

# Installation Instructions

## NHAP-3R

### 3" Apollo Round Non-IC Air-Tight Housing with Field Changeable Optic

**READ PRIOR TO ATTEMPTING INSTALLATION**  
**ALWAYS TURN OFF MAIN POWER BEFORE INSTALLATION**  
**INSTALLATION SHOULD BE CARRIED OUT BY YOUR LOCAL ELECTRICIAN**

Fixtures are listed for non-insulated ceilings (Non-IC) where a minimum of clearance of 3" from thermal insulation and 1/2" from combustible material from above the fixture, airtight (AT) and for suspended ceilings. To insure safe and reliable operations, make sure the fixture corresponds to the proper ceiling installation. Read the following material carefully before beginning installation. In general these instructions apply to "round" housings. Drawings of "round" housings have been used to illustrate installation procedures. Before attempting installation of any recessed lighting fixture check your local electrical code. This code sets the wiring standards for your locality and should be carefully studied before starting work.

#### NON-INSULATED CEILINGS (NON-IC)

A minimum clearance of 3" from thermal insulation and 1/2" from combustible material from above the fixture.

#### SUSPENDED CEILINGS

Fixture can be installed in suspended ceilings that are not permanent or insulated.

#### AIRTIGHT INSTALLATION

Nora housings certified under ASTM E283 are supplied with a pre-installed gasket or supplied with a ready-to-install self adhesive gasket.

- Step 1. Lay gasket flat and peel protective paper backing from gasket to expose adhesive side.
- Step 2. Apply supplied gasket to ceiling lip and wrap gasket around inside of housing to form seal of the ceiling opening or apply caulk per state/local code. When properly installed, Nora housings provide compliance with restricted air-flow regulations.

#### FIRE/ELECTRICAL HAZARD: INSTALL ACCORDING TO NATIONAL ELECTRIC CODE AND ANY APPLICABLE MUNICIPAL CODE REQUIREMENTS.

This equipment is intended to be installed only by qualified personnel. The installation must be made in accordance with the current edition to the National Electric Code and all applicable state and local building codes. The final installation must be approved by the appropriate qualified electrical/building inspector(s). Improper installation may result in a fire or electrical hazard. Be sure the electrical power to the circuit has been disconnected before installing this electrical system.

For additional details, contact technical support at 800.686.6672.

#### FEU / RISQUE ÉLECTRIQUE: INSTALLER SELON AU CODE ÉLECTRIQUE NATIONAL ET LES EXIGENCES DE CODE MUNICIPAUX APPLICABLES.

Cet équipement est destiné à être installé par un personnel qualifié. L'installation doit être faite conformément à l'édition actuelle du Code national de l'électricité et tous les codes d'état et de construction locaux applicables. L'installation finale doit être approuvée par l'inspecteur en électricité / bâtiment qualifié approprié (s). Une mauvaise installation peut provoquer un incendie ou un risque électrique. Assurez-vous que l'alimentation électrique du circuit a été coupée avant l'installation de ce système électrique. Pour plus de détails, contactez le support technique au 800.686.6672.

#### IMPORTANT - RISK OF FIRE:

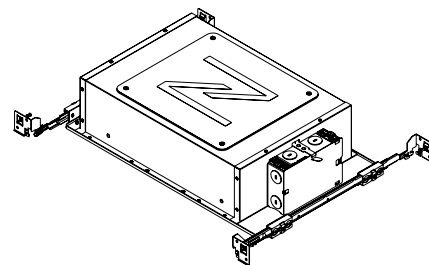
Most dwellings built before 1985 have supply wire rated 60°C (thermal cutoffs in fixtures operate at 90°C); consult a qualified electrician prior to installation. If supply wires are located within three inches of fixture, use wire rated for at least 90°C. Contact technical support at 1-800-686-6672 for additional details.

#### IMPORTANT-RISQUE D'INCENDIE:

La plupart des logements construits avant 1985 ont le fil d'alimentation nominale de 60°C (disjoncteurs thermiques dans les appareils fonctionnent à 90°C); consultez un électricien qualifié avant l'installation. Si les fils d'alimentation sont situés à moins de trois pouces de l'appareil, l'utilisation de fil résister au moins à 90°C. Contactez le support technique au 1-800-686-6672 pour plus de détails.



#### PACKAGING CONTENTS



Housing

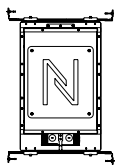
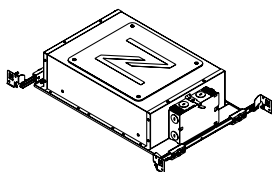


Hexbit Tool



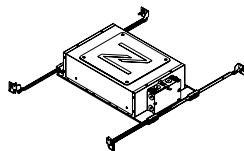
(2) M3x3 Set Screws

#### BAR HANGER ADJUSTMENT



11.5"

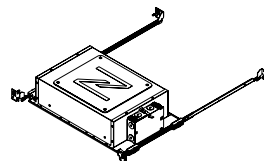
Housing



(Example: 25-5/8")

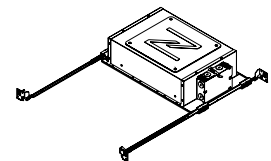
Housing is centered when hanger bar is expanded to max. length.

