



current IND467 Lumination LED Luminaire LPL Series Controller Box Installation Guide

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BEFORE YOU BEGIN

Read these instructions completely and carefully.



WARNING

RISK OF ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- Properly ground electrical enclosure.

RISK OF FIRE

- Follow all NEC and local codes.
- Use only UL approved wire for input/output connections.
Minimum size 18 AWG (0.75mm²).
- Do not install insulation within 3 inches (76 mm) of luminaire top.

Save These Instructions

Use only in the manner intended by the manufacturer.
If you have any questions, contact the manufacturer.

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 instruction manual, 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 his own expense.

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

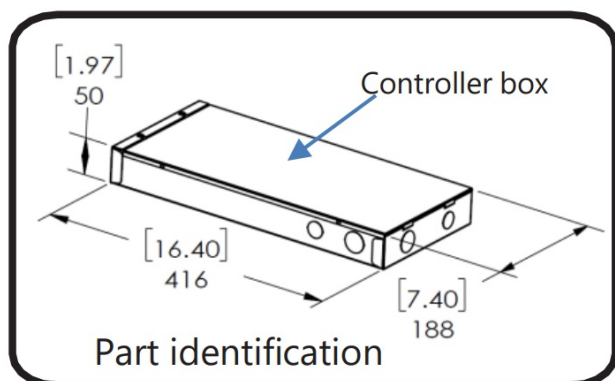


- The grounding and bonding of the overall system shall be done in accordance to local electric code of the country where the luminaire is installed.

Tools and Components Required

- Screwdriver
- UL Listed conduit connections per NEC/CEC for nominal conduit trade size 1/2" or 3/4"
- UL Listed wire connectors

Part identification

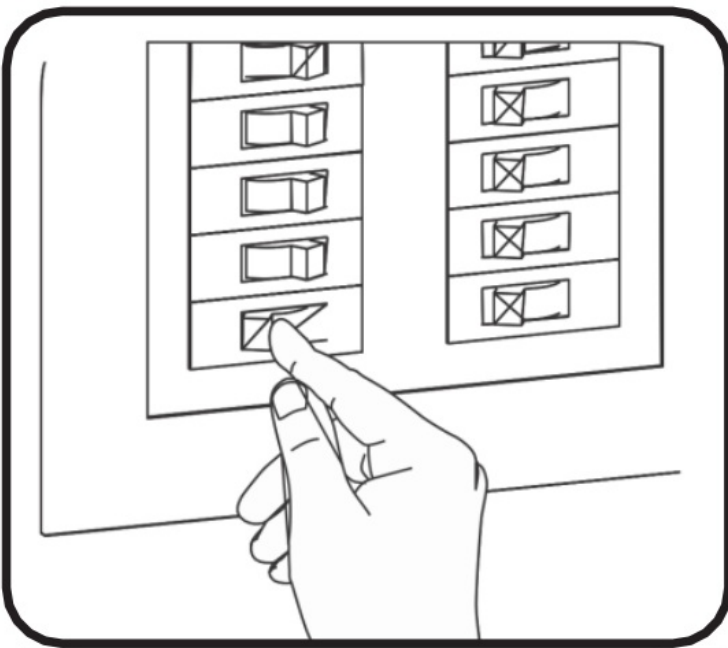


Contents

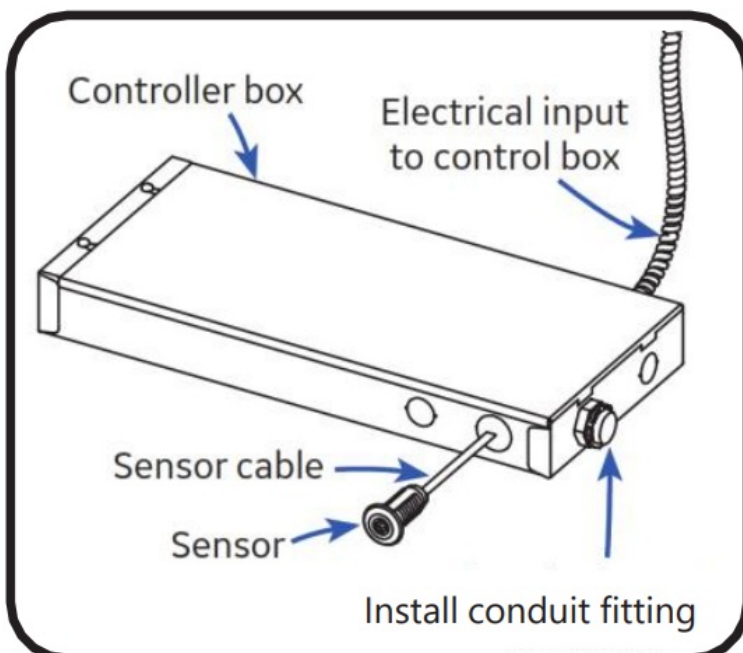
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LPL22A/ LPL24A/LPL24B/LPL22B

1. Disconnect incoming power to the fixture at the panel.

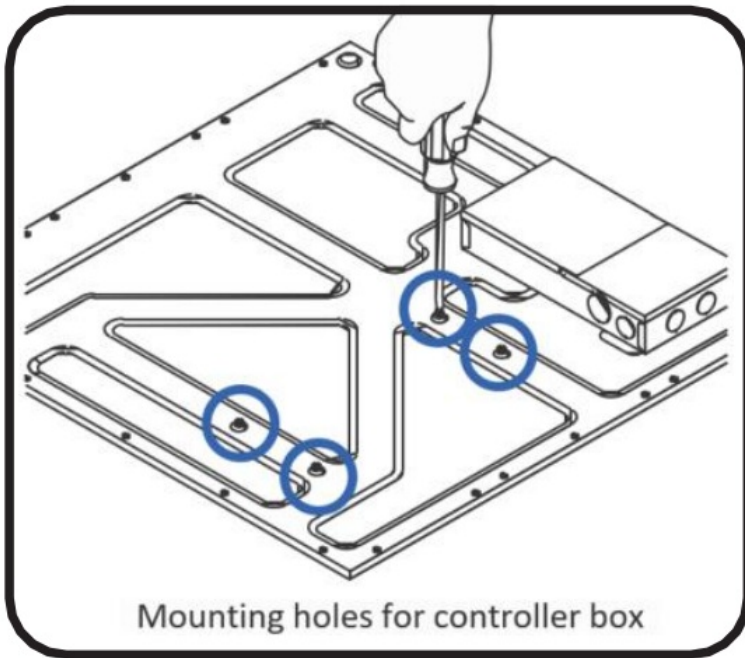


2. Open the knockout hole where electrical output to fixture, then install the conduit fitting on the controller box (Conduit fitting was in the bag of controller kit).

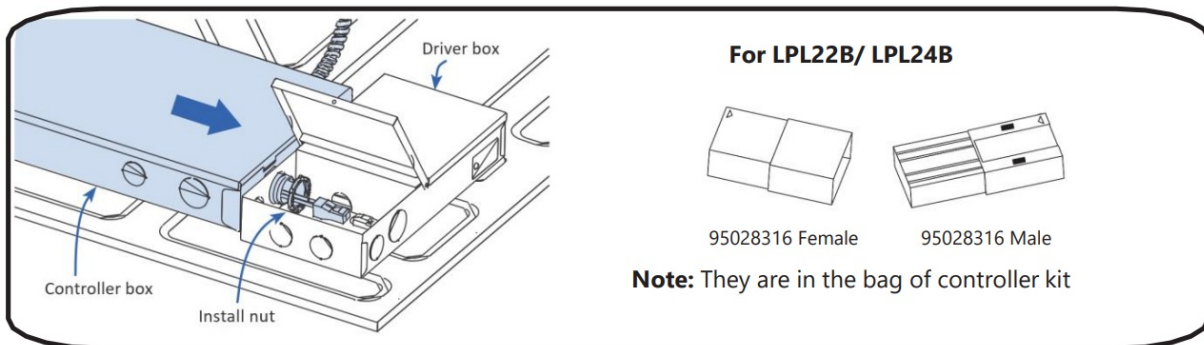


3. Remove screws on the back of luminaire.

NOTE: Keep the screws for later use.



4. Insert the conduit fitting to the driver box and screw the nut to connect them. Make sure all the electrical wires are inserted together into the driver box and connect the wires according to the appropriate wiring diagram on.

