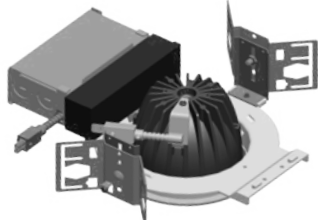


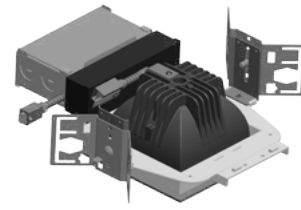
# NDLED6 INSTALLATION INSTRUCTIONS



Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)



NDLED6R  
Cut-Out Diameter: 7"



NDLED6S  
Cut-Out: 7"x7"

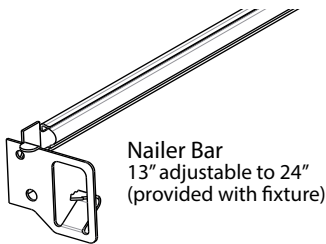
## IMPORTANT

**READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

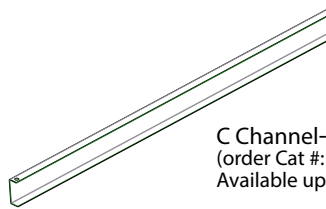
RAB fixtures must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

**WARNING: Make certain power is OFF before installing or maintaining fixture. No user serviceable parts inside.**

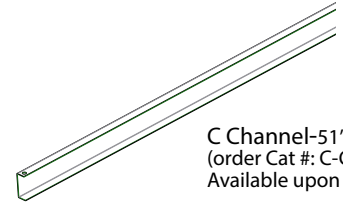
## MOUNTING BARS



Nailer Bar  
13" adjustable to 24"  
(provided with fixture)



C Channel-27"  
(order Cat #: C-Chan 27)  
Available upon request



C Channel-51"  
(order Cat #: C-Chan 51)  
Available upon request

## ROUGH-IN MOUNTING

1. Nailer bars are provided for use with wood joist installations. Insert through **Nailer Bar Slots** in **Butterfly Brackets** and secure accordingly. C-Channels are optionally available, consult factory. Consult local building codes for final support of fixture.
2. Remove appropriate **Knock out** on Junction box. Press **Clip** to open the **Junction Box**.
3. Feed the supply wires through **Knock out** hole and connect to the driver. See wiring section for details.
4. The fixture can be adjusted to different heights above the ceiling surface. For height adjustment, loosen the **Wing Nut** and slide the **Butterfly Bracket**. If necessary remove the **Wing Nut** and insert in screw in different hole provided on the **Butterfly Bracket**. (Fig: 2)
5. Adjust both the **Butterfly Brackets** such that the frame of **Rough-In Section** is flush with the finished ceiling surface. Tighten the **Wing nuts**.

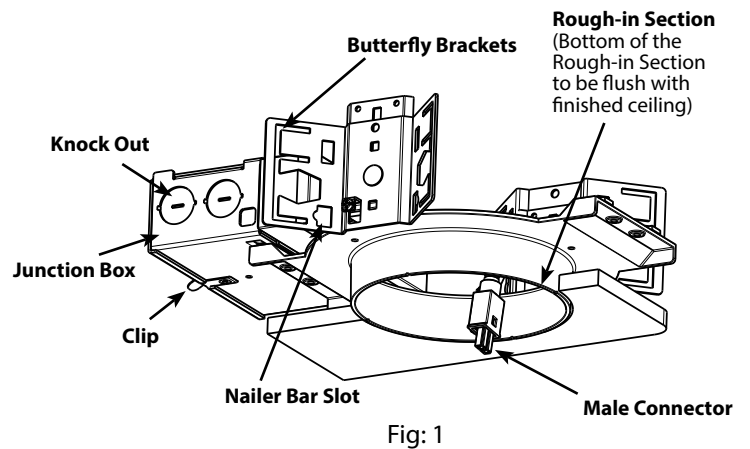


Fig: 1

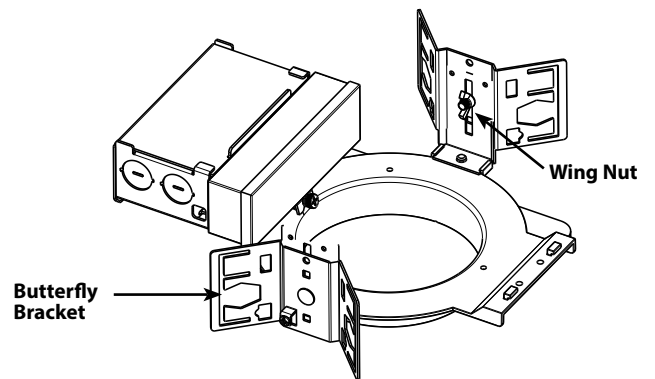


Fig: 2

*Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance. RAB cannot troubleshoot Lutron systems and have provided only basic information. See [www.lutron.com](http://www.lutron.com) for complete instructions and functional compatibility of Lutron Drivers with Lutron or other Control systems/dimmers.*

# NDLED6 INSTALLATION INSTRUCTIONS



Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

## TRIM MODULE MOUNTING

1. Pull **Female Connector** conduit through frame opening. Raise **Trim Module** towards opening and connect to **Male Connector** conduit as shown in Fig. 3.
2. Press **Torsion Springs** inward and slide **Trim Module** into frame opening. Release both springs into opening together. **Trim Ring** should be flush to ceiling.
3. For the Wallwash Model, orient the fixture such that the reflector is in correct orientation. Look for 'Towards the Wall' label on the fixture.

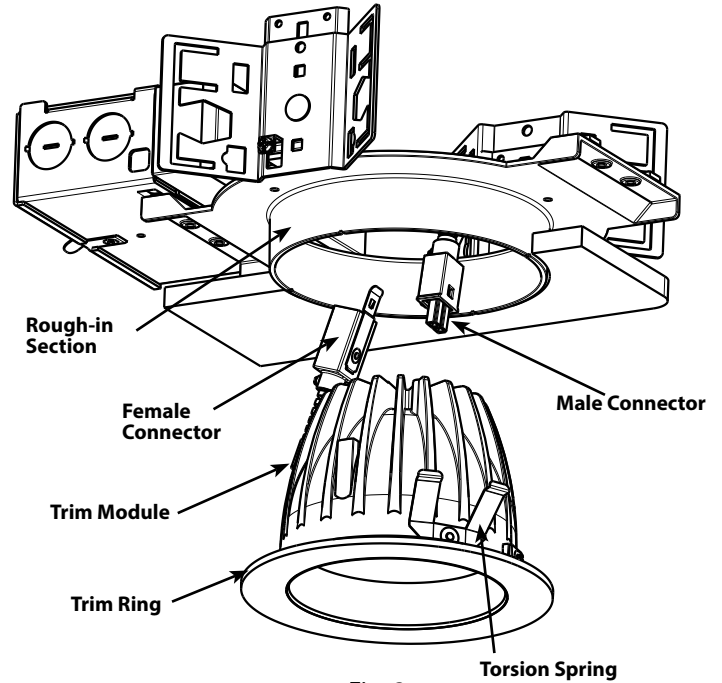


Fig: 3

## WIRING

**RISK OF FIRE.** Universal voltage driver permits operation at 120V thru 277V, 50 or 60 Hz. For Non-Dimming, Electronic Low Voltage (ELV) and Triac Dimming follow the wiring directions in Fig. 4.

1. Connect the GROUND wire from fixture to supply ground.
2. Connect the black fixture lead to the (+) LINE supply lead.
3. Connect the white fixture lead to the (-) COMMON supply lead.