When not adjusted to max length, housing may be moved to the left or right, as shown on the next illustrations.



(Example: 25-5/8")

Housing moved to the left.



(Example: 25-5/8")

Housing moved to the right.

**NOTE:** Contact [tech@noralighting.com](mailto:tech@noralighting.com) for additional information

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## 3" Apollo Round Non-IC Air-Tight Housing with Field Changeable Optic

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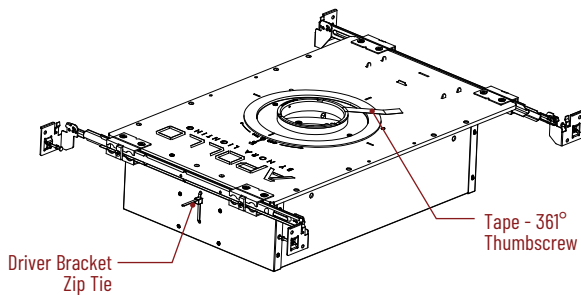
**⚠ IMPORTANT** - This equipment is intended to be installed only by qualified personnel. The installation must be made in accordance with the current edition of the National Electrical Code and all applicable state and local building codes. The final installation must be approved by the appropriate, qualified electrical/building inspector(s). Improper installation may result in a fire or electrical hazard. Be sure the electrical power to the circuit has been disconnected before installing this electrical system.

**⚠ IMPORTANT** - Cet équipement est destiné à être installé uniquement par du personnel qualifié. L'installation doit être faite conformément à l'édition actuelle du Code national de l'électricité et à tous les codes de construction locaux et nationaux applicables. L'installation finale doit être approuvée par un ou plusieurs inspecteurs qualifiés en électricité / bâtiment. Une installation incorrecte peut entraîner un incendie ou un risque électrique. Assurez-vous que l'alimentation électrique du circuit a été déconnectée avant d'installer ce système électrique.

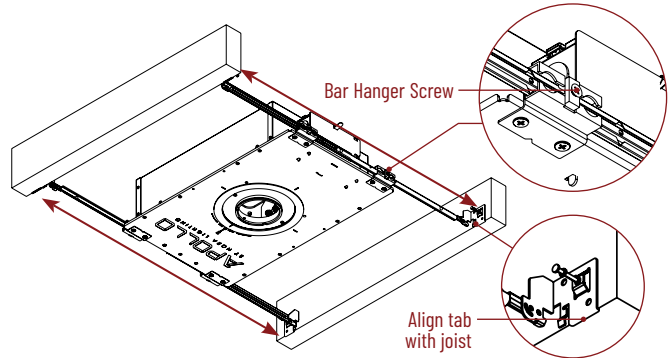
### HOUSING INSTALLATION

### ⚠ TURN OFF MAIN POWER BEFORE INSTALLATION

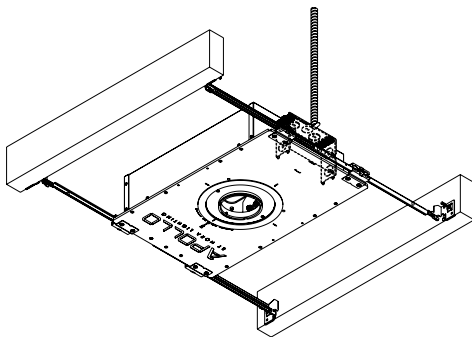
- 1** Before installation, cut and remove the zip-tie from the driver bracket and take off the tape securing the 361 horizontal rotation thumbscrew.



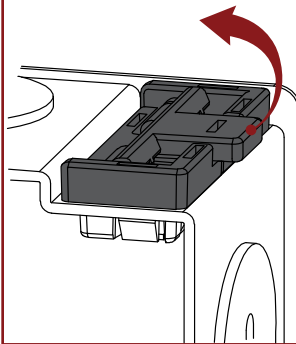
- 2** Secure the housing to the ceiling joists. Slide housing to desired location and tighten bar hanger screws.



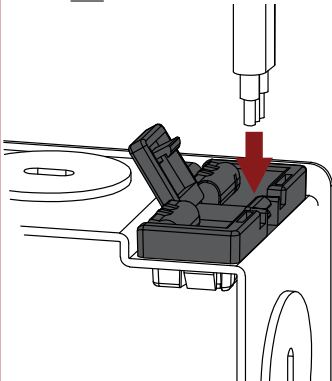
- 3** Remove junction box cover and connect power feed to housing.



- 4** Connect ½ inch trade size steel conduit to junction box with appropriate fitting. If using Romex-type shielded wiring, open strain relief by lifting tab.