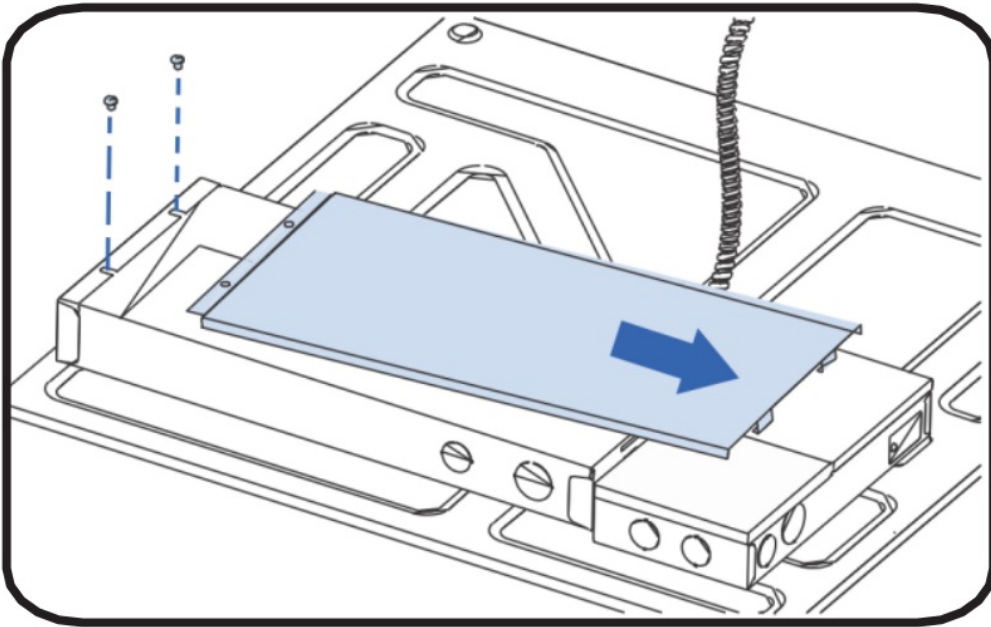


For LPL22B/ LPL24B

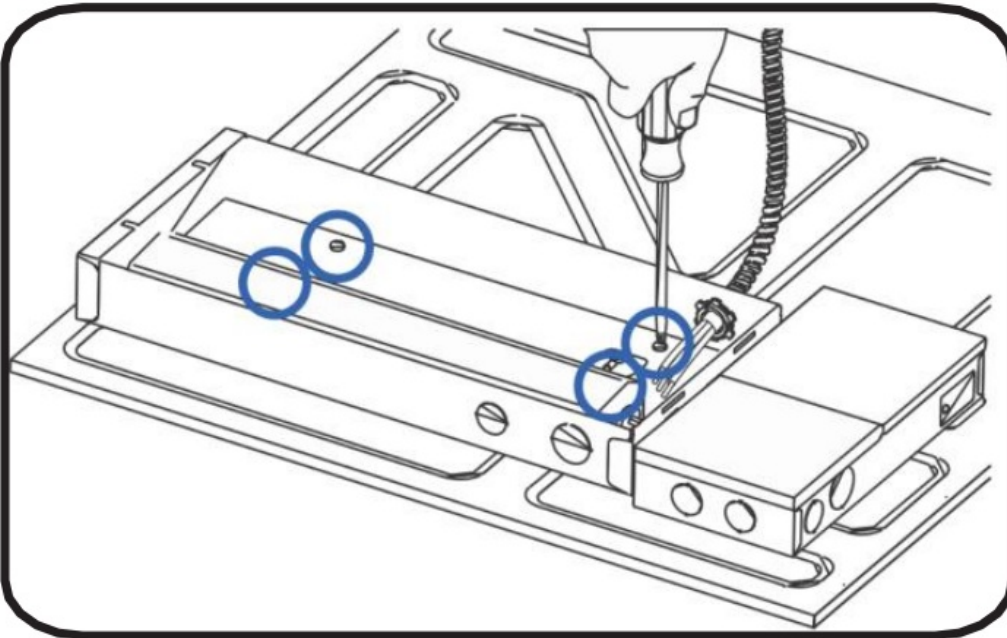
Replace current EMBB LED input/output wire connector with 95028316(Female), 95028316(Male) for EMBB version and IOTA CP Series EMBB with Control version.

5. Remove the screws and open the control box cover by sliding it aside.

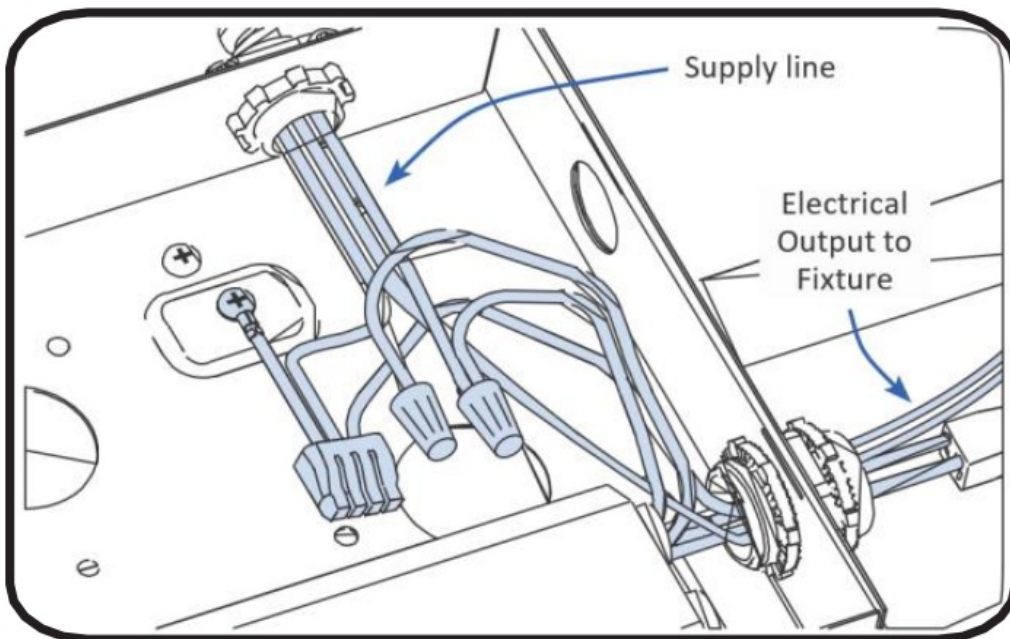
NOTE: Keep the screws for later use



6. Fix the controller box to the back of the luminaire using the four available holes and the screws from step 3.



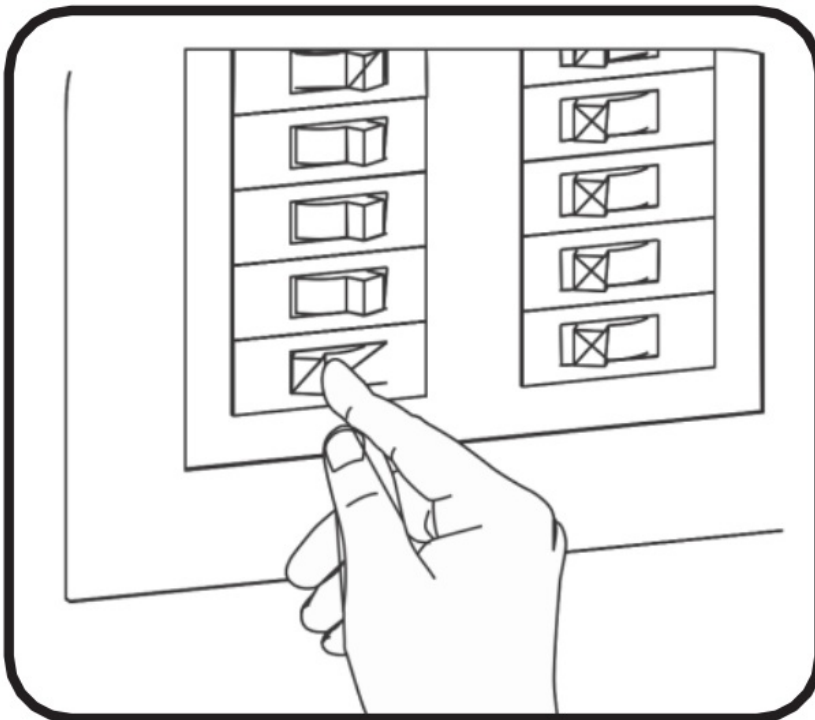
7. Make supply line connections inside the controller box assembly. Refer to the appropriate wiring diagram on pages 8-9 to identify proper connections.



