

# NU4RD RGBW DMX512-A RJ-45 / XLR / WIRE LEAD Recessed LED Downlight

**WARNING – PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLATION. READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE INSTALLING OR MAINTAINING THIS PRODUCT. TURN OFF POWER PRIOR TO ANY WORK ON THE SYSTEM OR PRODUCT. DO NOT INSTALL DAMAGED PRODUCT.**

Installing, wiring, and maintenance must be done by qualified persons or a certified electrician in accordance with all local and National Electrical Codes.

Warranty is voided in case of unauthorized modifications and/or improper use.

Save these instructions. Use as reference when service or maintenance is performed.

**CAUTION – Do not install any fixture assembly closer than 6 inches (15.24 cm) from any combustible material.**

New Construction Mounting Plate driver compartments are rated for through wiring.

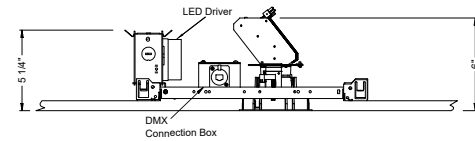
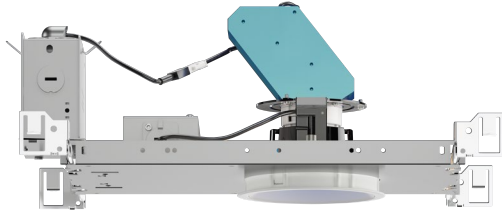
Refer to product label for voltage requirements and properly ground fixture in accordance with all local and national electrical codes.

Suitable for WET locations with lens only.

DO NOT use a Dimming Driver or Dimmer.

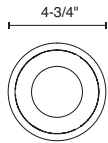
Using a constant current power supply will damage the light engine, and will void warranty.

DO NOT HOT PLUG the light fixtures

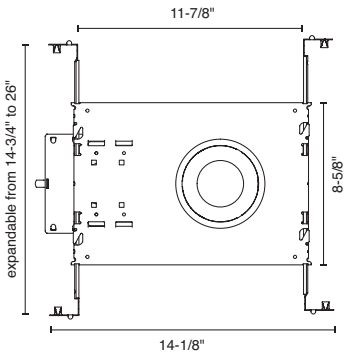
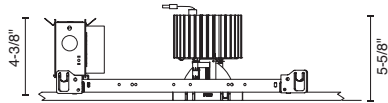


## HOLE CUTOUT 4-3/8" DIAMETER

\*New Construction Mounting Plate not used on Retrofit version.



ceiling cutout  
4-3/8" diameter



### ⚠ WARNING ⚠

- To avoid possible electrical shock, before installing light fixtures, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.
- Verify that supply voltage is correct by comparing it with the luminaire label information.
- Make all electrical and ground connections in the accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- Wait for fixture and driver to cool before servicing and performing maintenance.

### ⚠ CAUTION ⚠

- All wiring must comply with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, consult a qualified electrician.
- PPE Personal Protective Equipment such as gloves and safety glasses should always be used when installing, maintaining or servicing.
- Risk of fire. Keep combustible material away from fixtures.

### ⚠ ADVERTENCIA ⚠

- Para evitar un choque eléctrico, antes de instalar luminarias, desconecte la alimentación apagando los interruptores de circuito en el panel de servicio y en las paredes. Si no es posible bloquear los interruptores en la posición de apagado, sujete una etiqueta de seguridad en el panel de servicio.
- Compruebe que la tensión de alimentación es correcta comparándola con la información en la etiqueta de la luminaria.
- Haga todas las conexiones eléctricas y puesta a tierra de acuerdo con el código eléctrico nacional (NEC) y los requisitos del código local aplicable.
- Espere hasta que la luminaria y el controlador se enfrién antes de empezar el servicio y mantenimiento.

### ⚠ PRECAUCION ⚠

- Todo el cableado debe cumplir con los códigos eléctricos nacionales y locales y ANSI/NFPA 70. Si no está familiarizado con el cableado, consulte a un electricista.
- Al instalar, mantener o reparar, siempre se debe utilizar equipo de protección personal como guantes y lentes de seguridad
- Riesgo de incendio. Mantenga los materiales combustibles lejos de las luminarias.

