





LO-PRO® JUNCTION BOX/LED DRIVER

INSTALLATION GUIDE



ALWAYS TURN OFF MAIN POWER BEFORE INSTALLING & SERVICING!

Ensure to read all Safety and Installation Instructions thoroughly!

IMPORTANT SAFETY INSTRUCTIONS

- 1. Read all instructions.
- 2. Install in accordance with national and local electrical code regulations.
- 3. This product is intended to be installed and serviced by a qualified, licensed electrician.
- 4. For cabinet and surface mount use only.
- 5. Do not install outdoors or in wet locations. For indoor and dry use only.
- 6. Do not conceal or extend exposed conductors through a building wall.
- For low voltage exposed insulated conductor systems required by 30.1(c) of UL 2108 do not install any part of this system less than 7 feet (2.2m) above the floor.
- To reduce the risk of fire and burns, do not install this lighting system where the exposed bare conductors can be shorted or contact any conductive materials.
- 9. To reduce the risk of fire and overheating, make sure all connections are tight.
- Do not install any luminaire closer than 6 inches (15.25cm) from any curtain, or similar combustible materials.
- 11. Turn off electrical power before modifying the lighting system in any way.

SAVE THESE INSTRUCTIONS

CONSIGNES DE SÉCURITÉ IMPORTANTES

- 1. Lisez toutes les instructions
- Installez conformément à la réglementation du code électrique national et local.
- Ce produit est destiné à être installé et entretenu par un électricien agréé qualifié.
- 4. Pour armoire et montage en surface utilizer seulement.
- 5. Ne pas installer à l'extérieur ou dans des endroits humides. Pour une utilisation en intérieur et sec seulement.
- Ne pas cacher ou allonger des conducteurs exposés à travers un mur de hâtiment
- 7. Pour la basse exposée tension systèmes de conducteurs isolés requis par 30.1 (c) de la norme UL 2108 ne pas installer une partie de ce système moins de 7 pieds (2.2m) au-dessus du sol.
- 8. Pour réduire le risque d'incendie et de brûlures, ne pas installer ce système d'éclairage où les conducteurs nus exposés peuvent être court-circuités ou communiquer avec tous les matériaux conducteurs.To reduce the risk of fire and overheating, make sure all connections are tight.
- 9. Pour réduire le risque d'incendie et de surchauffe, assurez-vous que toutes les connexions sont bien serrées.
- 10. 10. Ne pas installer un luminaire à moins de 6 pouces (15,25 cm) de toute rideau, ou matériaux combustibles analogues.
- 11. Coupez l'alimentation électrique avant de évoluer le système d'éclairage en aucune façon.

CONSERVER CES INSTRUCTIONS

LO-PRO JUNCTION BOX HAS 3 UL CERTIFICATIONS OUTLINED BELOW TO COVER A VARIETY OF APPLICATIONS. #1 IS OPTIONAL. #2 AND #3 ALWAYS APPLY:

#1) UL 1598 (UL# E469769) LED LOW VOLTAGE POWER UNIT

CERTIFIED AS A LISTED LED LOW VOLTAGE POWER UNIT. <u>OPTIONAL - ONLY APPLIES WHEN PURCHASED AS A DRIVER & J-BOX BUNDLE.</u> SEE SPEC SHEET OR WEBSITE FOR ORDERING OPTIONS. A UL E469769 STICKER WILL BE PLACED ON THE OUTSIDE OF THE LO-PRO BOX CERTIFYING THE BUNDLE AS AN LED LOW VOLTAGE POWER UNIT.

#2) UL 508A (UL# E486215) INDUSTRIAL CONTROL PANEL

TYPE 1 ENCLOSURE - INDOOR. CAN BE USED AS A STANDARD J-BOX FOR ANY COMPONENT. THIS CERT ALWAYS APPLIES TO THE LO-PRO BOX.

#3) UL 1598 (UL# E485321) LUMINAIRE FITTING

CAN BE USED AS A FITTING WITH OUR WITHOUT CLASS 2 LED DRIVER MODELS AND LIGHTING SYSTEMS OUTLINED BELOW. THIS CERT ALWAYS APPLIES TO THE LO-PRO BOX.