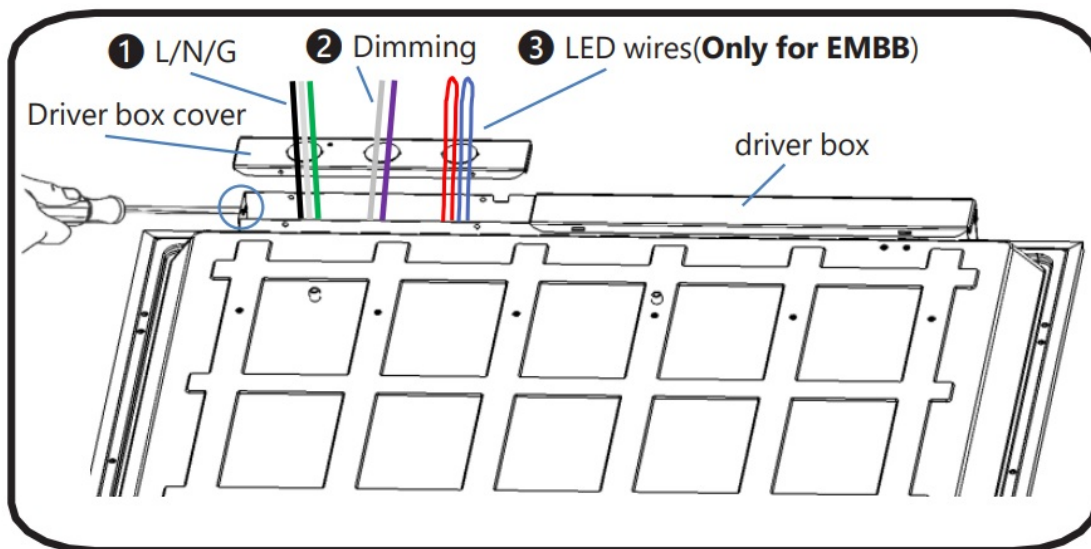
8. Install the controller box cover back to controller box by the screws and star washers.
Position and install sensor in the ceiling using provided hardware

LPL22C/ LPL24C

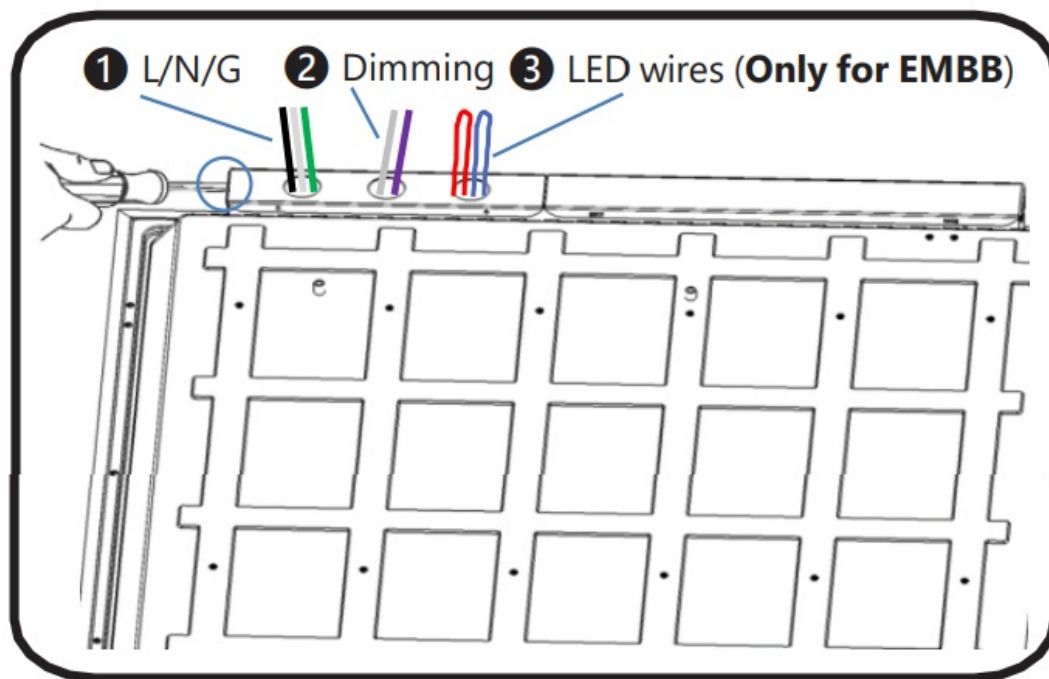
1. Disconnect incoming power to the fixture at the panel.



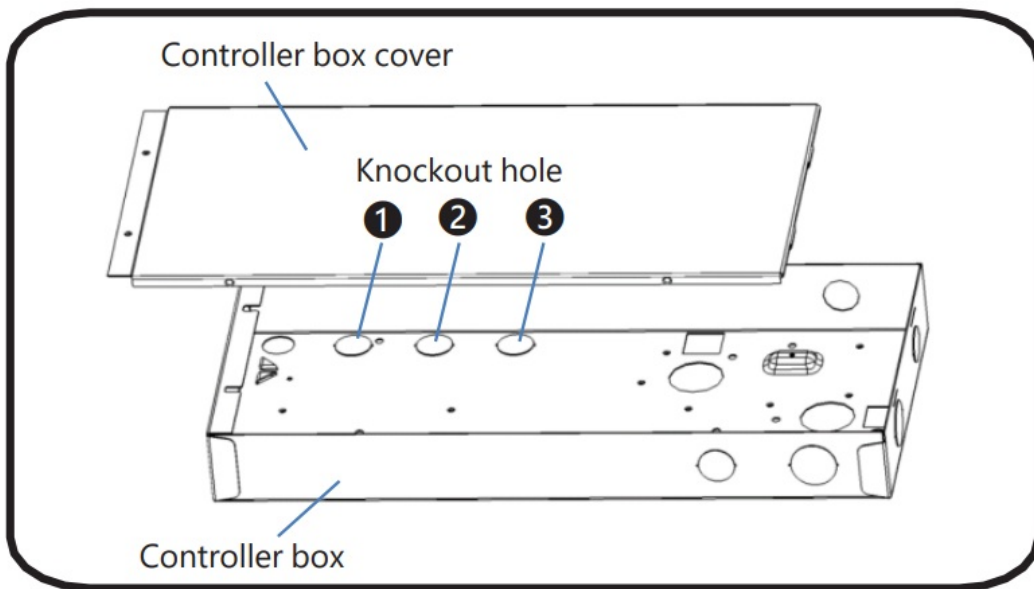
2. Remove the screw and open the driver box cover by sliding it upside,
then open knockout hole ❶ ❷ for None-EMBB or ❶ ❷ ❸ for EMBB, after that, make these wires from driver
through knockout hole:



1. Input line(L, N), Grounding
2. Dimming cable(Violet, Grey)
3. LED wire(LED Output, LED Input): Only for EMBB
3. Install driver box cover back to driver box and fix it with screw while keeping these wires outside of driver box.

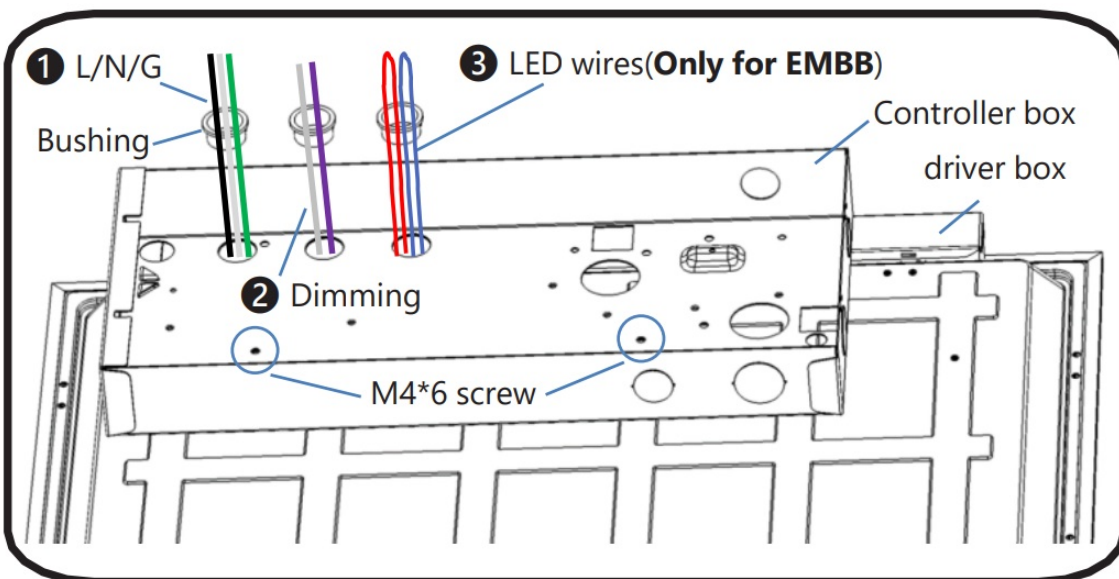


4. Remove the screws and open the controller box cover by sliding it aside, then open knockout hole 1 2 for None-EMBB or 1 2 3 for EMBB.