### ⚠ AVERTISSEMENT ⚠

- Pour éviter les chocs, avant d'installer des appareils d'éclairage, coupez l'alimentation en désactivant les disjoncteurs et l'emplacement du commutateur mural. Si vous ne pouvez pas verrouiller les disjoncteurs en position d'arrêt, fixer un avertissement sur le panneau de service.
- Vérifiez que la tension d'alimentation est correcte en le comparant avec les informations d'étiquette de luminaire.
- Effectuer tous les raccordements électriques et mise à la terre dans la conformité avec le Code électrique National (NEC) et des exigences du code local applicable.
- Laisser suffisamment de temps pour l'appareil et pilote refroidir avant d'effectuer l'entretien et la maintenance.

### ⚠ MIS EN GARDE ⚠

- Tout le câblage doit être effectué conformément aux codes électriques locaux et nationaux et ANSI/NFPA 70. Si vous êtes peu familier avec câblage, vous devez utiliser un électricien qualifié.
- Équipement de protection personnelle comme des gants et des lunettes de sécurité doivent être utilisé en tout temps lors de l'installation, maintenance ou entretien.
- Risque d'incendie. Garder les matières combustibles loin de luminaires.

## INSTRUCTIONS FOR USE

De-energize circuit before installation.

### 1A. EXISTING CEILING:

Ensure placement of fixture will accommodate New Construction Mounting Plate, DMX control box, and LED Module Assembly. Refer to product cut sheet and cut hole into ceiling. Adjust bar hangers to size and secure New Construction Mounting Plate as required using integral nails and screws or suspend in T-Bar grid ceiling. Ensure the fixture is properly supported and attached to building. Open wiring compartment and use knockouts to connect electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply and close driver compartment. Feed quick disconnect and DMX wiring through ceiling cutout.

### 1B. NEW CONSTRUCTION:

Secure New Construction Mounting Plate by adjusting bar hangers to size and secure New Construction Mounting Plate as required using integral nails and screws or suspend in T-Bar grid ceiling. Ensure the fixture is properly supported and attached to building. Refer to product cut sheet and cut hole into ceiling as required. Open wiring compartment and use knockouts to connect electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply and close driver compartment. Feed quick disconnect and DMX wiring through ceiling cutout.

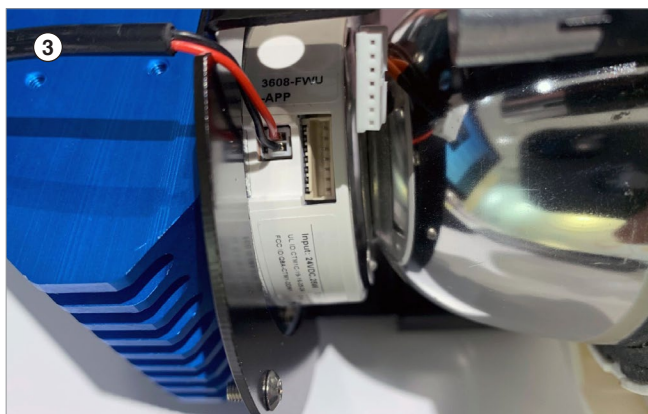
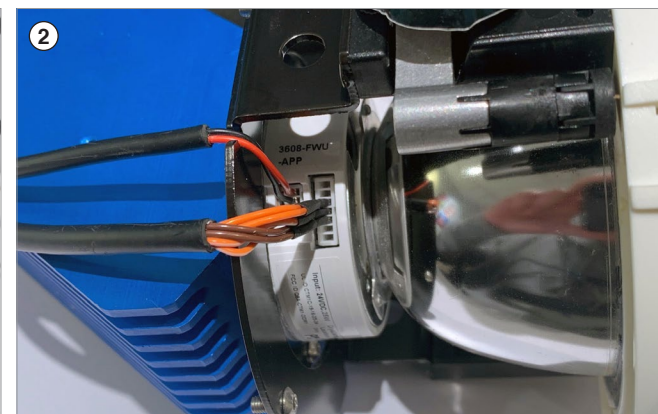
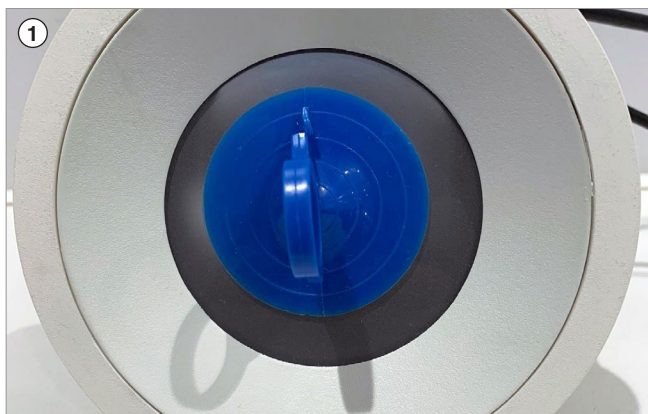
### 1C. RETROFIT:

New Construction Mounting Plate may or may not be used. Ensure area above finished ceiling will accommodate placement of fixture, DMX control box, and driver compartment. Refer to product cut sheet and cut hole into ceiling as required. Feed building electrical conduit through ceiling cutout and ensure enough conduit length for future serviceability. Open driver compartment and use knockouts to connect building electrical conduit to driver compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply and close driver compartment. For future servicing, do not fasten driver compartment to any structure. Feed DMX wiring through ceiling cutout.

1. Confirm PIN position on harness when reconnecting.  
Use suction cup only on lens not on TIR optics. (See image 1)
2. Carefully remove bezel from LED Module Assembly. Use suction cup (provided) to remove bezel. Sharp or flat objects not recommended as they can damage the bezel or snap locks. (See image 2)
3. Ensure DMX wiring is long enough to connect to DMX control box compartment and allow for future servicing. Attach RJ45 / XLR / WIRE LEAD connectors to DMX control box. For future servicing, do not attach to any structure.
4. Insert the DMX Control box and LED Module Assembly through the ceiling cutout.
5. Connect the quick disconnect from driver compartment to LED Module Assembly.
6. Hand tighten the Phillips head fastening screws to secure the LED Module Assembly. Ensure the LED Module Assembly is securely fastened against the ceiling but has not recessed into soft ceiling tiles due to over tightening.
7. Carefully insert bezel into LED Module Assembly.  
Press firmly until bezel snaps into place.

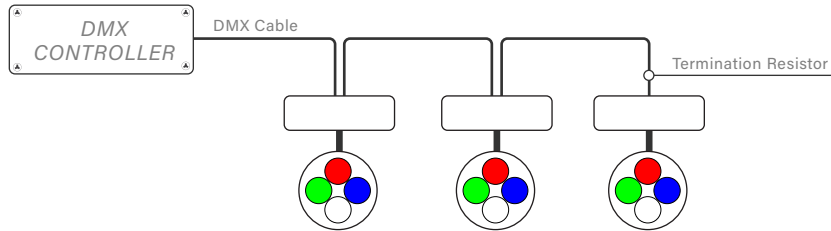
## ENERGIZE CIRCUIT AND TEST FOR PROPER OPERATION.

**NOTE:** The DMX wiring *harness* to the LED Module Assembly may be removed for ease of DMX wiring. Confirm PIN position on harness when reconnecting.



