ground wire connected to the luminaire. See fig 2B.
- C** Connect conduit end with input leads to existing J-Box and make the proper connections according to diagram C1/C2.

Make all electrical connections using UL Listed wire connectors.

Securely close J-Box after wiring. See fig 2C.



Optional Dimmer: Optional Dimmer: When connecting a dimming controller, low-voltage dimming wires must route through a separate knockout. Connect the violet (dimming+) and pink (dimming-) wires to the violet and pink wires of the fixture.

Note: Cap all unused dimming leads with wire nuts

Note: Phase cut dimmers must be wired to the power feed "hot" line (L). For 0-10V and phase cut dimming compatibility, please visit: www.led.com/dimming

- D** About selecting CCT or lumen level, refer to step D and E on page 3 and 4.

- E** Only for 10 in and 12 in:
ATTACH THE SAFETY TETHER TO THE FRAME KIT FOR REDUNDANT INSTALLATION SAFETY.

See fig 2E.

CAUTION/ATTENTION

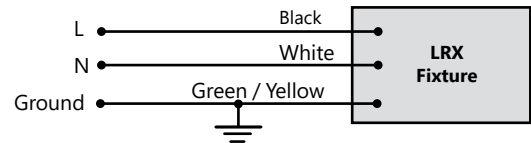
RISK OF PERSONAL INJURY - Operators shall ensure no appendages are in the path of the torsion springs as they are a pinch hazard when released. The springs will release when the arm is flexed downward. Be cautious that no body part is in the path of the spring when released.

RISQUE DE BLESSURE CORPORELLE - Les techniciens veilleront à ce qu'aucun appendice ne se trouve sur le chemin des ressorts de torsion, car ils présentent un risque de pincement lorsqu'ils sont libérés. Les ressorts seront libérés au moment de fléchir le bras vers le bas. Faites attention à ce qu'aucune partie du corps ne se trouve sur le chemin du ressort à sa libération.

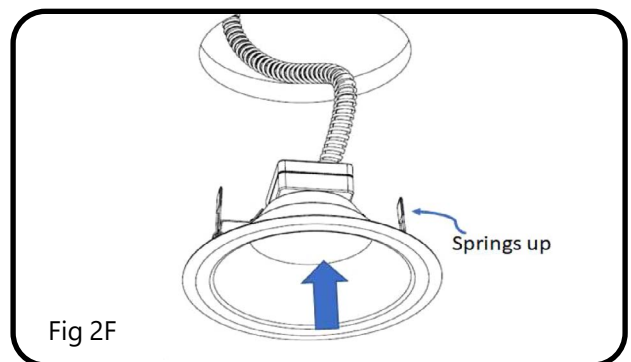
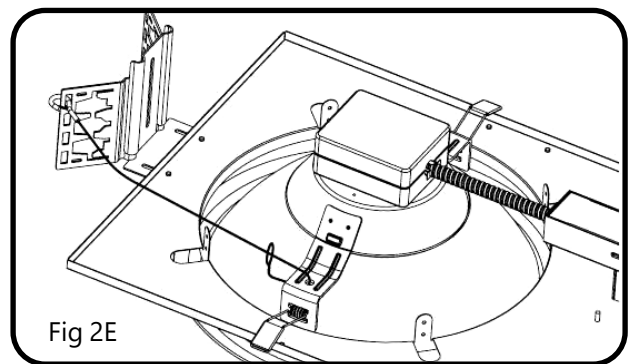
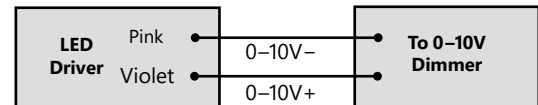
- D** Load springs into upright position by twisting the springs upward and carefully insert the fixture to ceiling opening.

The springs will rotate back into position and hold the fixture tight to the ceiling .