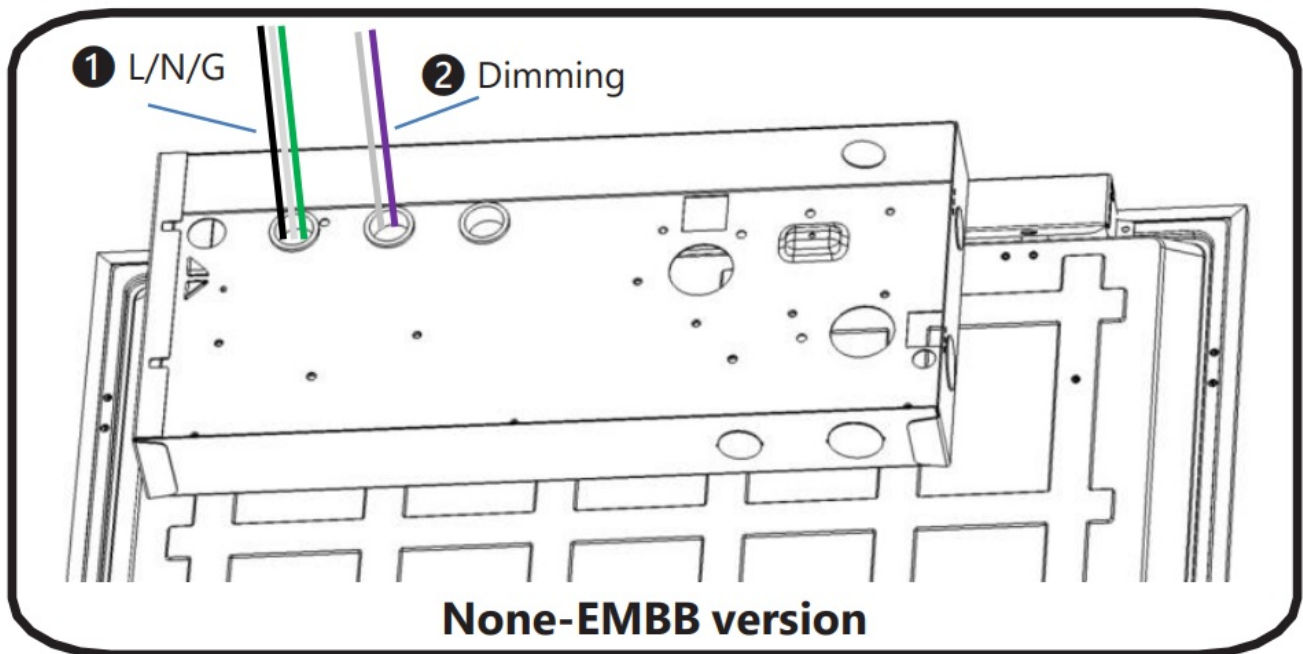
NOTE: Keep the screws for later use

5. Install controller box on the back of the luminaire by keeping 2 holes of controller box matching with 2 nuts of luminaire housing back, then set the knockout holes align between controller box and driver box while making wires through them, then fix controller box with M4*6 screws(M4*6 screws are in the bag of control kit). Insert bushing into knockout holes, and wires go through them (Bushings are in the bag of control kit).



6. A None-EMBB version:

Make sure all the electrical wires are connected according to the appropriate wiring diagram on pages 8-9.



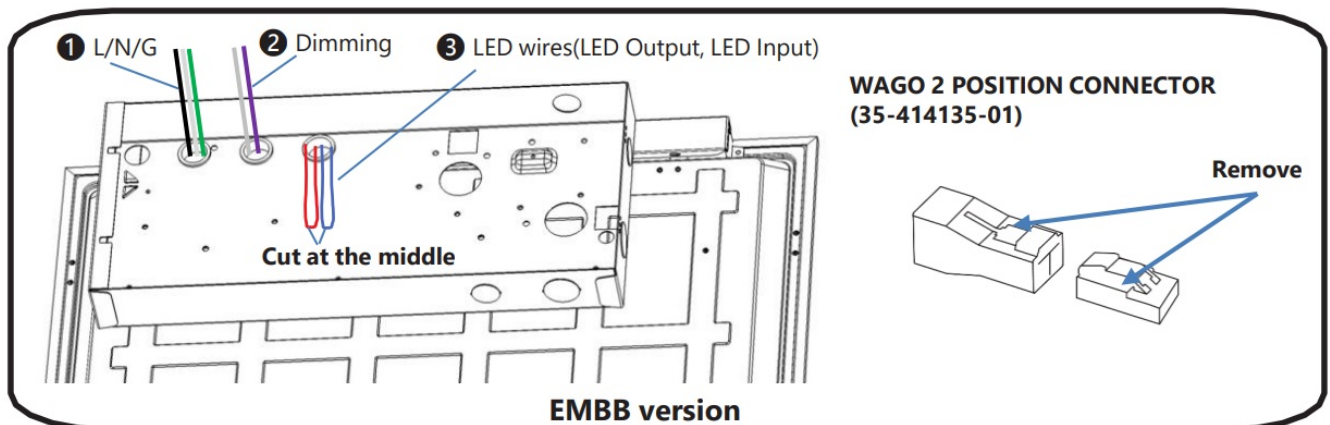
6-B EMBB version:

First, cut LED wires(LED Output, LED Input) at the middle, strip the wire tips by 10mm.

Second, remove WAGO 2-position connectors from EMBB LED wires as above right view.

Third, connect LED wires according to the appropriate wiring diagram on pages 8-9 with UL listed wire nuts.

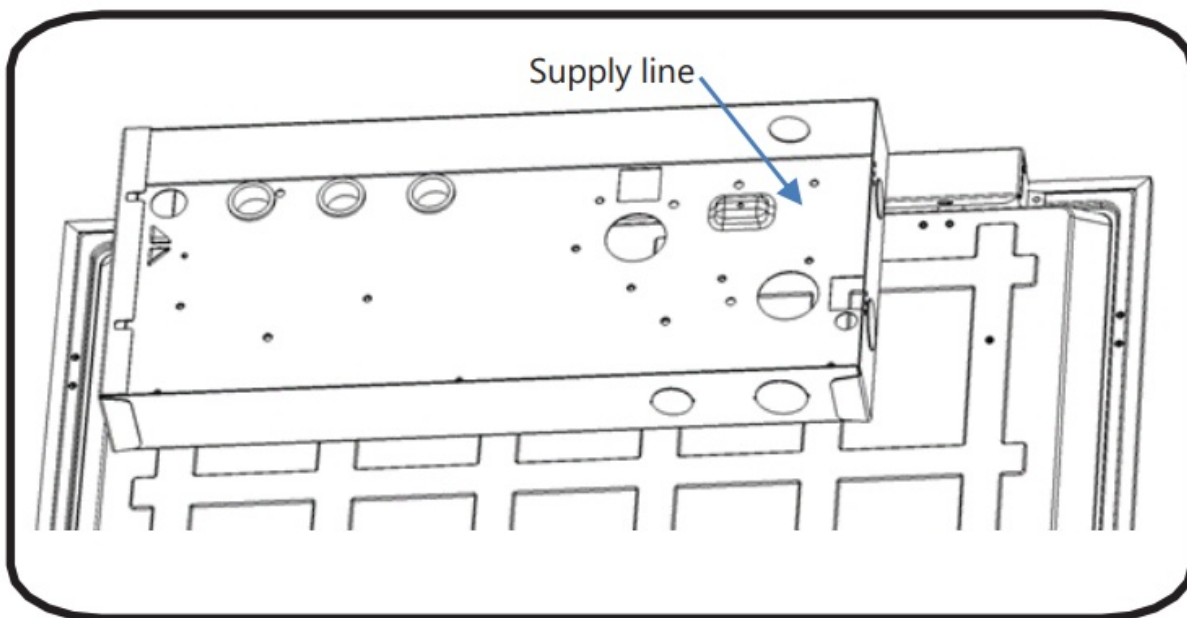
Finally, make sure all the electrical wires are connected according to the appropriate wiring diagram.