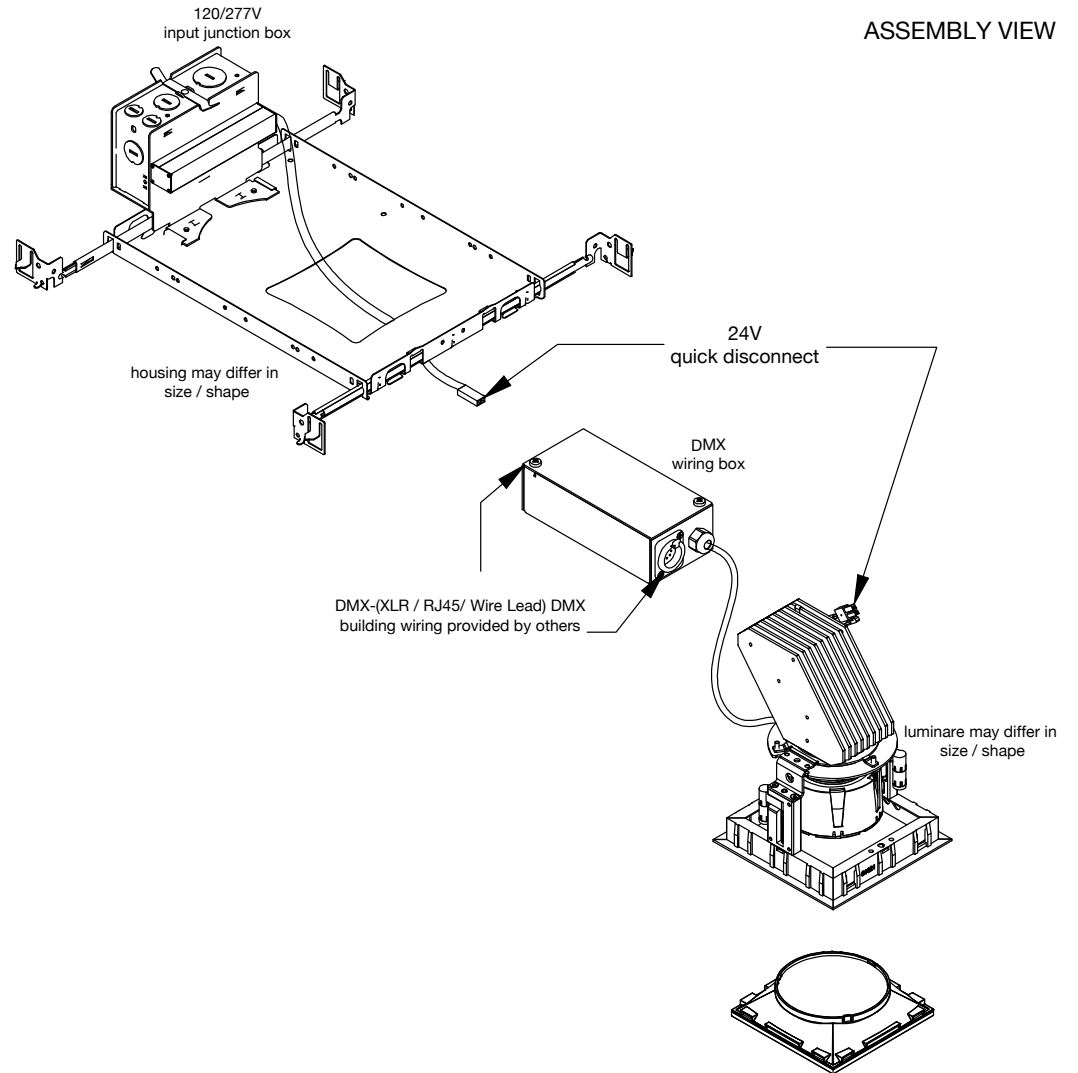
## DMX GUIDELINES

- Terminate DMX with a 120Ω resistor to prevent reflections\*.
- Use cable specifically designed for DMX/RS-485 standard.
- Use a daisy chain topology.
- Use a repeater/booster after 25 - 32 units.
- Keep the total length of the cable between the controller and the last driver to less than 300 meters
- DO NOT run DMX control cable in close proximity to AC power lines. Electromagnetic waves spike from switching of high-current devices such as HVAC equipment or generators will induce noise into the DMX cable.
- All drain wires should be insulated from contact with ground using shrink tubing or other appropriate methods. The shields of both the fixture cable and the system cable should be insulated from contact with ground. This can be achieved by adding shrink tubing or other appropriate insulation around the area where each cable's outer jacket is stripped off to expose the individual conductors. Failure to insulate the drain wires and shields from contact with grounded parts may cause a ground loop within the system which may lead to degraded performance.