- 5** If using Romex strain relief, push Romex cable through one side of the strain relief.  
Note: Two Romex cables can be used per strain relief.



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3" Apollo Round Non-IC Air-Tight Housing with Field Changeable Optic

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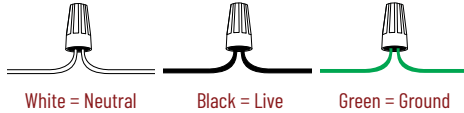
## HOUSING INSTALLATION (CONTINUED)

6

Connect wires according to NEC codes.

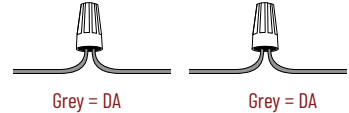
Note: Maximum of 8 no. 12 AWG through branch circuit conductors suitable for at least 90°C permitted in junction box, AC ONLY.

- Black = Supply Voltage
- White = Neutral
- Green = Ground



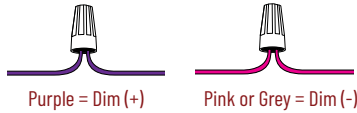
DALI Wiring:

- Grey = DA
- Grey = DA



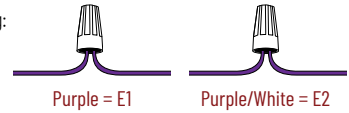
0-10V Wiring: (cap off if not used)

- Purple = Dim (+)
- Pink or Grey = Dim (-)



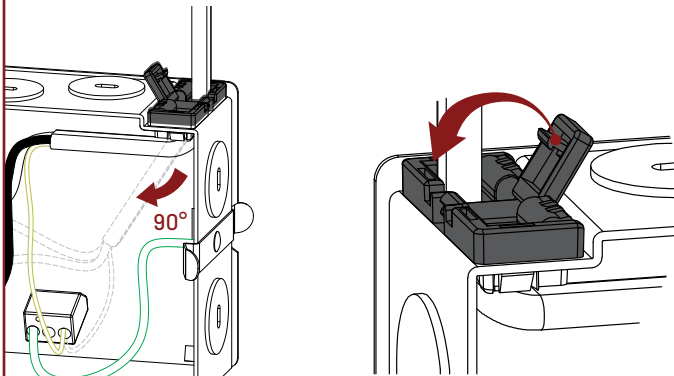
Lutron EcoSystem Wiring:

- Purple = E1
- Purple/White = E2



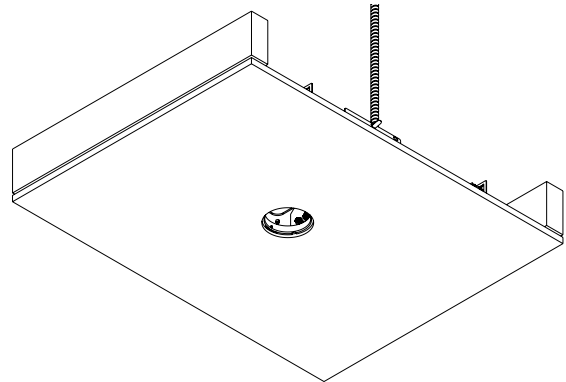
7

If using Romex strain relief, make a 90° shaped bend in Romex cable after wiring and close the strain relief tab.



8

Install drywall/wood ceiling and cut a 3-3/8" diameter hole.

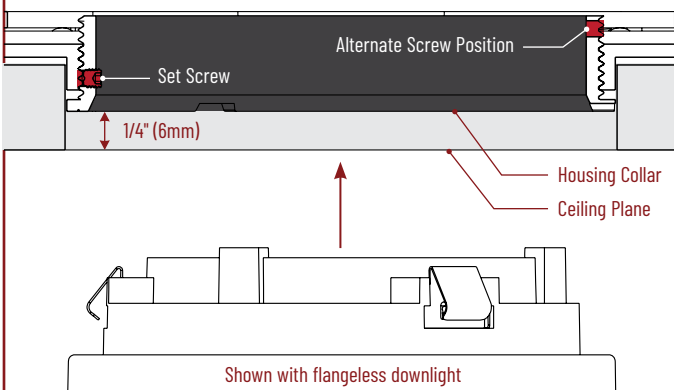


9

Adjust collar height, leave 6mm (1/4") gap from the bottom of the ceiling to bottom of the collar. Tighten set screws to fix collar height in place.

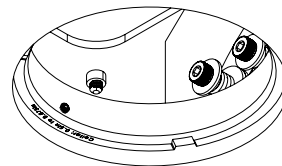
(NOTE: Collars have two set screw positions, depending on ceiling thickness)

**CAUTION:** Ensure proper collar range is installed, if improper collar range is installed, remove existing collar by unscrewing the collar out.



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Housing installation complete.