Attention:

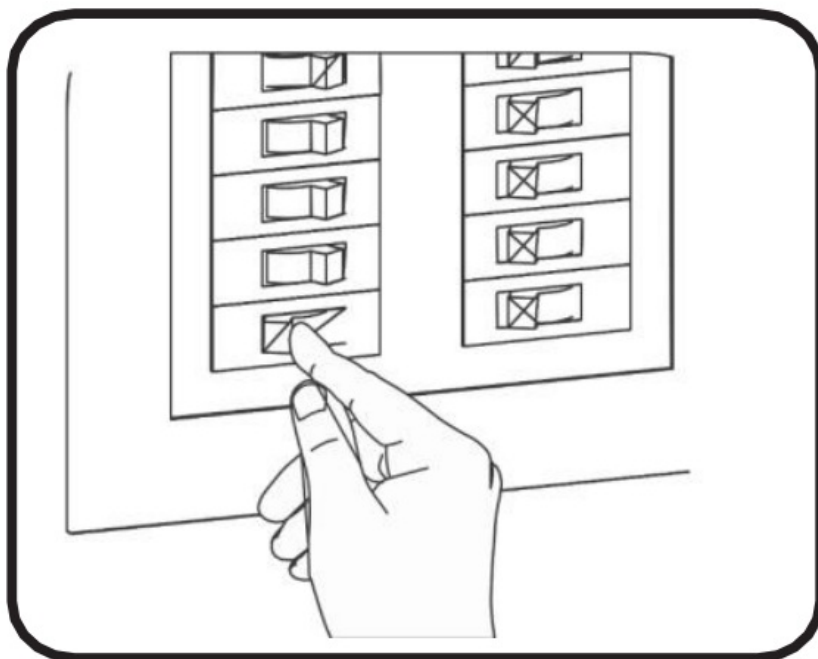
Make sure EMBB wiring is correct according to the appropriate wiring diagram on pages 8-9, otherwise EMBB function will fail.

7. Make supply line connections inside the controller box assembly. Refer to the appropriate wiring diagram to identify proper connections. Fix the controller box cover by using the screws from step 4.



LPL22D/ LPL24D

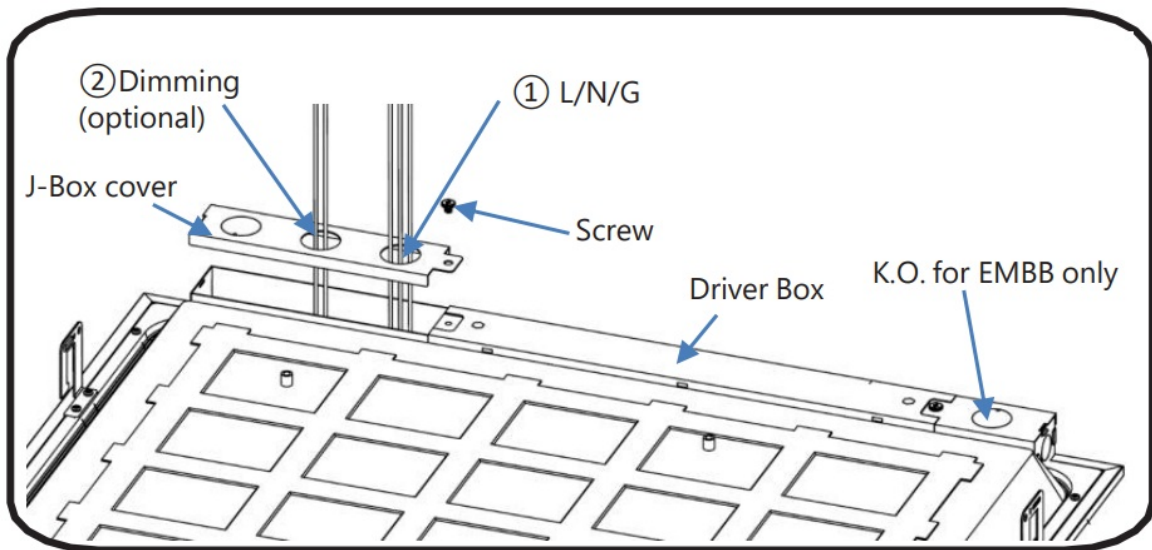
1. Disconnect incoming power to the fixture at the panel.



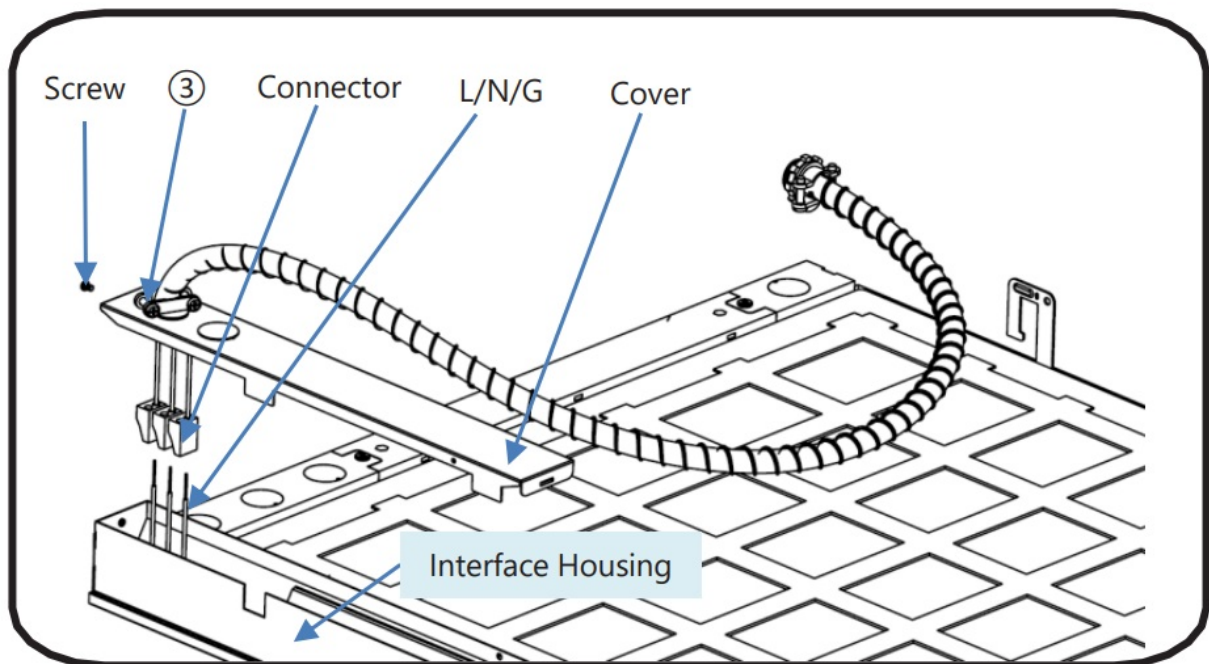
2. For basic version, remove the screw (on the Jbox cover) and open knockout holes ①②.

Take input wires and dimming wires from driver through knockout holes:

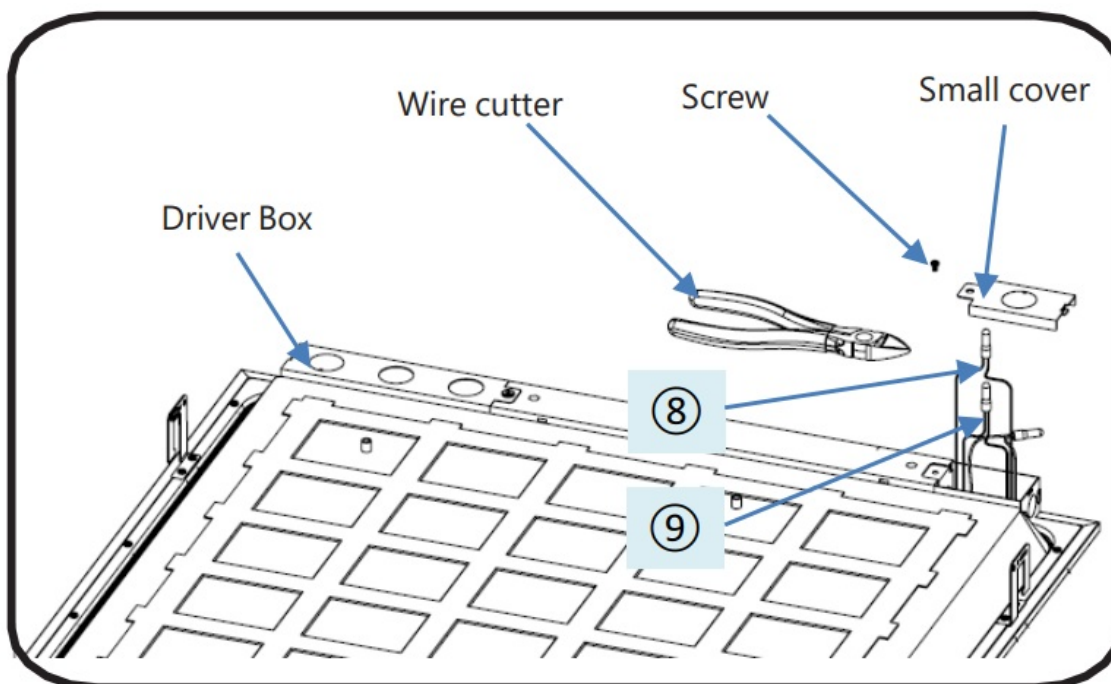
1. Input wires(L, N), Grounding;
2. Dimming wires(Violet, Pink) if need dimming function (Optional)