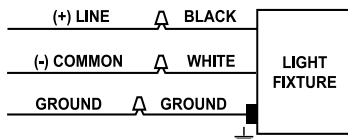


Fig: 4

Lutron L3D Hi-Lume series drivers work with Lutron 3-Wire Control (Fig. 5) or EcoSystem Digital Controls (Fig. 6).

**Note:** See [www.lutron.com](http://www.lutron.com) for complete instructions and functional compatibility of Lutron drivers with Lutron or other control systems/dimmers.

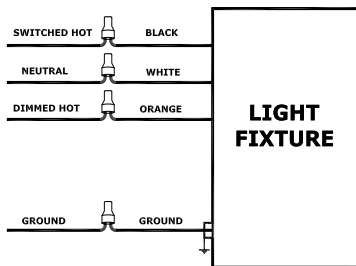


Fig: 5

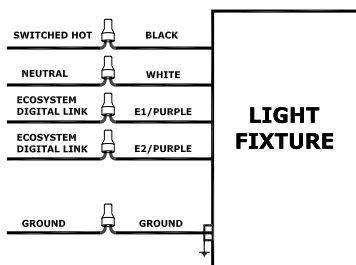


Fig: 6

## CLEANING & MAINTENANCE

**CAUTION:** Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Do not open fixture to clean the LED. Do not touch the LED.
2. Do not touch reflector, lens, or trim cone.
3. Do not clean any fixture surface with wood base cleaning material such as paper towels or tissues. Only use micro fiber cleaning cloth.

## TROUBLESHOOTING

1. Check that the line voltage at the fixture is correct. Refer to wiring directions.
2. Is the fixture grounded properly?
3. For questions on compatibility of dimmers purchased separately refer to [www.rabweb.com](http://www.rabweb.com)
4. If the LED is blinking the fixture may be overheating. Remove the Trim assembly and if the fixture is labeled 'BLINKING LIGHT OF THIS THERMALLY PROTECTED LUMINAIRE MAY INDICATE OVERHEATING' allow the fixture to cool down. Determine cause of overheating and remove. Fixtures with this label have a thermal protector that turns fixture off above a certain temperature. It will automatically restart when cool.