# Installation Instructions

NHAP-3R

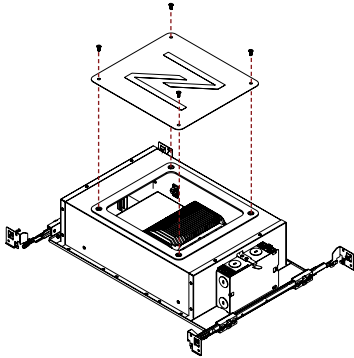
3" Apollo Round Non-IC Air-Tight Housing with Field Changeable Optic

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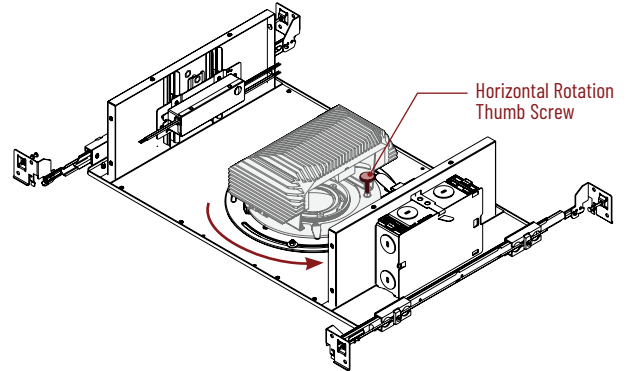
## ADJUSTING LED MECHANISM

## ⚠️ TURN OFF MAIN POWER BEFORE INSTALLATION

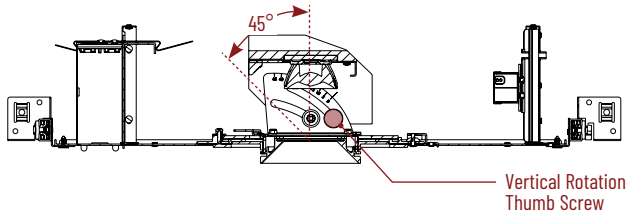
- 1** Remove (4) moonroof screws and plate, if accessing from above the ceiling.



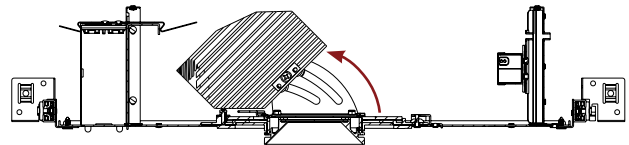
- 2** For horizontal rotation, loosen thumb screw and rotate the LED mechanism.



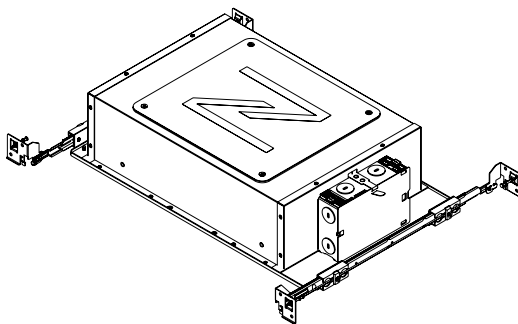
- 3** For vertical rotation, loosen thumb screw to tilt the LED mechanism.



- 4** Adjust LED mechanism to desired angle and tighten all thumb screws.



- 5** If applicable, replace moonroof plate and screws. Adjustment complete.



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NHAP-3R

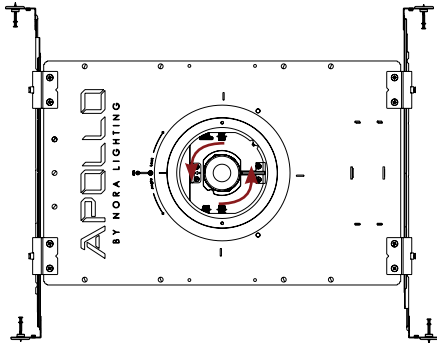
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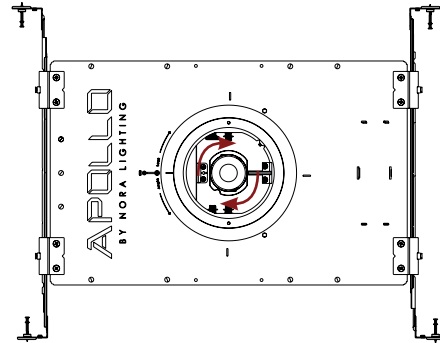
## CHANGING THE OPTICS