Install the cover back to driver box and fix it with screw and keep these wires outside of driver box
For sensor version, remove the screw on the Interface-housing cover, and open knockout hole ③
 Take the long conduit from control-box and install it and its fitting to hole ③.
 Connect L/N/G wires via the pre-placed connectors.
 Install the cover back to Interface-Housing and fix it with screws.



3. Loosen the screws and open the controller box cover by sliding it aside, then,
 For basic version, open knockout holes ④⑤ for wires L/N/G and dimming.
 For sensor version, open knockout holes ⑥ for wires L/N/G.
NOTE: Keep the screws for later use.



NOTE: Keep the screws for later use. Attention: Don't cut gray wires!

5. Only For EMBB:

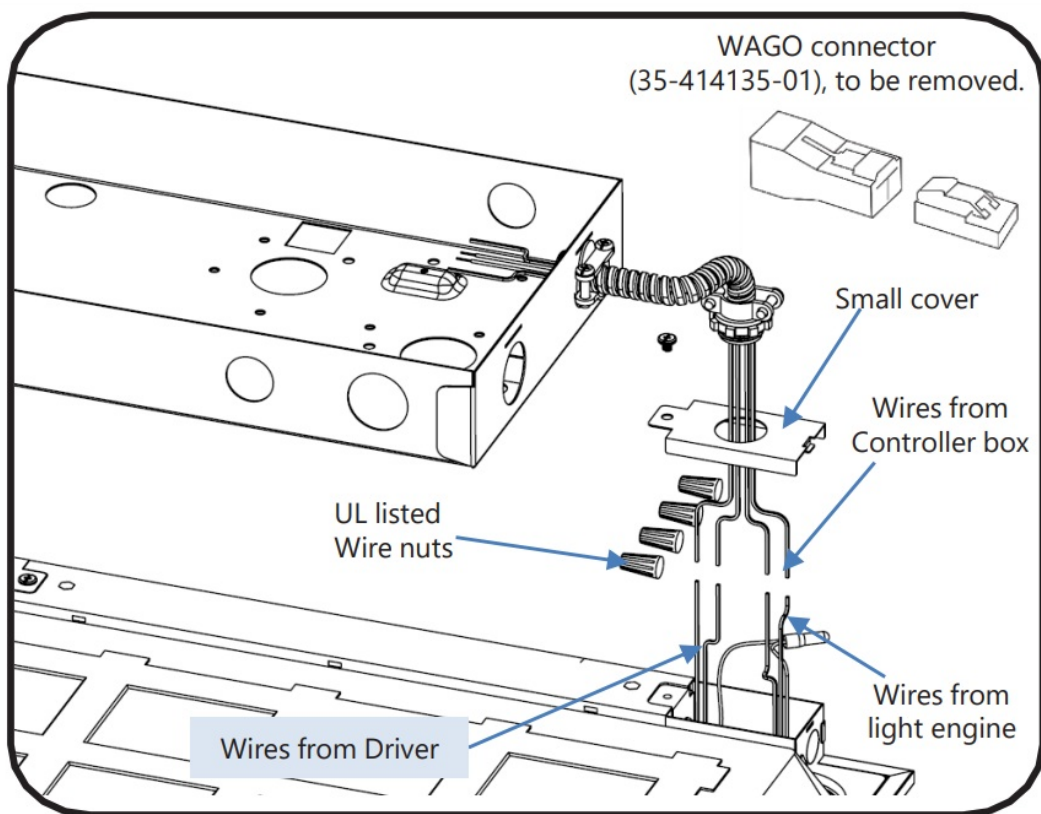
First, cut LED wires (red , white) as step ④ , then strip the wire tips by 10mm.

Second, remove WAGO 2-position connectors from EMBB LED wires (red and blue) as right view. Third, thread 4 wires (Red, Blue, Red/white, Blue/white) through the conduit from controller box, then connect them with wires from driver and light engine according to the appropriate wiring diagram on pages 8-9 with UL listed wire nuts.

Fourth, fix the other end of the conduit to the small cover of fixture.

Finally, put all wires and connectors back into compartment, then fix small cover back to driver box by tightening the screw

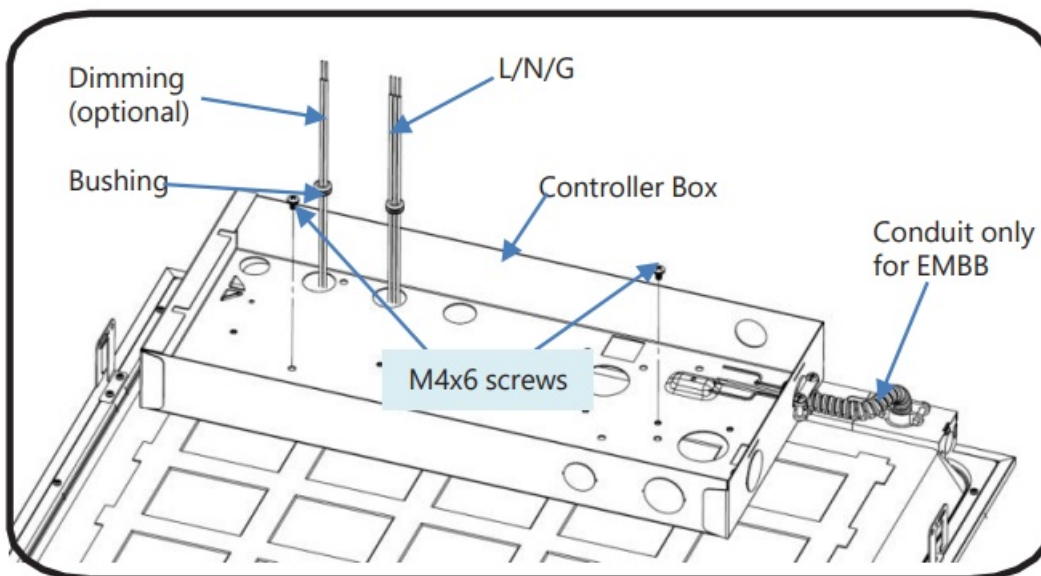
Attentions: Make sure EMBB wiring is correct according to the appropriate wiring diagram on pages 9-10, otherwise EMBB function will fail.

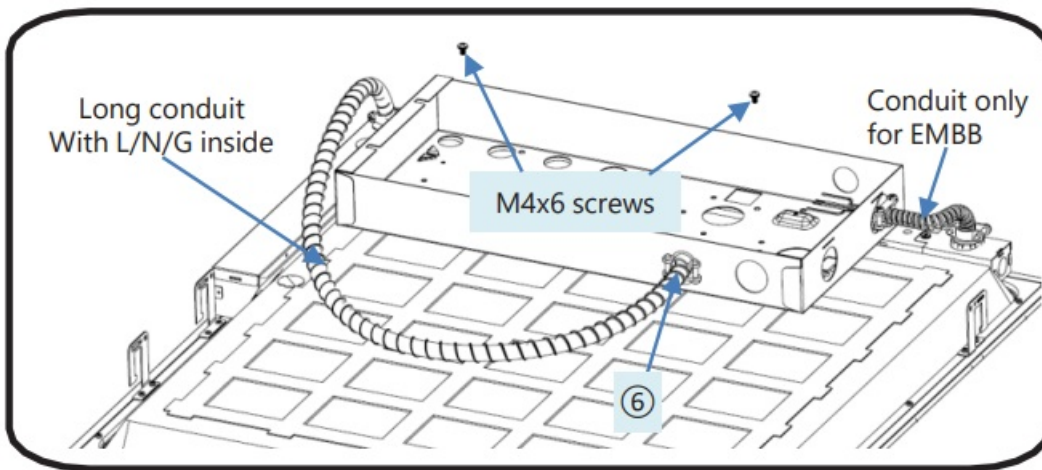


6. Install controller box onto the back of the luminaire by keeping 2 holes of controller box matching with 2 nuts pre-placed on the back of luminaire housing. Align the holes of controller box with driver box and keep wires through the holes. Fix controller box with M4*6 screws(M4*6 screws are in the bag of control kit).