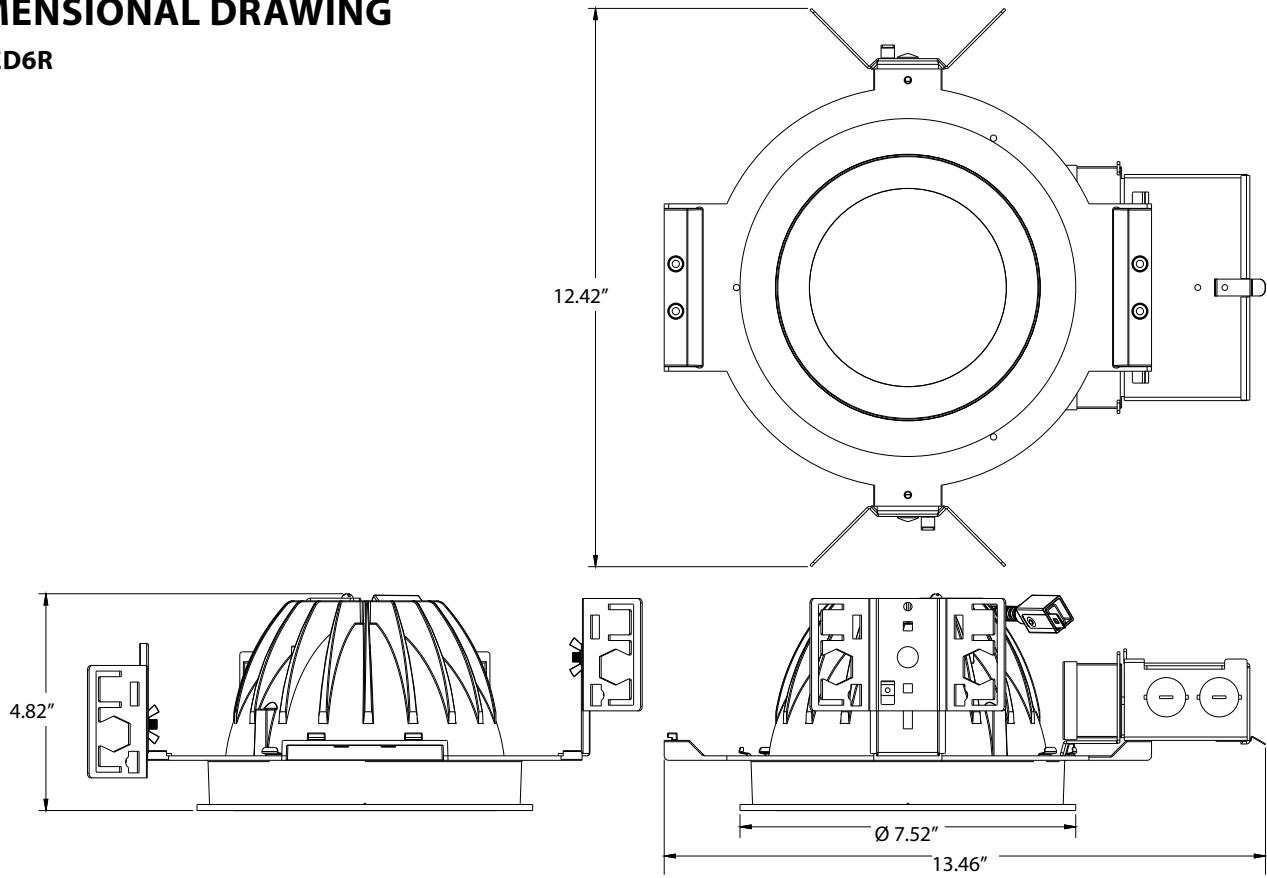
# NDLED6 INSTALLATION INSTRUCTIONS



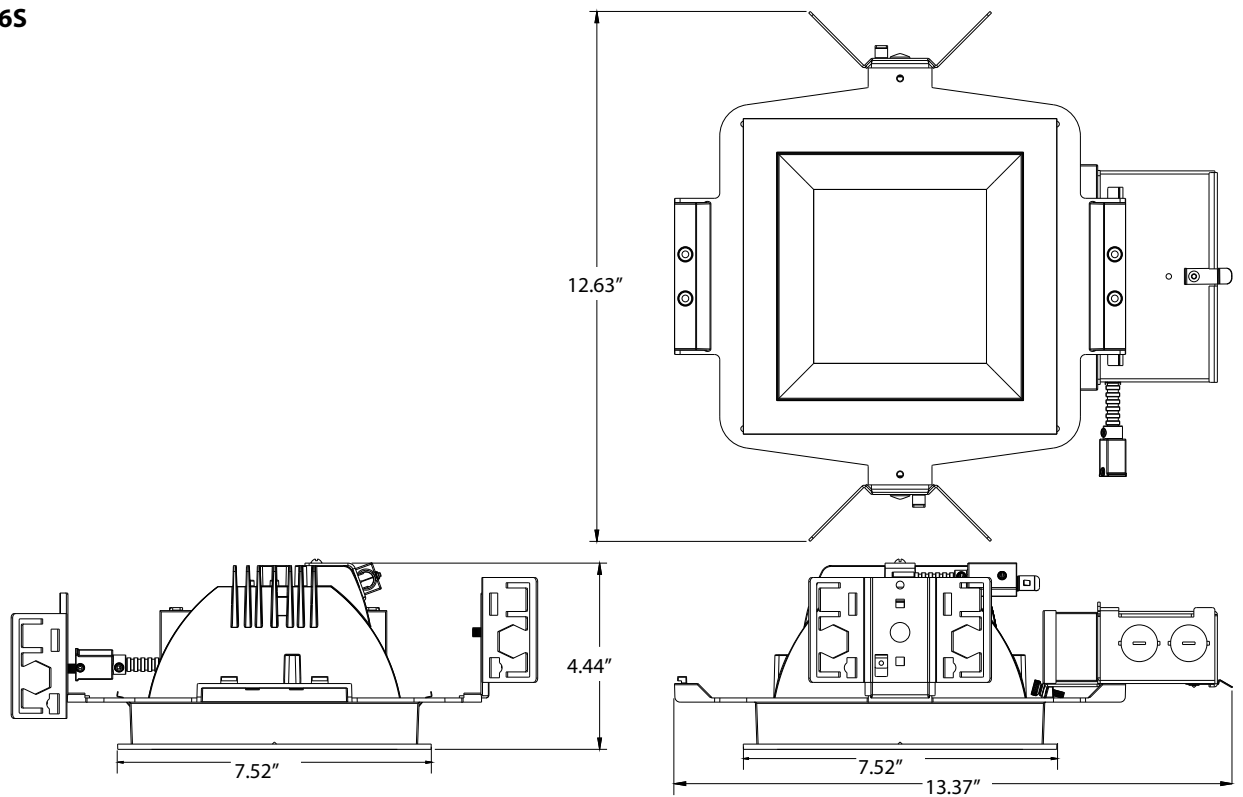
Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

## DIMENSIONAL DRAWING

### NDLED6R

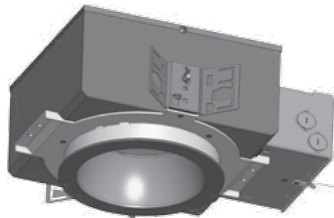


### NDLED6S

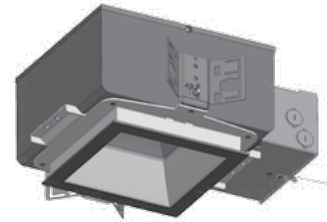


# NDIC6 INSTALLATION INSTRUCTIONS

Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)



NDIC6R  
Cut-Out Diameter: 7"



NDIC6S  
Cut-Out: 7"x7"

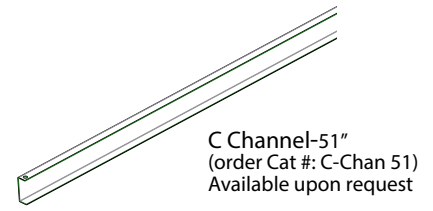
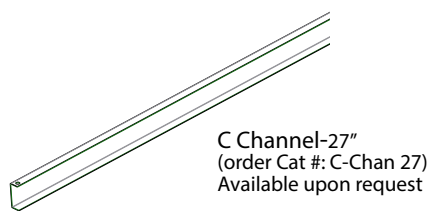
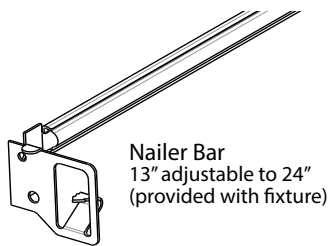
## IMPORTANT

**READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

RAB fixtures must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

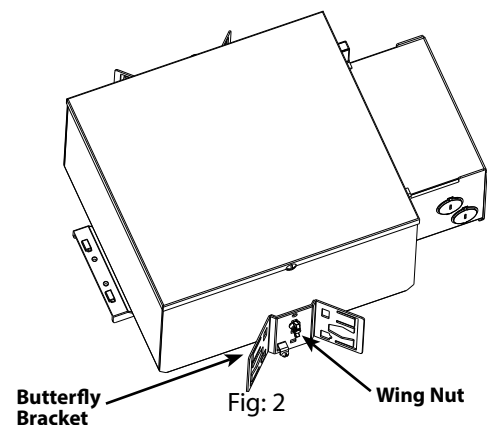
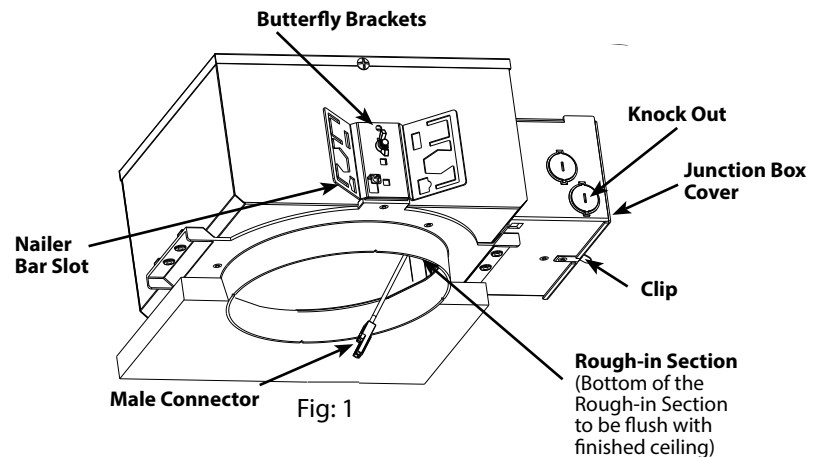
**WARNING: Make certain power is OFF before installing or maintaining fixture. No user serviceable parts inside.**

## MOUNTING BARS



## ROUGH-IN MOUNTING

1. Nailer bars are provided for use with wood joist installations. Insert through **Nailer Bar Slots** in **Butterfly Brackets** and secure accordingly. C-Channels are optionally available, consult factory. Consult local building codes for final support of fixture.
2. Remove appropriate **Knock out** on Junction box. Press **Clip** to remove the **Junction Box Cover**.
3. Feed the supply wires through **Knock out** hole and connect to the driver. Re-install **Junction Box Cover**. See wiring section for details.
4. The fixture can be adjusted to different heights above the ceiling surface. For height adjustment, loosen the **Wing Nut** and slide the **Butterfly Bracket**. If necessary remove the **Wing Nut** and insert in screw in different hole provided on the **Butterfly Bracket**. (Fig: 2)
5. Adjust both the **Butterfly Brackets** such that the frame of **Rough-In Section** is flush with the finished ceiling surface. Tighten the **Wing nuts**.



RAB NDIC6 fixtures are IC rated allowing fixtures to be completely covered with insulation and also comply with minimum Air Leakage requirements per the Washington State Energy Code and Model Energy Code.

# NDIC6 INSTALLATION INSTRUCTIONS

Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

## TRIM MODULE MOUNTING

1. Pull **Male Connector** conduit through frame opening. Raise **Trim Module** towards opening and connect to **Female Connector** conduit as shown in Fig. 3.
2. Press **Torsion Springs** inward and slide **Trim Module** into frame opening. Release both springs into opening together. **Trim Ring** should be flush to ceiling.
3. For the Wallwash Model, orient the fixture such that the reflector is in correct orientation. Look for 'Towards the Wall' label on the fixture.

