

# INSTALLATION GUIDE



## Schluter®-LIPROTEC-ECD

Dimmable LED driver with junction box



## WARNING!

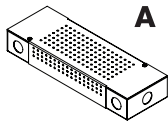
**ALWAYS TURN OFF MAIN POWER BEFORE INSTALLING & SERVICING!**  
Ensure to read all Safety and Installation Instructions thoroughly!

## IMPORTANT SAFETY INSTRUCTIONS

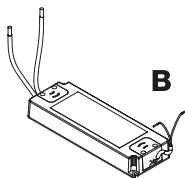
1. Read all instructions.
2. Install in accordance with national and local electrical code regulations.
3. This product is intended to be installed and serviced by a qualified, licensed electrician.
4. For cabinet and surface mount use only.
5. Do not install outdoors or in wet locations. For indoor use only.
6. Do not conceal or extend exposed conductors through a building wall.
7. 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.
8. To reduce the risk of fire and overheating, make sure all connections are tight.
9. Do not install any luminaire closer than 6 inches (15.25 cm) from any curtain, or similar combustible materials.
10. Turn off electrical power before modifying the lighting system in any way.

## SUPPLIED ACCESSORIES

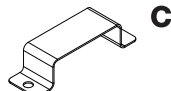
1x UL certified junction box (J-Box)



1x Driver



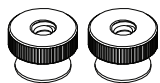
1x Driver mounting bracket



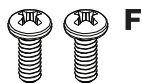
1x Ground screw



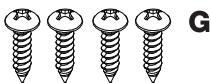
2x Thumb nut



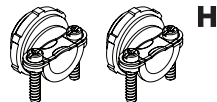
2x Cover screw



4x Mounting screw



2x NM (non-metallic) cable strain relief 1/2"



4x Wago lever connector

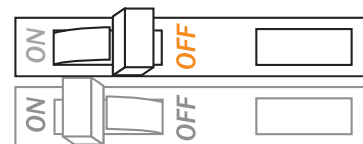


## INSTALLATION

### 1 TURN POWER OFF AT CIRCUIT BREAKER



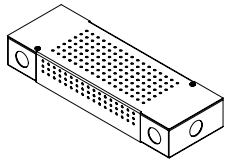
**SHOCK HAZARD!**  
May result in serious injury or death.  
Turn power OFF at circuit breaker prior to installation.



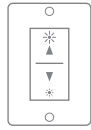
# INSTALLATION CONT.

## 2 DETERMINE LOCATION TO INSTALL COMPONENTS

Refer to **SYSTEM DIAGRAM** under step 6 for basic layout. Enclosure must be installed, following local codes, in a damp/dry location outside of the shower area.



Class 2 Driver & Junction Box



Dimmer Switch

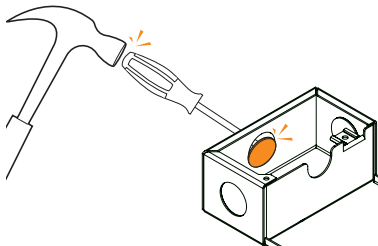


Fixture

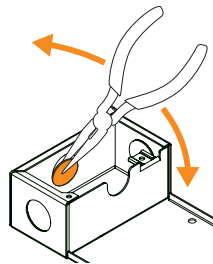
### WIRE GAUGE & VOLTAGE DROP

Ensure applicable wire is installed between driver and fixture. Only use Schluter®-LIPROTEC-CW cables (sold separately), available in 13' 1-1/2" (4 m), 26' 3" (8 m), and 49' 2-1/2" (15 m) lengths. These cables can be extended using standard NEC or CEC guidelines. Contact Schluter Systems Customer Service at 800-472-4588 (US) or 800-667-8746 (Canada) for more information.

## 3 PUNCH OUT KNOCKOUTS FOR CONDUIT ACCESS

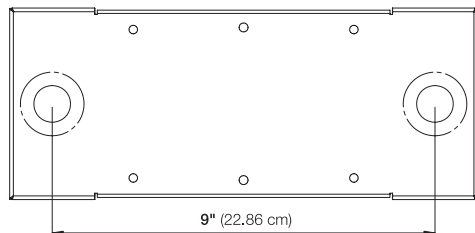


a. Use punch and hammer to loosen appropriate K/O. (Inner K/O for 1/2" fittings.)



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

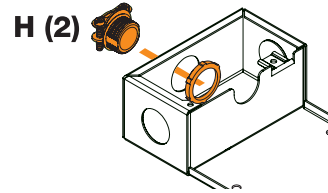
K/O on back of J-Box can be used for direct access from the wall. Ø 1.5" (38 mm) clearance hole is required.