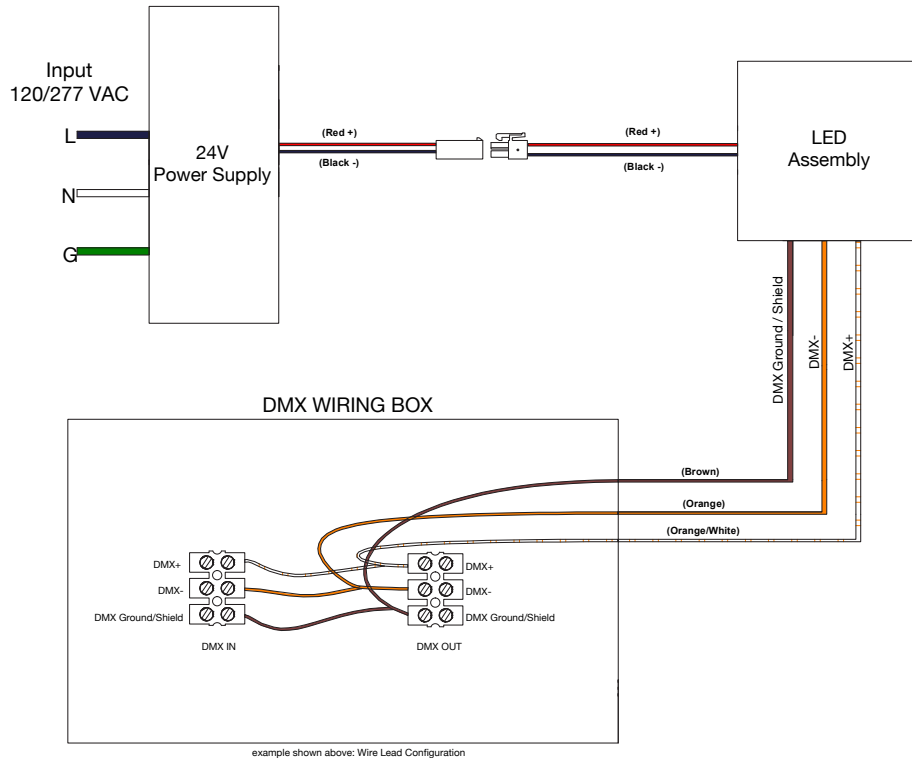


\*These reflections can cause erratic behavior such as random flashing of lights, unintended brightness levels, visible flicker and unstable operation.

## ASSEMBLY VIEW

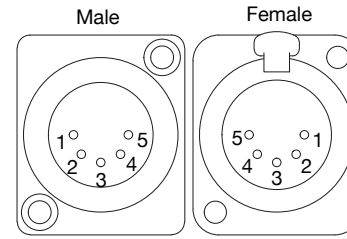


# WIRING DIAGRAM



# CONNECTIONS

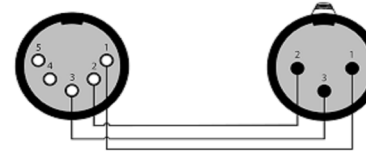
## XLR



## 5-PIN XLR CONNECTORS

PIN	FUNCTION
1	Common
2	DATA -
3	DATA +
4	N/C
5	N/C

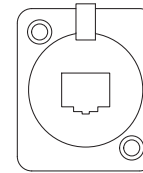
## 5 to 3 PIN ADAPTER (provided by others)



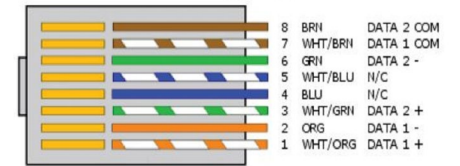
## 3-PIN XLR CONNECTORS

PIN	FUNCTION
1	Common
2	DATA -
3	DATA +

## RJ45



## RJ-45 Connector Pin-Out (T568B)



**NOTE:** DATA 1 Pins connected to Luminaire DMX controls.  
DATA 2 Pins pass through.

# DMX TERMINATION RESISTOR WIRING