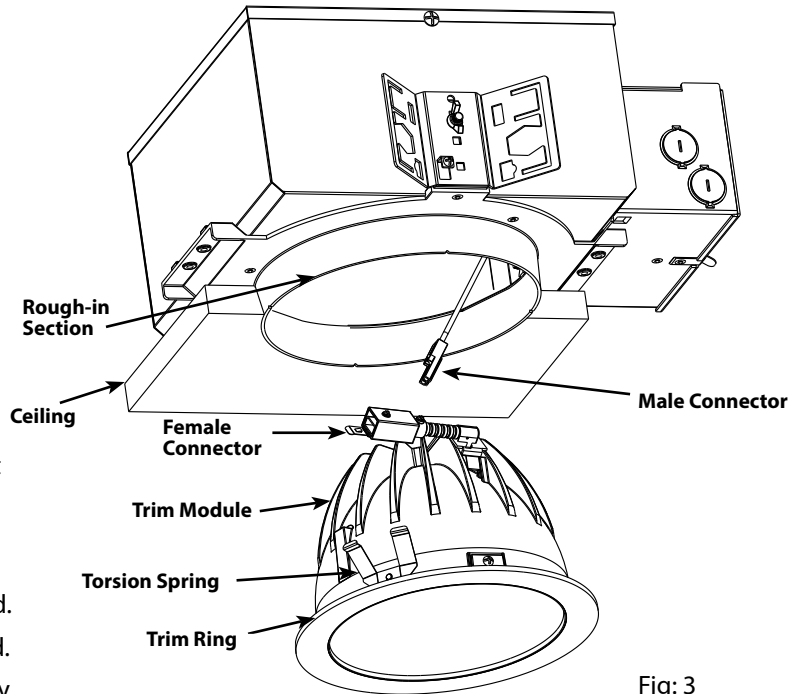


Fig: 3

## WIRING

**RISK OF FIRE.** Universal voltage driver permits operation at 120V thru 277V, 50 or 60 Hz. For Non-Dimming, Electronic Low Voltage (ELV) and Triac Dimming follow the wiring directions in Fig. 4.

1. Connect the GROUND wire from fixture to supply ground.
2. Connect the black fixture lead to the (+) LINE supply lead.
3. Connect the white fixture lead to the (-) COMMON supply lead.

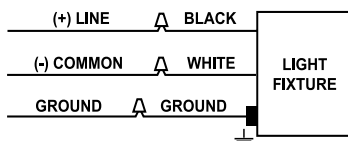


Fig: 4

Lutron L3D Hi-Lume series drivers work with Lutron 3-Wire Control (Fig. 5) or EcoSystem Digital Controls (Fig. 6).

**Note:** See [www.lutron.com](http://www.lutron.com) for complete instructions and functional compatibility of Lutron drivers with Lutron or other control systems/dimmers.

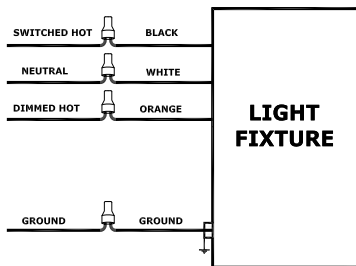


Fig: 5

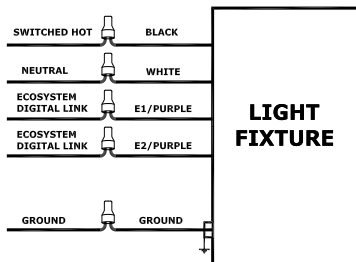


Fig: 6

## CLEANING & MAINTENANCE

**CAUTION:** Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Do not open fixture to clean the LED. Do not touch the LED.
2. Do not touch reflector, lens, or trim cone.
3. Do not clean any fixture surface with wood base cleaning material such as paper towels or tissues. Only use micro fiber cleaning cloth.

## TROUBLESHOOTING

1. Check that the line voltage at the fixture is correct. Refer to wiring directions.
2. Is the fixture grounded properly?
3. For questions on compatibility of dimmers purchased separately refer to [www.rabweb.com](http://www.rabweb.com)

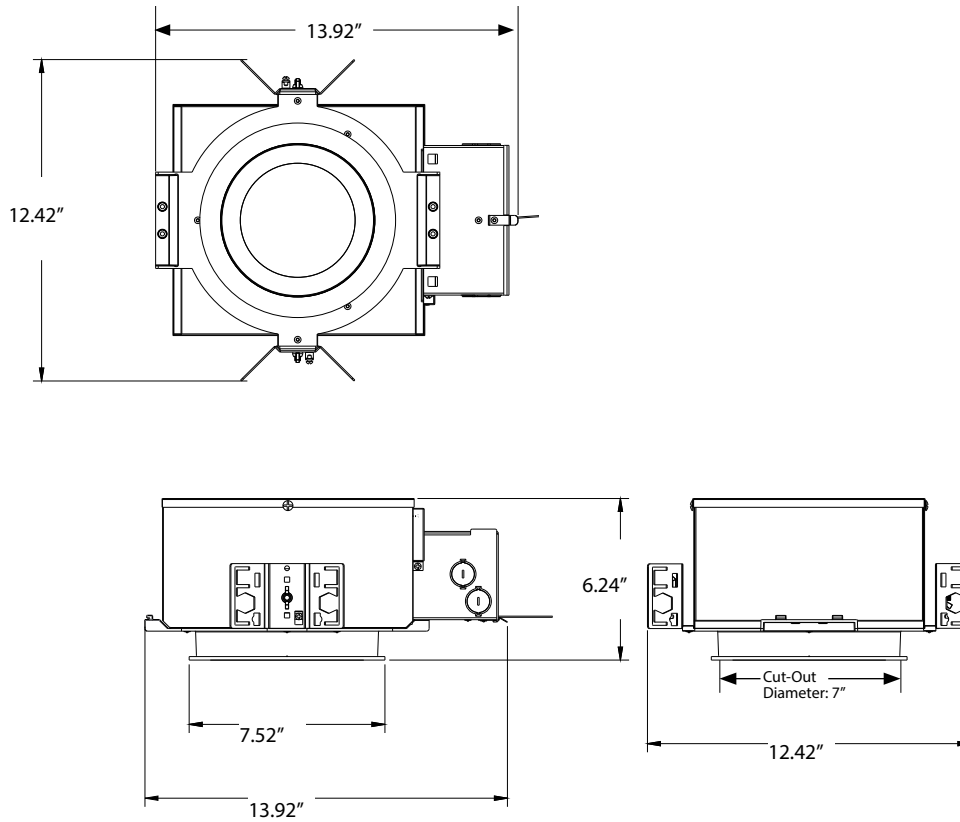
*Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance. RAB cannot troubleshoot Lutron systems and have provided only basic information. See [www.lutron.com](http://www.lutron.com) for complete instructions and functional compatibility of Lutron Drivers with Lutron or other Control systems/dimmers.*