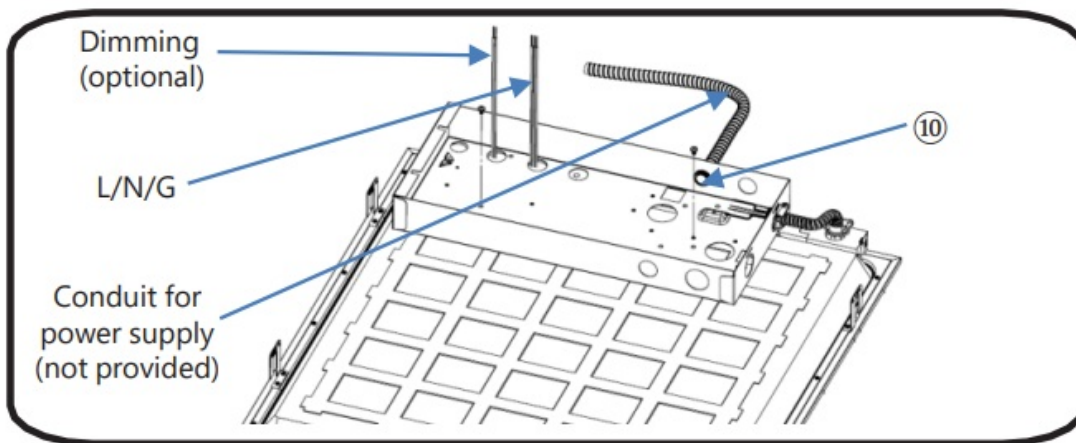
For Basic version, insert bushing into holes, and keep wires go through them. Bushings are in the bag of controller kit.

For Sensor version, install the long conduit and its fittings into holes ⑥ of controller-box.

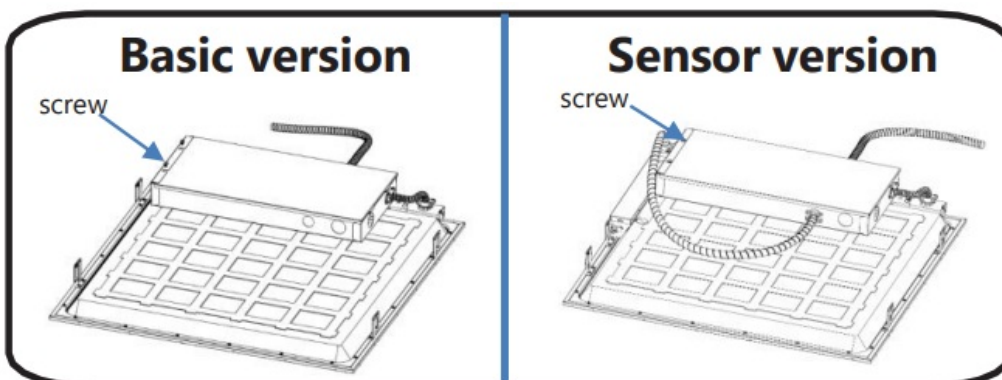




7. Install the conduit and its fitting on an appropriate knockout ⑩ or others knockout for power supply. Connect power supply line to components inside the controller box assembly according to wiring diagram on page 9-10. Make sure all the electrical wires are connected correctly according to the appropriate wiring diagram on page 9-10