⚠️ TURN OFF MAIN POWER BEFORE INSTALLATION

1 Twist optics counter clockwise to detach.



2 Twist on new optics clockwise



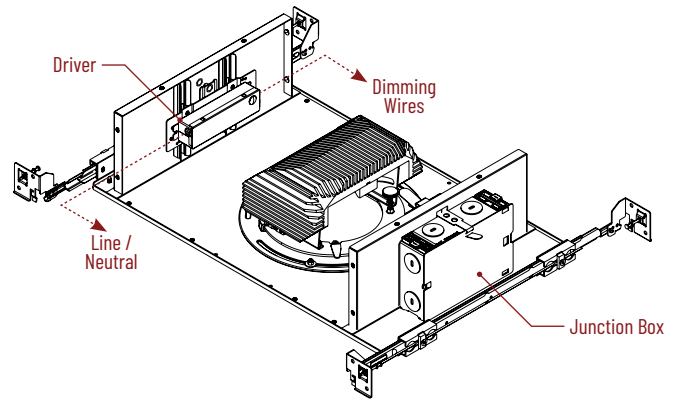
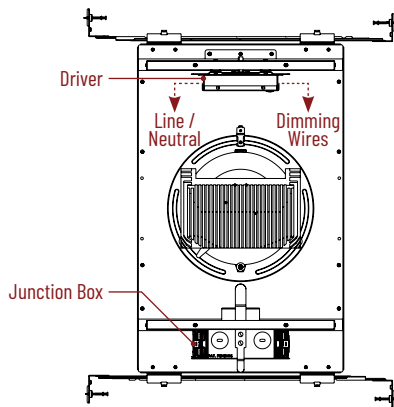
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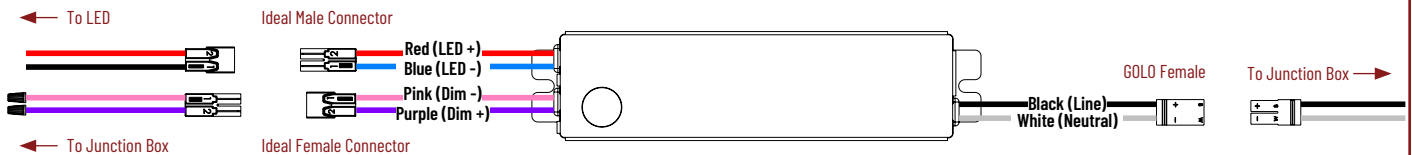
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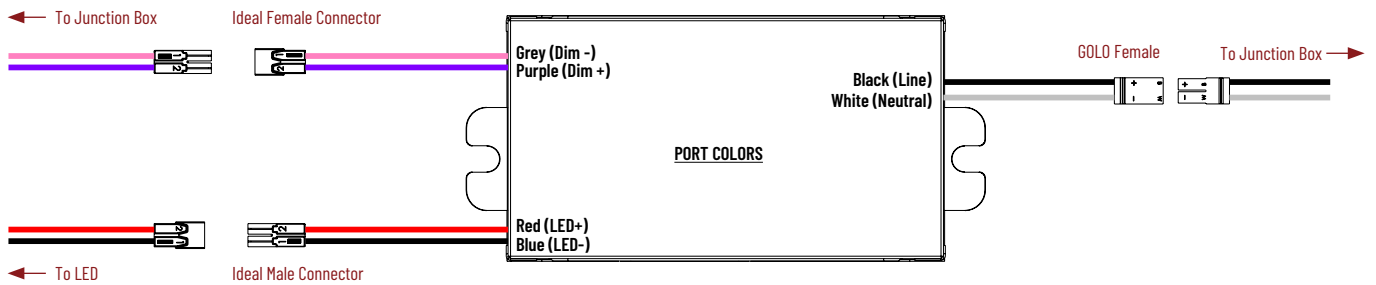
## WIRING DIAGRAM ORIENTATION