CERTIFIED CLASS 2 DRIVERS

DIODE LED DRIVER SKU*	DESCRIPTION	LO-PRO BOX
DI-TD-xxV-yyW	OMNIDRIVE Dimmable Driver	-LPS (10-35W) -LPL (45-80W)
DI-0904	12V 20W CV	DI-JBOX-LPS
DI-0918	12V 35W CV	DI-JBOX-LPS
DI-0906	12V 60W CV	DI-JBOX-LPS
DI-0970	24V 35W CV	DI-JBOX-LPS
DI-0954	24V 96W CV	DI-JBOX-LPL
DI-CV-MW12V40W-277	12V 40W CV Commercial	DI-JBOX-LPS
DI-CV-MW12V60W-277	12V 60W CV Commercial	DI-JBOX-LPS
DI-CV-MW24V60W-277	24V 60W CV Commercial	DI-JBOX-LPS
DI-CV-MW24V90W-277	24V 90W CV Commercial	DI-JBOX-LPL
DI-DM-MW12V40W-0-10V	12V 40W 0-10V Control	DI-JBOX-LPS
DI-DM-MW12V60W-0-10V	12V 60W 0-10V Control	DI-JBOX-LPS
DI-DM-MW24V60W-0-10V	24V 60W 0-10V Control	DI-JBOX-LPS
DI-DM-MW24V90W-0-10V	24V 90W 0-10V Control	DI-JBOX-LPL

CERTIFIED LIGHTING SYSTEMS

DI-xxV-**	DI-FI-**
EL-xxV-**	EL-FI-**
LF-xxV-**	

'xx' Indicates 12V or 24V

'yy' Indicates wattage output 10-60W for 12V Class 2 models or 10-80W for 24V Class 2 models

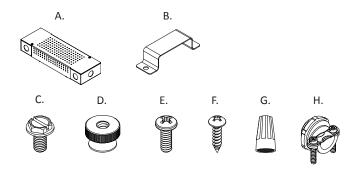
- * List subject to change. See Lo-Pro J-Box Product page for most recent list. Contact Diode LED Technical Support for OEM models if required.
- ** Indicates luminaire family, CCT, CRI, LENGTH

SUPPLIED ACCESSORIES

Lo-Pro Junction Box (Small): DI-JBOX-LPS OR Lo-Pro Junction Box (Large): DI-JBOX-LPL

- A. Lo-Pro Junction Box (1)
- B. Driver Mounting Bracket (1)
- C. Ground Screw (1)
- D. Thumb Screws (2)
- E. Cover Screws (2)
- F. Mounting Screws (4)
- G. Wire Connector 22-14AWG (600V) (6)
- H. NM (Non-Metallic) Cable Strain Relief (2) - 3/8"

Power Supply/LED Driver Sold Separately.

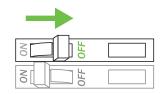


INSTALLATION





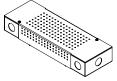
SHOCK HAZARD! May result in serious injury or death. Turn power OFF at circuit breaker prior to installation.





DETERMINE LOCATION TO INSTALL COMPONENTS

Refer to **SYSTEM DIAGRAM** under step 7. Ensure to calculate LED load properly for loading LED driver. See LED luminaire installation guide for calculating loads.







1) Class 2 Driver & Lo Pro Box

2) Control

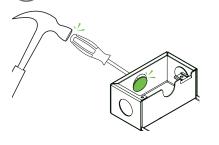
3) Fixture

WIRE GAUGE & VOLTAGE DROP

Ensure applicable wire is installed between driver, fixture, and any controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.)

(3)

PUNCH OUT KNOCKOUTS FOR CONDUIT ACCESS





a. Use punch and hammer to loosen K/O.

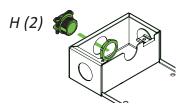
b. Grip K/O with pliers. Bend back and forth until broken off.



ATTACH INCLUDED 3/8" NM (NON-METTALIC) CABLE STRAIN RELIEF OR OTHER FITTING FOR CONDUIT ACCESS.

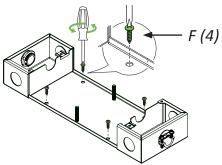
Additional fittings for BX cable, flexible conduit and rigid conduit must be purchased at local hardware store.

J-Box actual KO diameter is 0.87" and fits 3/8" fittings.



(5)

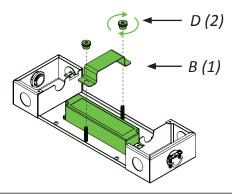
MOUNT BOX TO SURFACE WITH 4X SCREWS.



Mount J-Box to a sturdy surface in a position where it can be easily located and accessed for servicing and troubleshooting.



FASTEN POWER SUPPLY TO LO-PRO J-BOX.