8. Fix the controller box cover by the screws and star washers.



Wiring Diagrams

Symbol Key

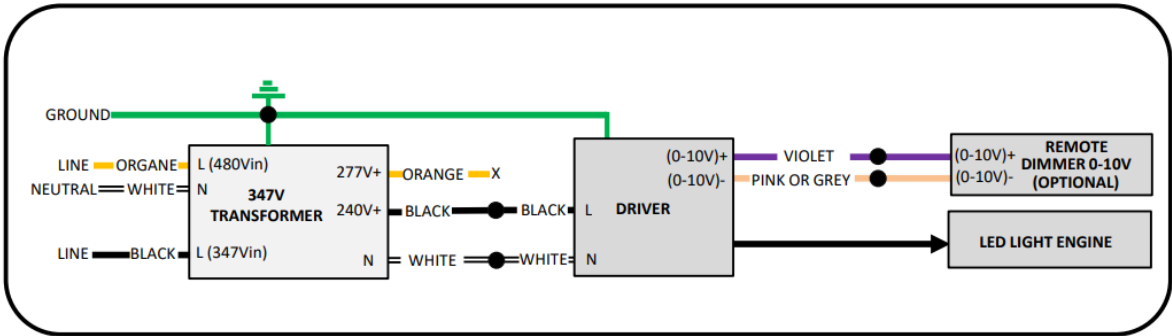


Contraction
Connection

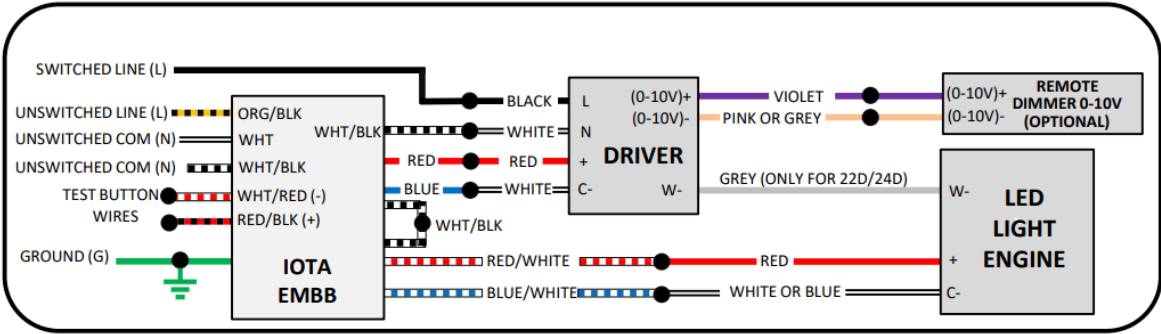


Ground/
Luminaire

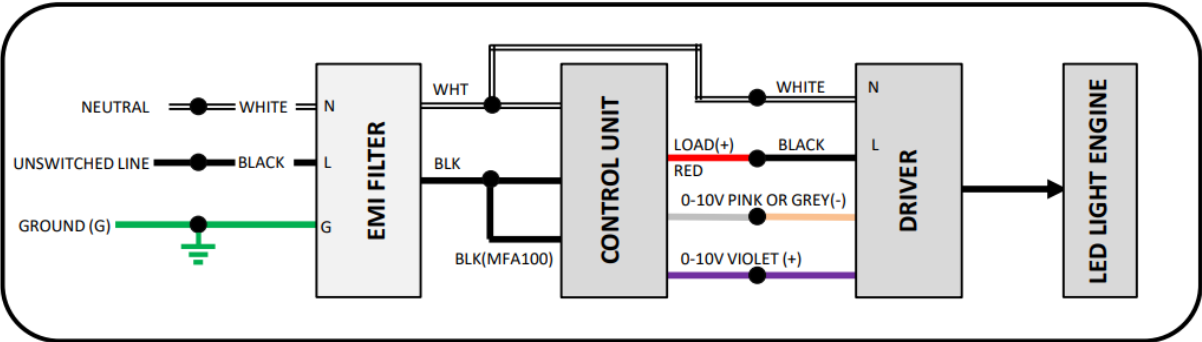
0-10V Dimming: 347V Version



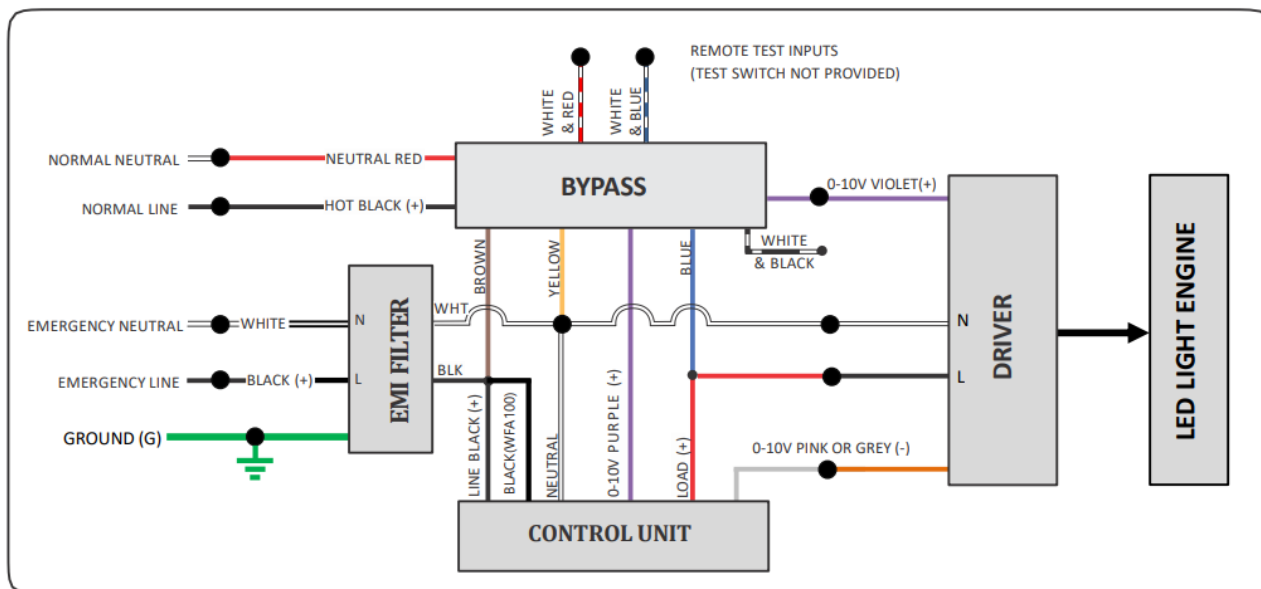
0-10V Dimming: EMBB Version



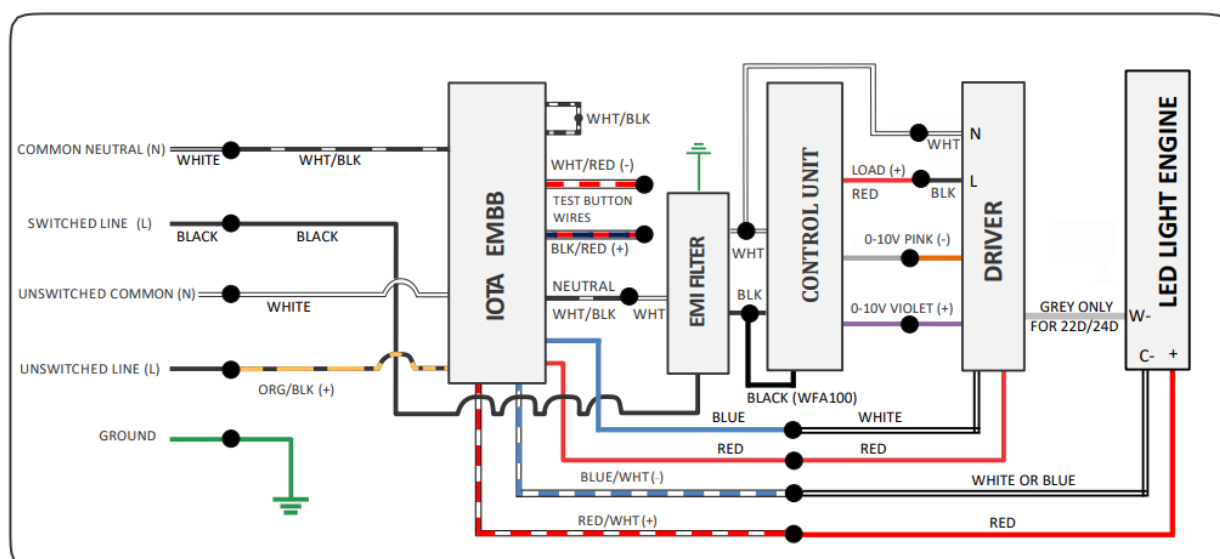
Control with Driver Standard



Emergency Bypass with Controls

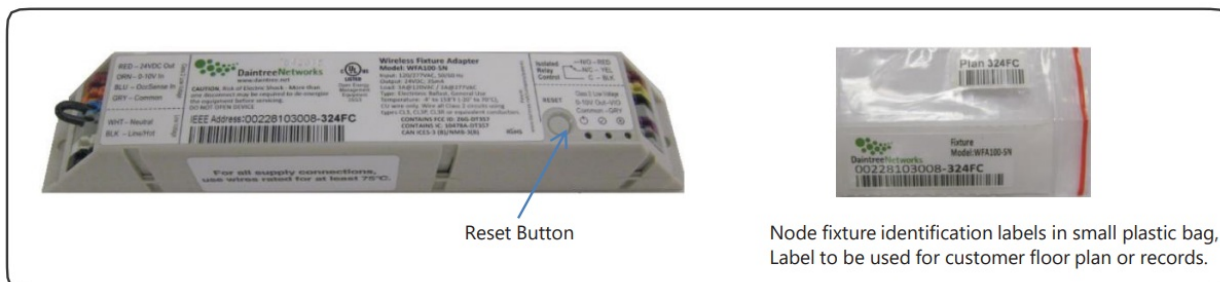


IOTA CP Series EMBB with Control



Controller Identification

Daintree WFA Controller



LABELS: The labels are in a small plastic bag and can be visible either on the control unit itself or near the fixture labels on the outside of the luminaire. These labels can be left in the same visible spot, or they can be placed in an area that is easy to access for easy identification.

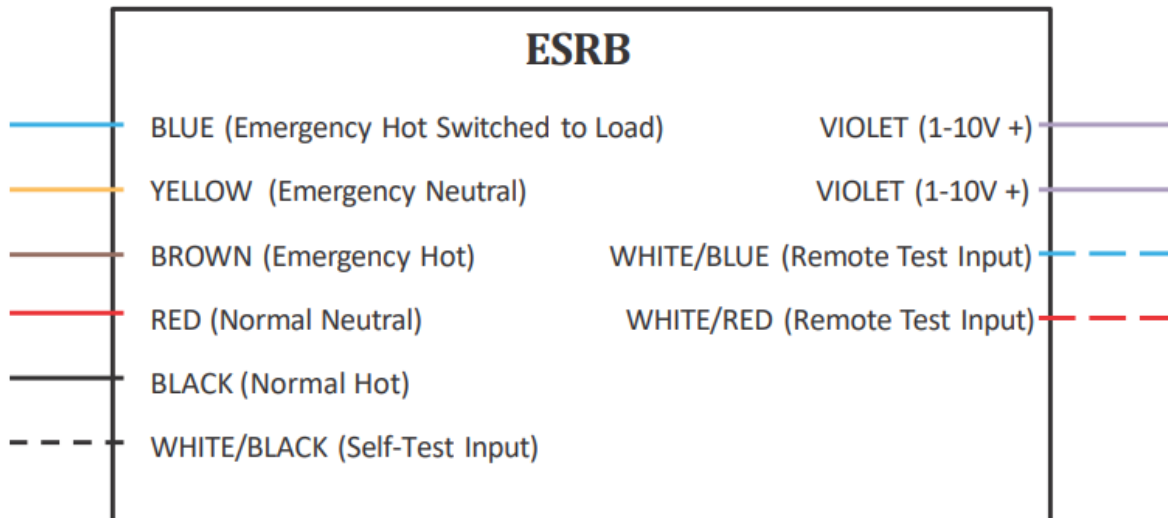
Daintree Module G Controller



LABELS: The labels are in a small plastic bag and can be visible either on the control unit itself or near the fixture labels on the outside of the luminaire. These labels can be left in the same visible spot, or they can be placed in an area that is easy to access for easy identification.

EMERGENCY BYPASS OPTION

Connect the BLACK and RED wires from the fixture to the normal, non-emergency AC wires to detect whether the fixture is in emergency mode.



NOTES:

- See diagram to right for wire colors and descriptions.
- Self-Test Input must be from same branch circuit as normal neutral and normal hot.
- Remote test switch is not provided.
- Remote test input is performed when input is CLOSED.

For further information on the bypass unit, refer to

www.functionaldevices.com

Documents / Resources



[current IND467 Lumination LED Luminaire LPL Series Controller Box](#) [pdf] Installation Guide
de
IND467, Lumination LED Luminaire LPL Series Controller Box, IND467 Lumination LED Luminaire LPL Series Controller Box

References

- [C Lumination® | Current](#)
- [EMA Emergency Lighting Equipment | IOTA](#)