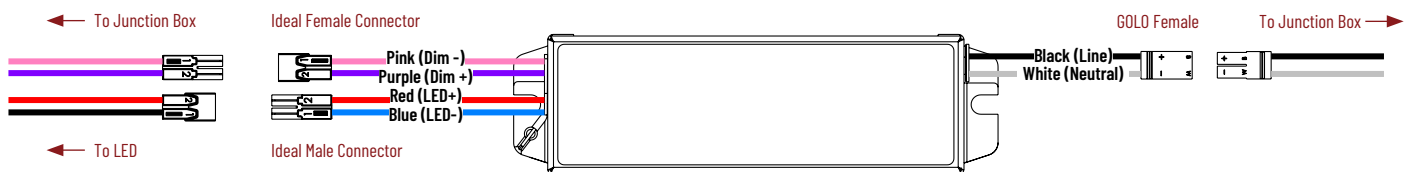
## WIRING DIAGRAM - PHASE DIMMING, 120V



## WIRING DIAGRAM - 0-10V, 1%, 120-277V



## WIRING DIAGRAM - 0-10V, 0.1%, 120-277V



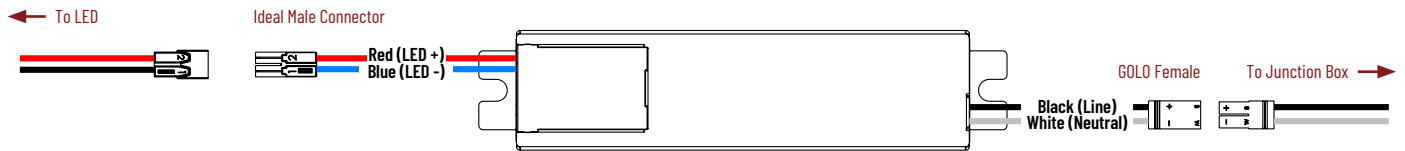
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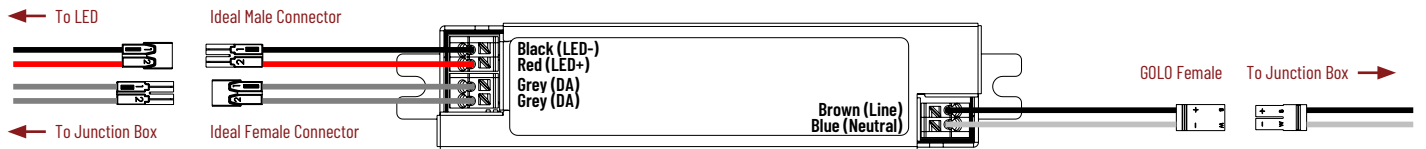
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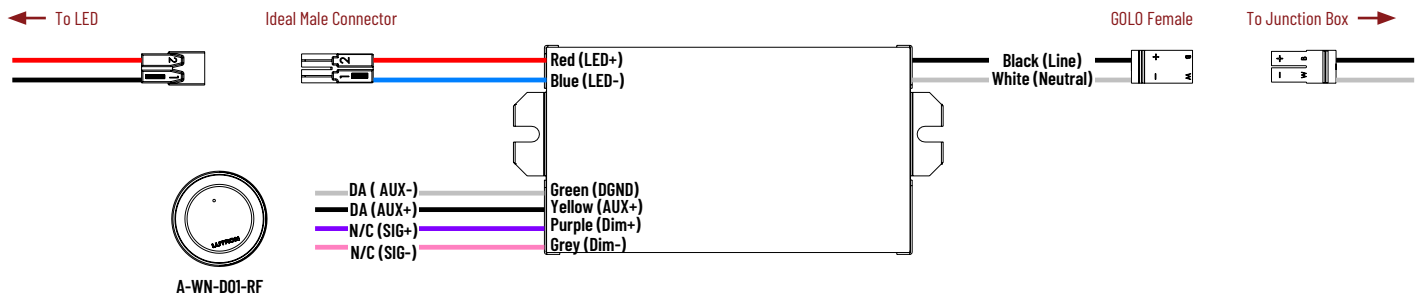
## WIRING DIAGRAM - CASAMBI, 1%, 120/277V



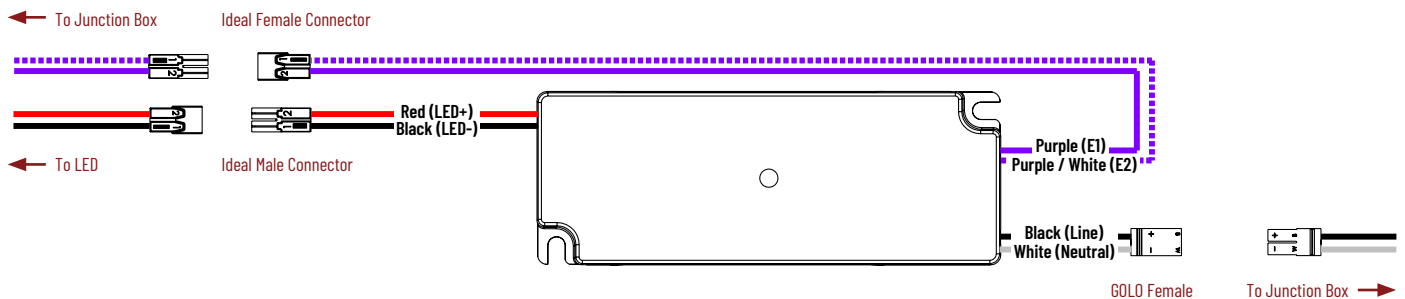
## WIRING DIAGRAM - DALI-2, 1%, 120-277V



## WIRING DIAGRAM - ATHENA, 1%, 120/277V



## WIRING DIAGRAM - LUTRON ECOSYSTEM, 0.1%, 120/277V



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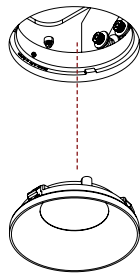
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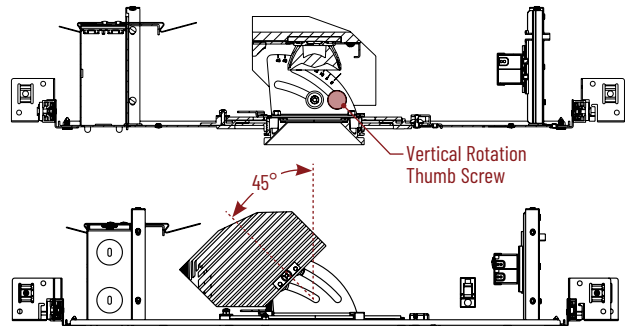
## DRIVER MAINTENANCE (BELOW THE CEILING)