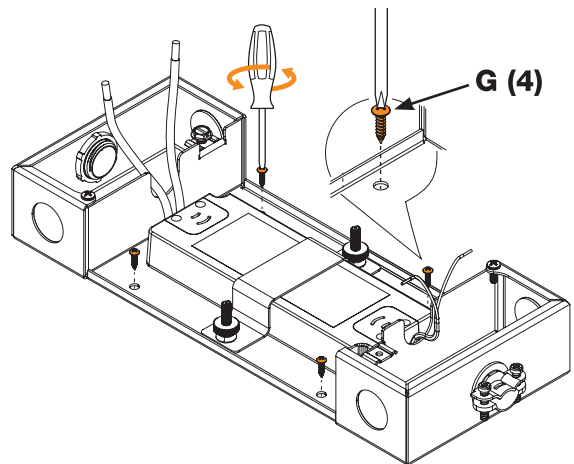
## 4 ATTACH INCLUDED 1/2" NM (NON-METALLIC) CABLE STRAIN RELIEF OR OTHER FITTING FOR CONDUIT ACCESS

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

J-Box actual inner K/O diameter fits 1/2" fittings.



## 5 MOUNT BOX TO SURFACE WITH 4 SCREWS



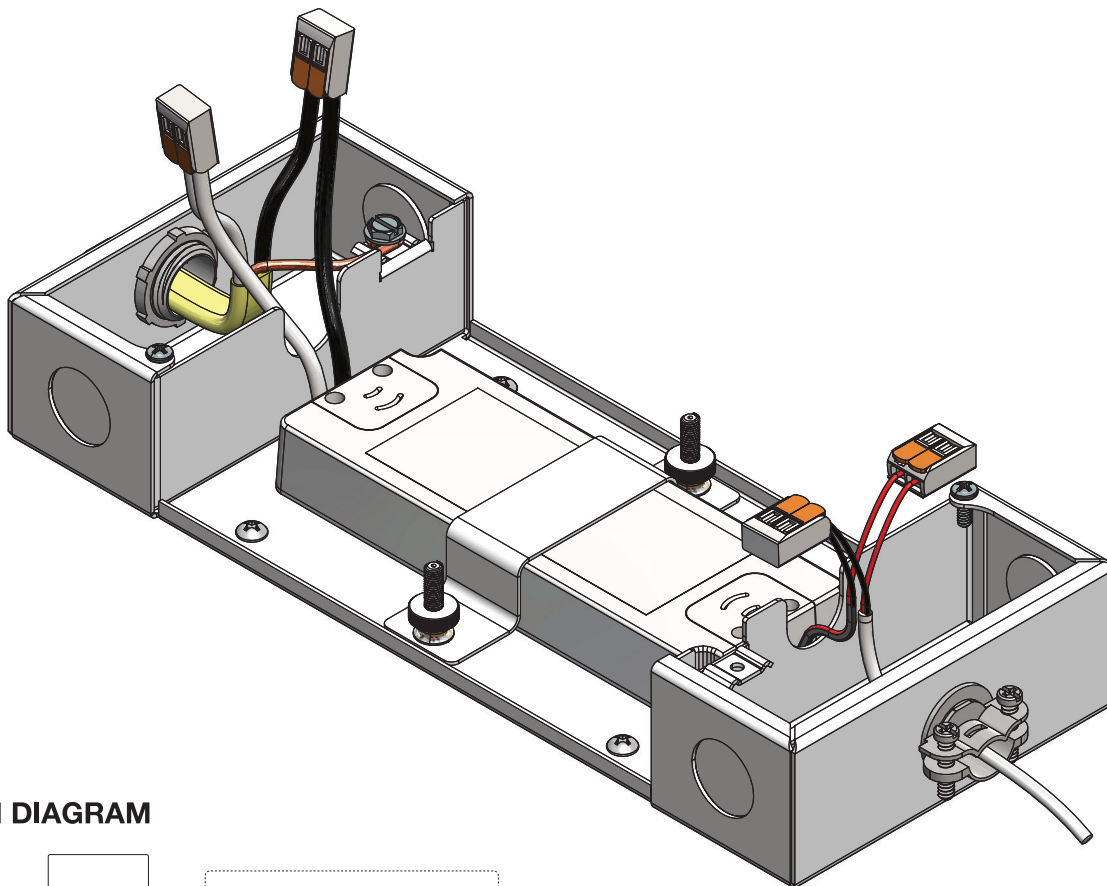
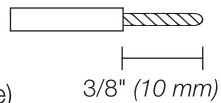
Mount J-Box to a sturdy surface in a position where it can be easily located and accessed for servicing and troubleshooting. Orientation is not critical. Do not install closer than 2" (50 mm) from cabinet walls or in a compartment smaller than: L17-1/2 x W8-1/2" x H4-1/4" (L44.5 cm x W21.5 cm x H11.5 cm).