INSTALLATION CONT.



WIRE DRIVER TO AC INPUT AND LOW VOLTAGE LOAD.

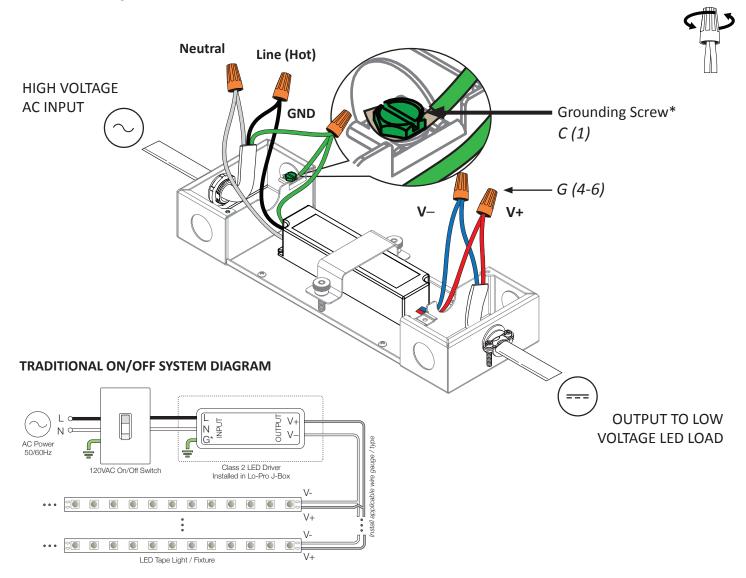
WARNING! SYSTEM DIAGRAM NOTE!

Each compatible LED driver has a unique System Diagram and color-coded wires. Please see each LED driver, luminaire (tape light, puck light, etc.), and control installation guide for System Diagrams, connections and wire colors. Pictured below is a Traditional ON/OFF Switching system. This is for reference only and does not apply to every driver.

Wire LED Driver. Ensure main power is OFF.

- 1. GND*: Attach to J-Box and to Primary Ground
- 2. Neutral: To Primary High Voltage Neutral
- 3. Line (Hot): To Primary High Voltage Line Hot
- 4. V+: To Low Voltage Load V+
- 5. V-: To Low Voltage Load V-

Wire Combination Range	Wire Combination Range (mm)	
600V Max 22 to 14 AWG Min. (1) #18 & (2) #20	600V Max 0.34mm ² to 2.5mm ² Min. (1) 0.75mm ² w/ (1) 0.50mm ²	
Max. (2) # 14	Max. (4) 1.5mm ² w/ (1) 0.50mm ²	3/8 in. (10 mm)

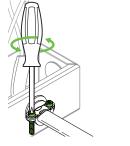


*LED Driver and J-Box must be grounded in accordance with local and national electrical codes. Ground the LED Driver and J-Box with the included Green Grounding Screw. Some compatible LED drivers are Class II certified and do not require a FG (Fault Ground Connection). Refer to the LED driver label and installation guide for more information.

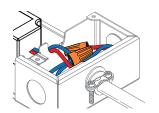
INSTALLATION CONT.



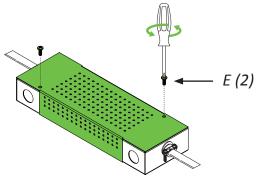
FINISH ASSEMBLY.







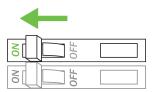
b. Tuck Wires into compartments.



b. Fasten lid to Lo-Pro Junction Box.



TURN POWER ON AT CIRCUIT BREAKER.



SYSTEM WORKING IMPROPERLY?

Turn power OFF at circuit breaker and verify all connections. Review SYSTEM DIAGRAMS and TROUBLESHOOTING on LED Driver, Luminaire, and Control Installation Guides, or call Diode LED Technical Support at 877.817.6028.

TROUBLESHOOTING

For System Troubleshooting see individual LED Driver, Luminaire, and Control Installation Guides.

ADDITIONAL RESOURCES

Visit the on-line product page at www.DiodeLED.com for full product specifications, installation guides, and warranty information.

LO-PRO JUNCTION BOX / LED DRIVER SPEC SHEET VOLTAGE DROP CHARTS

LED DRIVER SPECIFICATION SHEETS / INSTALLATION GUIDES

LED TAPE LIGHT OR LUMINAIRE SPECIFICATION SHEETS / INSTALLATION GUIDES



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