## ⚠️ TURN OFF MAIN POWER BEFORE INSTALLATION

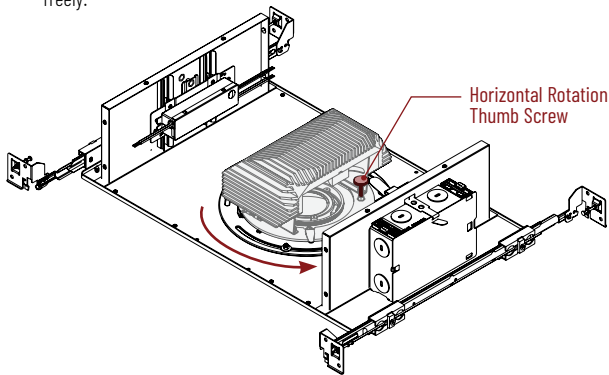
- 1 Turn off power and remove trim.



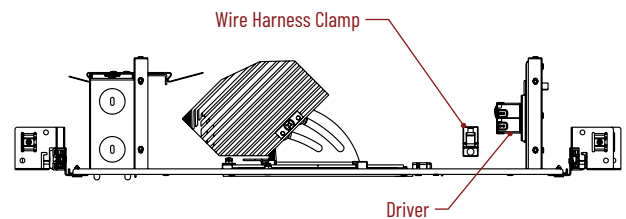
- 2 Adjust the LED mechanism to its maximum vertical tilt (45°) by loosening the vertical tilt thumb screw.



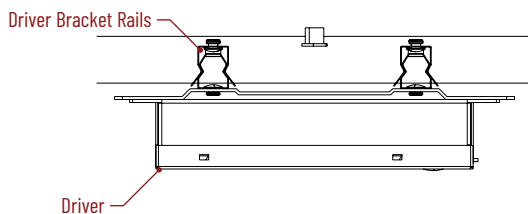
- 3 If needed, loosen the horizontal thumb screw to allow LED mechanism to rotate freely.



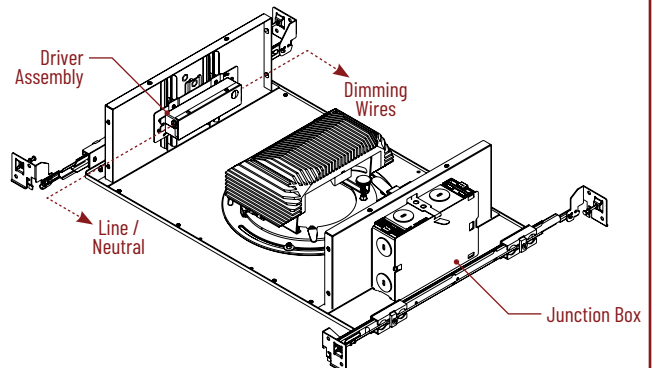
- 4 Release (2) wire harness clamps from both sides of housing's wall.



- 5 Remove driver bracket and wiring connections. Refer to pages 6 and 7 for reference.  
Note: Driver bracket zip-tie should have been removed prior to installation, discard if present.



- 6 Attach new driver to bracket and its respective wiring connections. Secure respective wiring harness(es).





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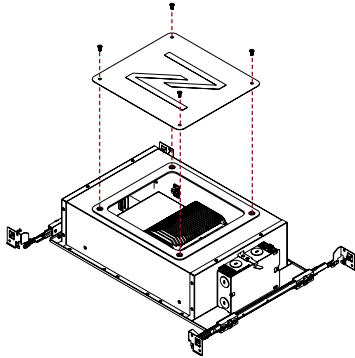
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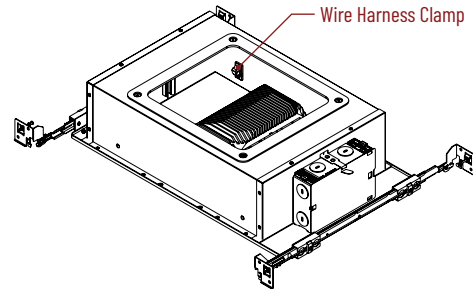
## DRIVER MAINTENANCE (ABOVE CEILING ACCESS)

## ⚠️ TURN OFF MAIN POWER BEFORE INSTALLATION

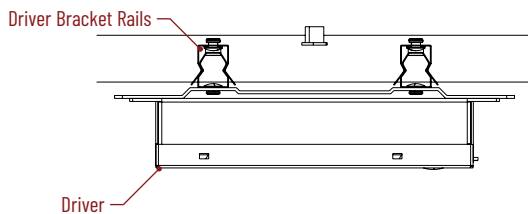
- 1** Turn off power and remove (4) moonroof screws.