## NDIC6 INSTALLATION INSTRUCTIONS

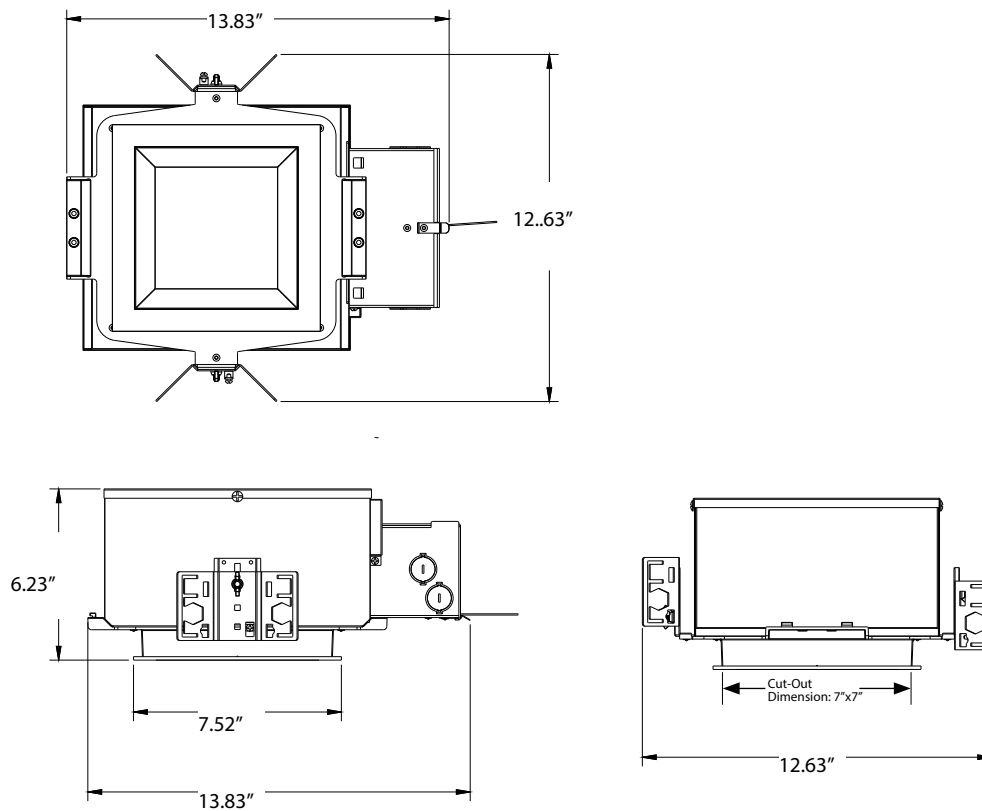
Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

### DIMENSIONAL DRAWING

#### NDIC6R

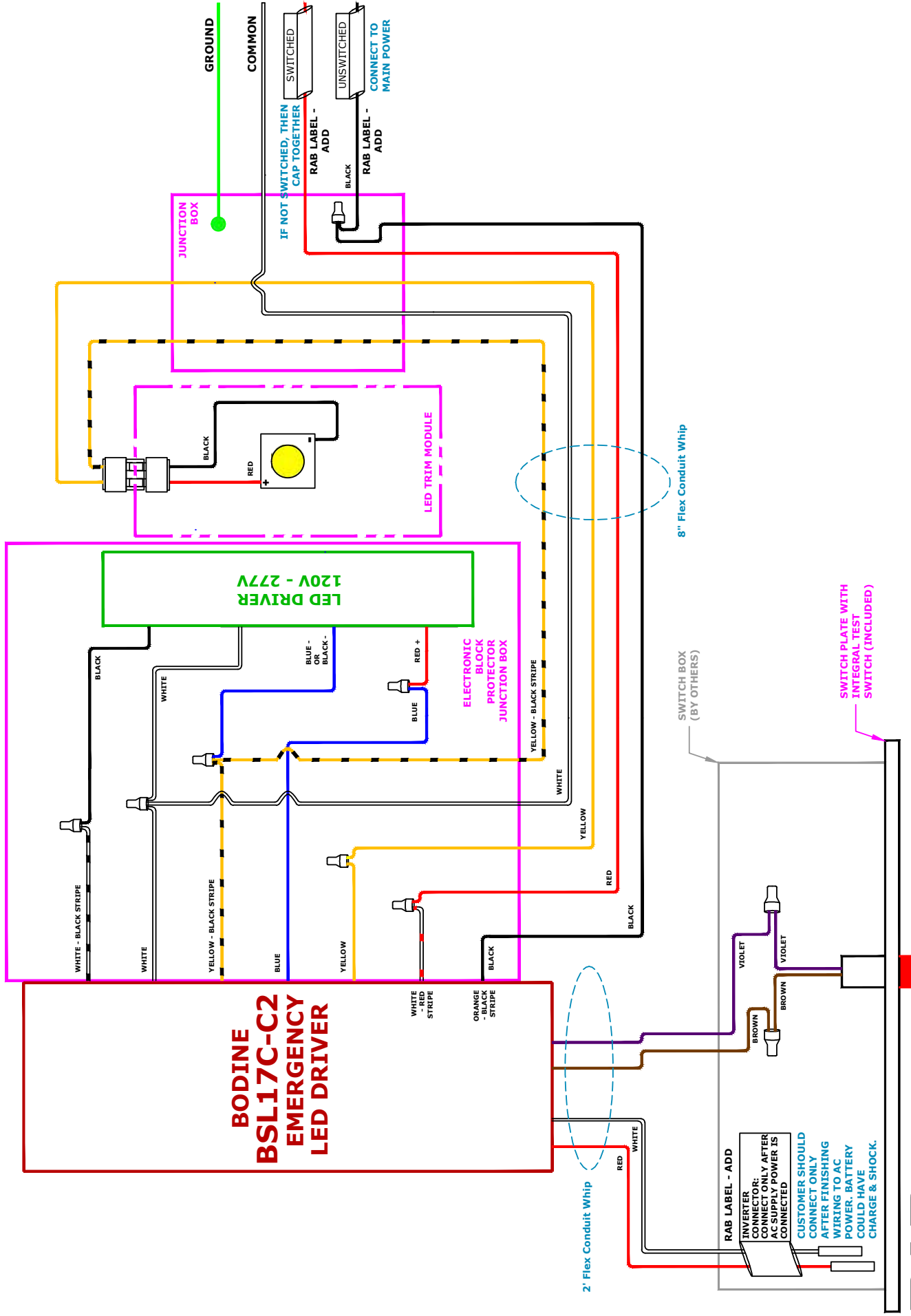


#### NDIC6S



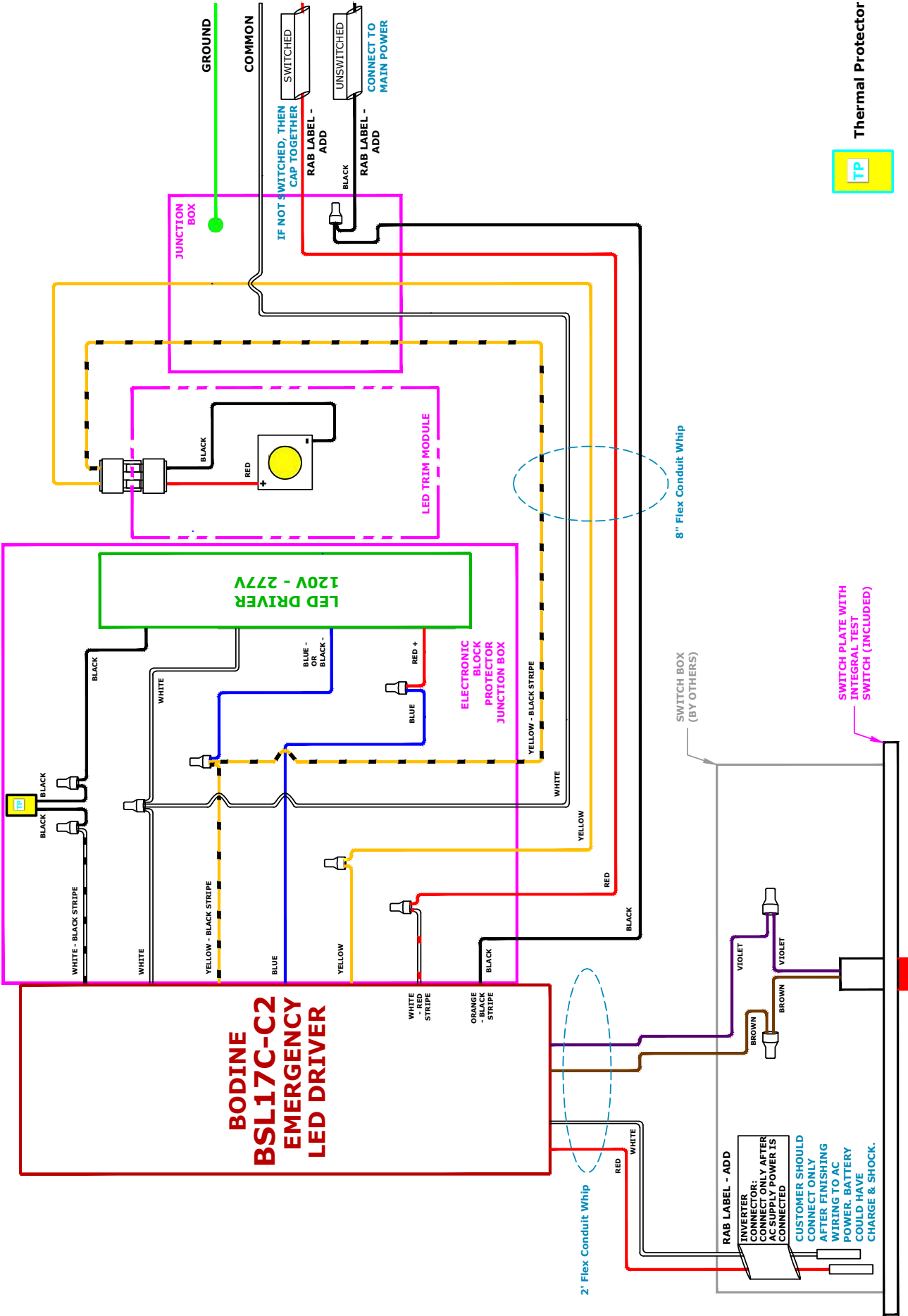
# WIRING DIAGRAM for EMERGENCY OPERATION at 120V - 277V