WIRING DIAGRAM C1



0-10 VOLT DIMMING



3. New Construction Installation

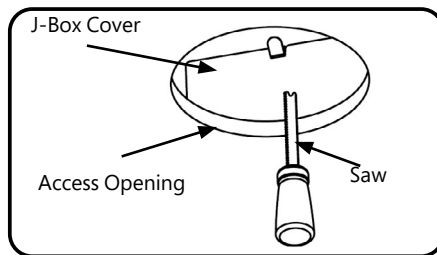
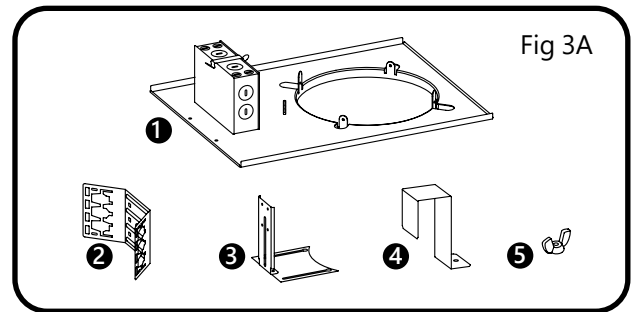
① Provided Components

The components have been properly packed to avoid damage during transit. Inspect the components to confirm there is no physical damage. Do not install damaged components. See Fig 3A and Tab 3.

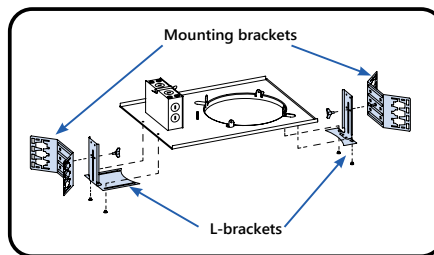
① Frame Installation

Tab 4			
Fixture Size	Fixture Type	Suitable Frame	Suitable Ceiling Max Thickness
4	Round	FRAME4R	5.0~5.5
6	Round	FRAME6R	6.6~7.1
8	Round	FRAME8R	8.2~8.7
10	Round	FRAME10R	10.6~11.2
12	Round	FRAME12R	12.5~13.3
4	Square	FRAME4S	5.1~5.6
6	Square	FRAME6S	6.9~7.4
8	Square	FRAME8S	8.5~9.4

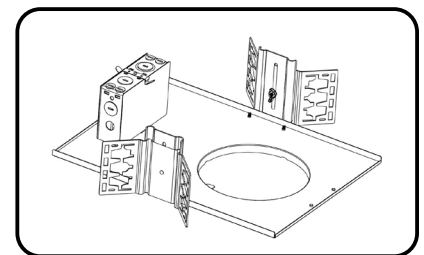
Tab 3		
	Provided Item	Qty.
1	Frame (4-inch, 6-inch, 8-inch, 10-inch or 12-inch)	1
2	Mounting Brackets	2
3	L-Bracket	2
5	Wing Nut	3



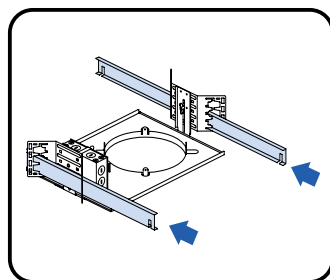
- A** Cut an appropriate hole on the ceiling tile according to Tab 4. Ensure the ceiling hole diameter match the frame opening diameter.



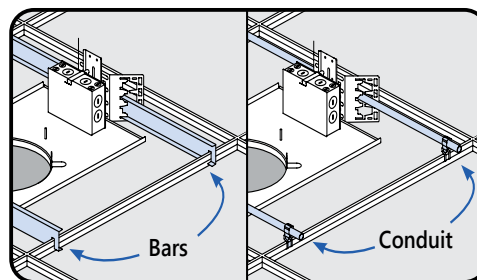
- B** Place side L-brackets on existing frame screws and tighten with screwdriver on both sides of the frame. Then attach mounting brackets to both L-brackets with wing nuts (provided).



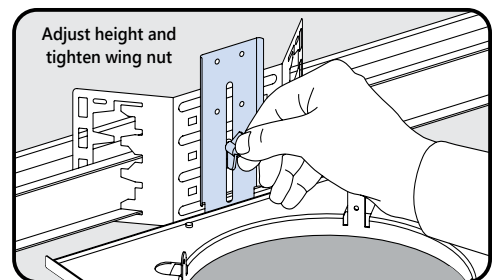
- C** Mounting brackets could also be fixed on the short side of frame.



- D** Slide hanger bars (order separately) through adjustable mounting brackets.



- E** **Option A:** Mount fixture by attaching hanger bars to T-Grid ceiling (BH3 SKU 94890).
Option B: Mount fixture with 1/2" EMT conduit. (Not Supplied)



- F** Adjust fixture height to be flush with ceiling and tighten both mounting bracket wing nuts.

- G** Refer to steps C-F of the retrofit installation above to finish the installation.