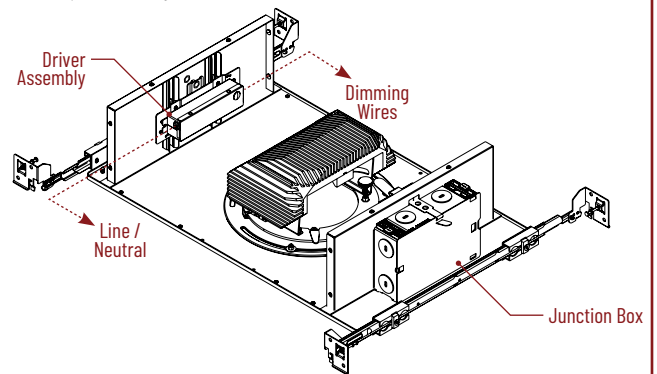
- 2** Release (2) wire harness clamps from both sides of housing's wall.



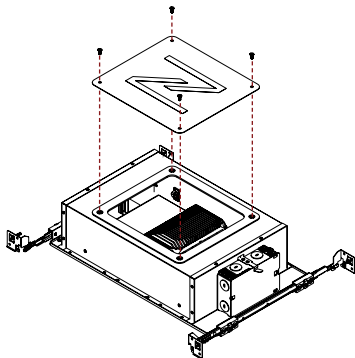
- 3** Remove driver bracket and wiring connections. Refer to pages 6 and 7 for reference.  
Note: Driver bracket zip-tie should have been removed prior to installation, discard if present.



- 4** Attach new driver to bracket and its respective wiring connections. Secure respective wiring harness(es).



- 5** Replace moonroof and screws.



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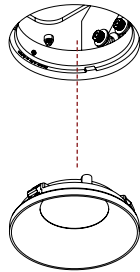
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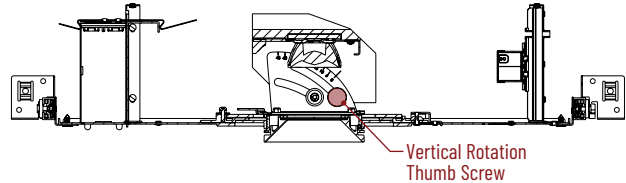
## LED REPLACEMENT

## ⚠ TURN OFF MAIN POWER BEFORE INSTALLATION

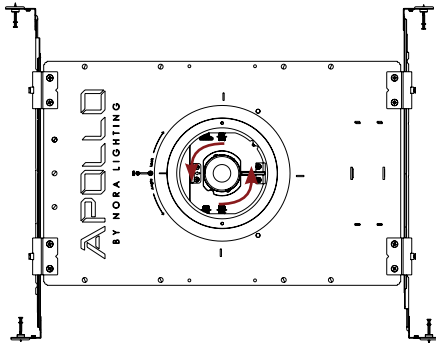
- 1 Turn off power and remove trim.



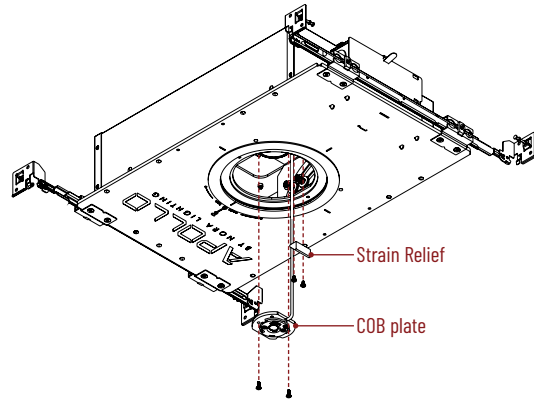
- 2 Adjust the LED mechanism to its nadir position by loosening the vertical tilt thumb screw.



- 3 Remove optic by twisting counter clockwise to detach.

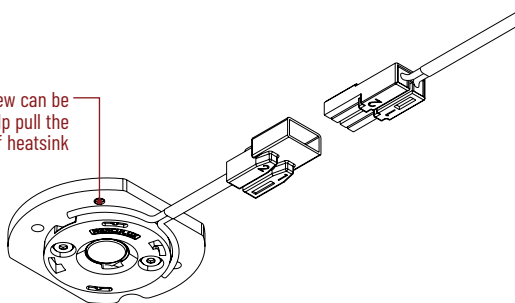


- 4 Remove (2) philips screws at COB plate and (2) philips screws at strain relief.



- 5 Disconnect connectors and remove COB plate. Apply new thermal paste uniformly to the back of the new COB plate and attach to connectors.

#8-32 screw can be installed to help pull the LED plate of heatsink



- 6 Replace COB plate and strain relief with (4) philips screws and test luminaire.