Emergency Ballast and AC Ballast must be fed from the same circuit



# WIRING DIAGRAM for EMERGENCY OPERATION at 120V - 277V with Thermal Protector

Emergency Ballast and AC Ballast must be fed from the same circuit

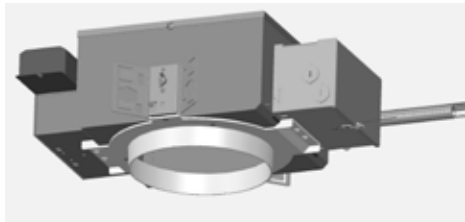




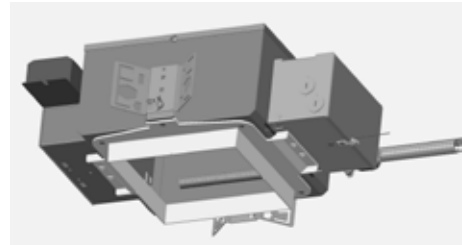
# NDIC6 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS



Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)



NDIC6R/E2  
Cut-Out Diameter: 7"



NDIC6S/E2  
Cut-Out: 7" x 7"

## IMPORTANT

**SUITABLE FOR INSTALLATION IN NON-ACCESSIBLE CEILINGS ONLY.**

**READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

Fixtures must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

**THIS IS AN EMERGENCY BATTERY BACKUP FIXTURE THAT CONTAINS A RECHARGEABLE NICKEL-CADMIUM BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OFF PROPERLY.**

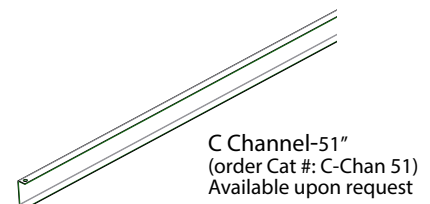
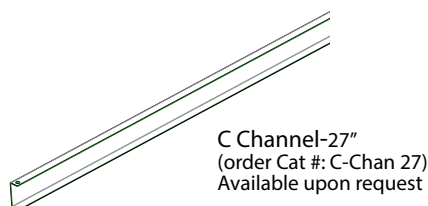
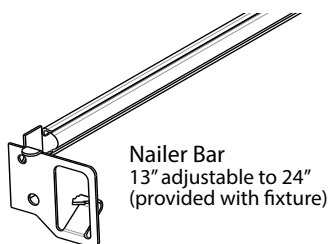
## SAFETY INSTRUCTIONS

**WARNING: Make certain power is OFF before installing or maintaining fixture. No user serviceable parts inside.**

**WARNING: Suitable for wet locations where the ambient temperature is 0° C minimum, +40° C maximum.**

**WARNING: Suitable for installation in Insulated Ceilings only.**

## MOUNTING BARS



## OPERATION

1. When AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged.
2. When power fails, the emergency ballast automatically switches to emergency power (internal battery), operating at reduced illumination. The emergency ballast supplies 7W of power (measured at nominal battery voltage) at a maximum rated current of 270mA with a maximum voltage of 50VDC in emergency mode for a minimum of 90 minutes.
3. When AC power is restored, the emergency ballast automatically returns to charging mode.

RAB NDIC6 fixtures are IC rated allowing fixtures to be completely covered with insulation and also comply with minimum Air Leakage requirements per the Washington State Energy Code and Model Energy Code.

# NDIC6 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS

Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

## ROUGH-IN MOUNTING

1. Nailer bars are provided for use with wood joist installations. Insert through **Nailer Bar Slots** in **Butterfly Brackets** and secure accordingly. C-Channels are optionally available, consult factory. Consult local building codes for final support of fixture.
2. Remove appropriate **Knock out** on Junction box. Press **Clip** to remove the **Junction Box Cover**.
3. Feed the supply wires through **Knock out** hole and connect to the driver. Re-install **Junction Box Cover**. See wiring section for details.
4. The fixture can be adjusted to different heights above the ceiling surface. For height adjustment, loosen the **Wing Nut** and slide the **Butterfly Bracket**. If necessary remove the **Wing Nut** and insert in screw in different hole provided on the **Butterfly Bracket**. (Fig: 2)
5. Adjust both the **Butterfly Brackets** such that the frame of **Rough-In Section** is flush with the finished ceiling surface. Tighten the **Wing nuts**.