## INSTALLATION CONT.

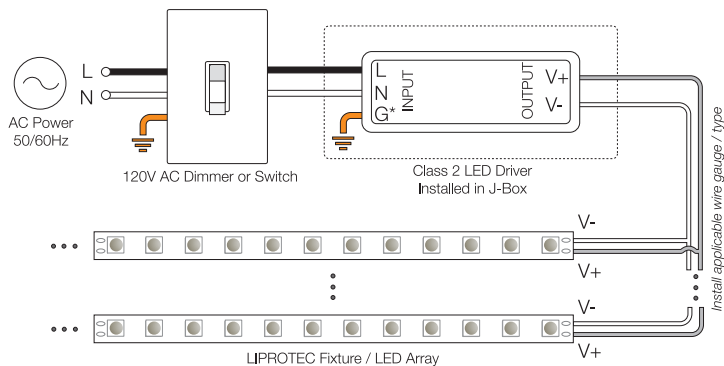
### ⑥ WIRE DRIVER TO AC INPUT AND LOW VOLTAGE LOAD WITH SUPPLIED LEVER CONNECTORS

**Wire LED Driver. Ensure main power is OFF.**

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



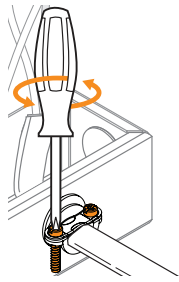
### SYSTEM DIAGRAM



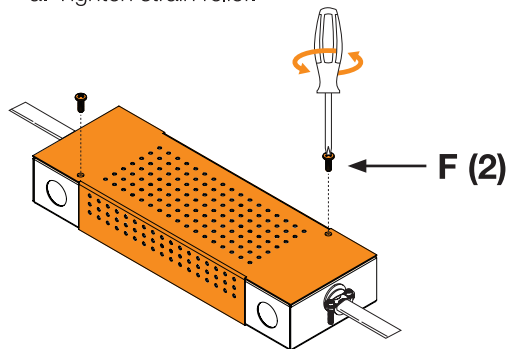
\*LED Driver and J-Box must be grounded in accordance with local and national electrical codes. Ground the J-Box with the included Green Grounding Screw. LIPROTEC-ECD LED drivers are Class 2 certified and do not require a direct ground connection or Ground Fault Circuit Interrupter (GFCI).

## INSTALLATION CONT.

### 7 FINISH ASSEMBLY

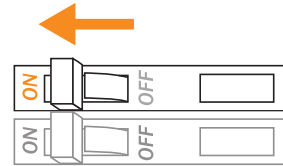


a. Tighten strain relief.



b. Fasten lid to Junction Box.

### 8 TURN POWER ON AT CIRCUIT BREAKER



#### SYSTEM WORKING IMPROPERLY?

Turn power **OFF** at circuit breaker and verify all connections. Review **SYSTEM DIAGRAM** and **TROUBLESHOOTING**, or contact Schluter Systems Customer Service at 800-472-4588 (US) or 800-667-8746 (Canada) for more information.

## TROUBLESHOOTING

Symptom	Common Cause
<ul style="list-style-type: none"> <li>• Fixture does not illuminate.</li> </ul>	<ul style="list-style-type: none"> <li>• Incorrect wiring. Polarity of Low Voltage V+ and V- are reversed.</li> <li>• Circuit breaker is OFF or tripped.</li> </ul>
<ul style="list-style-type: none"> <li>• Fixture turns off at low dim level.</li> <li>• Fixture strobesc/flickers at low dim level.</li> <li>• Dimmer buzzes excessively.</li> </ul>	<ul style="list-style-type: none"> <li>• Only install compatible Schluter®-LIPROTEC LED Systems.</li> <li>• Verify that a compatible Triac/Electronic Low Voltage LED dimmer is installed. If flickering is apparent at low light levels, install a compatible trim-adjustable dimming control.</li> <li>• Ensure all connections are properly secured.</li> <li>• Ensure fixture is receiving the correct input voltage.</li> <li>• Ensure driver is not overloaded. An overloaded driver will cause the internal auto-reset to trip repeatedly.</li> </ul>
<ul style="list-style-type: none"> <li>• Fixture heats up excessively.</li> </ul>	<ul style="list-style-type: none"> <li>• Incorrect voltage pairing of dimmer and fixture.</li> <li>• Do not attach a 12V fixture to a 24V dimmer.</li> <li>• Fixture is not compatible.</li> </ul>
<ul style="list-style-type: none"> <li>• Installation trips main breaker.</li> </ul>	<ul style="list-style-type: none"> <li>• Check wiring for short circuit. If breaker continues to trip, there may be a short in the driver.</li> </ul>

This installation guide is subject to change without notice. Please visit [www.schluter.com](http://www.schluter.com) for the latest version.



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