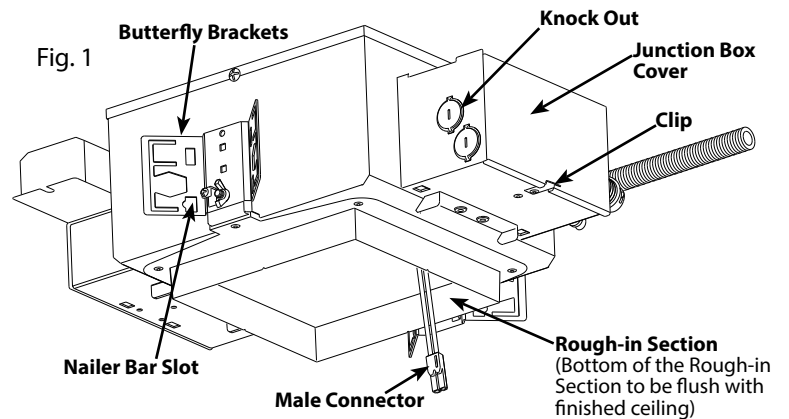


Fig. 2

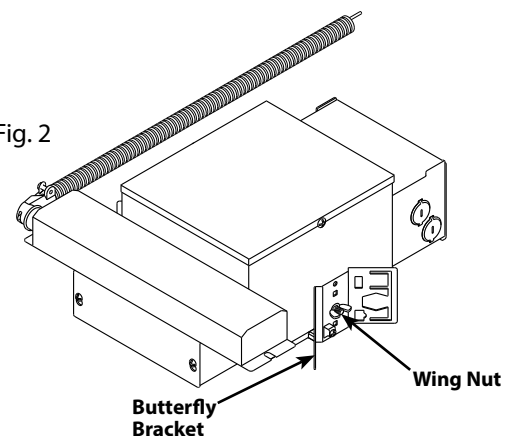
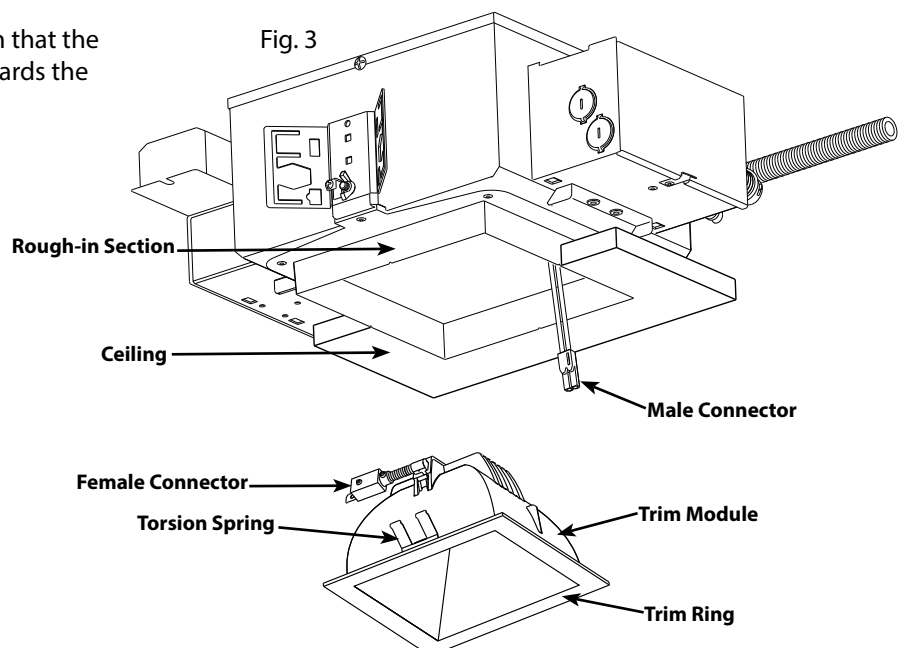


Fig. 3



# NDIC6 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS



Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

## WIRING

**CAUTION: THIS IS AN EMERGENCY BATTERY BACKUP FIXTURE. Voltage could be present in Battery. To prevent high voltage from being present on output leads, inverter connector must be open. Do not join inverter connector until installation is complete and AC power is supplied to the emergency ballast.**

**NOTE:** Make sure that the necessary branch circuit wiring is available. An unswitched AC source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

Do not use any supply voltage other than those specified below.

NDIC6R/E2 or NDIC6S/E2 120V-277V, 50/60Hz

1. Connect the UNSWITCHED black fixture lead to the HOT supply lead.
2. Connect red and black lead together, if not using a switching method.
3. If switching, connect SWITCHED red lead to a switch.
4. Connect the COMMON fixture lead to the COMMON supply lead.
5. For Lutron system, follow manufacturer's instructions.
5. Connect the GROUND wire from fixture to supply ground. Do NOT connect the GROUND of the dimming fixture to the output.
6. All unused leads must be capped and insulated.
7. After installation is complete, supply AC power to the emergency ballast and join the inverter connector.
9. At this point, power should be connected to both the AC ballast and the emergency ballast, and the Charging Indicator Light should illuminate indicating the battery is charging.
10. A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

## TROUBLESHOOTING

1. Check that the line voltage at the fixture is correct. Refer to wiring directions.
2. Is the fixture grounded properly?
3. For questions on compatibility of dimmers purchased separately refer to [www.rabweb.com](http://www.rabweb.com)
4. If the LED is blinking the fixture may be overheating. Remove the Trim assembly and if the fixture is labeled 'BLINKING LIGHT OF THIS THERMALLY PROTECTED LUMINAIRE MAY INDICATE OVERHEATING' allow the fixture to cool down. Determine cause of overheating and remove. Fixtures with this label have a thermal protector that turns fixture off above a certain temperature. It will automatically restart when cool.

## CLEANING

**CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.**

1. Do not open fixture to clean the LEDs. Do not touch the LEDs.
2. Do not touch reflector, lens, or trim cone.
3. Do not clean any fixture surface with wood base cleaning material such as paper towels or tissues. Only use micro fiber cleaning cloth.

## MAINTENANCE

Although no routine maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
3. Conduct a 90-minute discharge test once a year. Fixture would operate at reduced illumination for a minimum of 90 minutes.

*To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency ballast before servicing. Do not attempt to service the emergency ballast. The use of accessory equipment may cause an unsafe condition. Do not use this product for other than intended use. Refer any servicing indicated by these checks to a Qualified Service Personnel.*

*Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance. RAB cannot troubleshoot Lutron systems and have provided only basic information. See [www.lutron.com](http://www.lutron.com) for complete instructions and functional compatibility of Lutron Drivers with Lutron or other Control systems/dimmers.*

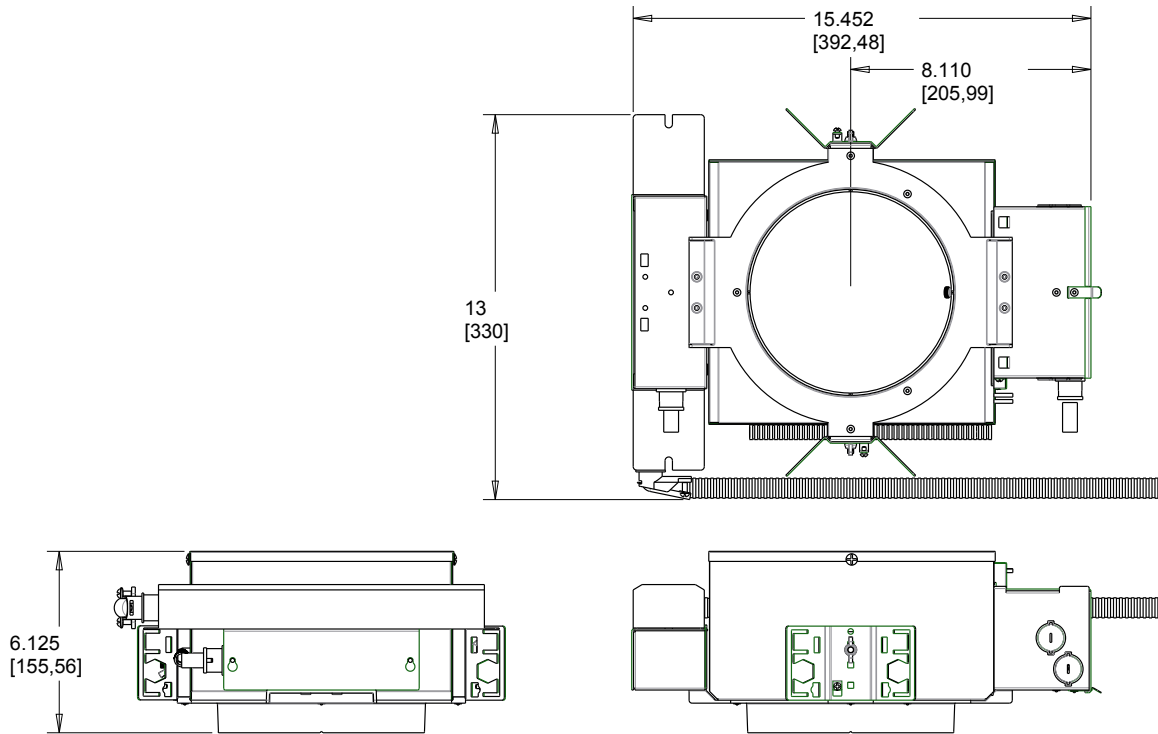
# NDIC6 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS



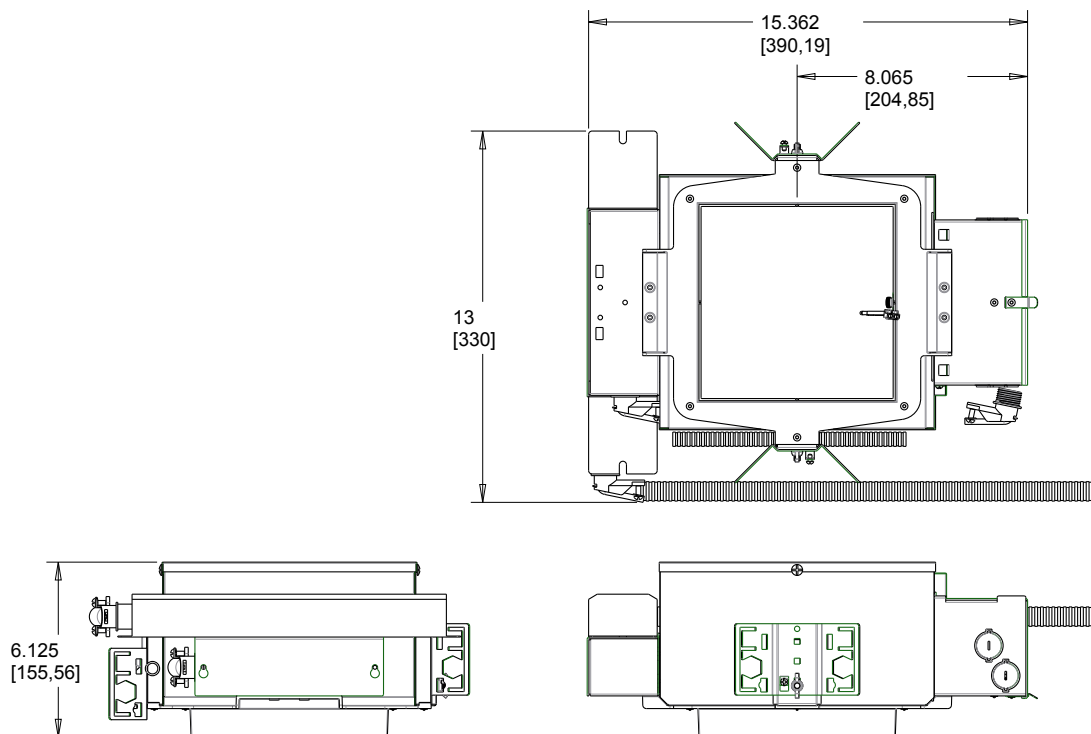
Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: [marketing@rabweb.com](mailto:marketing@rabweb.com)

## DIMENSIONAL DRAWING

### 6" Round

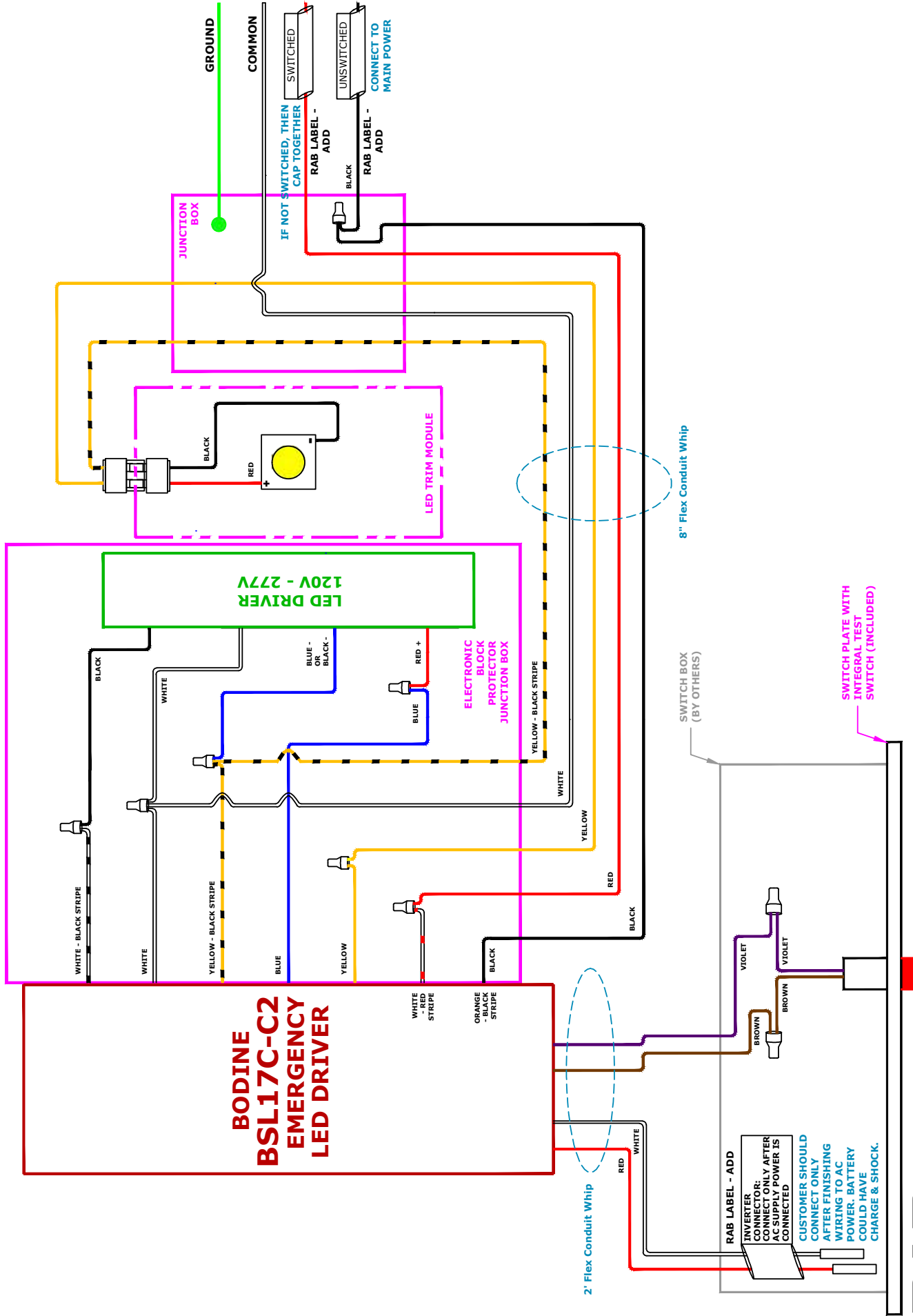


### 6" Square



# WIRING DIAGRAM for EMERGENCY OPERATION at 120V - 277V

Emergency Ballast and AC Ballast must be fed from the same circuit



# WIRING DIAGRAM for EMERGENCY OPERATION at 120V - 277V with Thermal Protector

Emergency Ballast and AC Ballast must be fed from the same circuit

