

120-277VAC

designplan@

installation instructions



INSTRUCTIONS PERTAINING TO RISK OF FIRE OR INJURY TO PERSONS. READ ALL INSTRUCTIONS. IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

# DANGER - RISK OF SHOCK - DISCONNECT POWER BEFORE INSTALLATION! Please read all instructions before installation.

- · Keep these instructions for future reference.
- Must be installed by a qualified electrician in accordance with national and local standards. Designplan is not responsible for fixtures installed without regard to these standards.
- Unauthorized alterations or tampering of product voids warranty.
- The main power connection must be in accordance with local electrical codes.
- Suitable for INDOOR and OUTDOOR applications.
- DO NOT INSTALL INSULATION WITHIN 3.0" (76 mm) OF ANY PART OF THE LUMINAIRE.





**IP65** 

## **Electrical Connections:**

• Fixture requires 120-277VAC and low-voltage DMX connections.

## **Maintenance**

Scheduled maintenance must be carried out once a year on all lighting devices, regardless of appliance class and type of use. It must include the following operations:

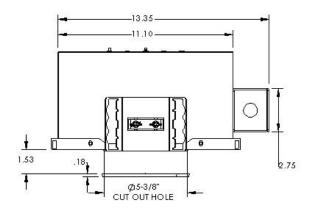
- Periodically clean fixtures to remove dirt from gratings and screw heads.
- Check tightness of screws on various parts of the device.
- Check that all cable glands and cables are intact and tight. Check that the glass or plastic lens is intact, and replace it if broken or damaged.
- The internal components such as the ballast, driver, washers and screws must not show clear signs of oxidation or rust. Clear traces of rust and oxidation will indicate the presence of water inside the device.
- In the case of damage, the components must be replaced by original components or spare parts.

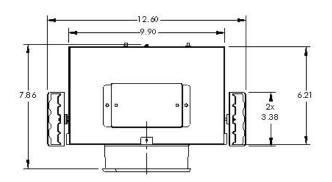
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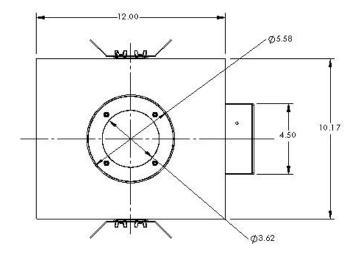




# **Fixture Installation**







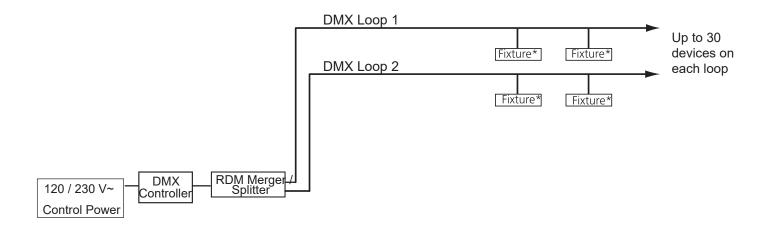
- The lighting fixture comes fully assembled.
- Remove the lens assembly. Mount fixture by utilizing the hanger bars on the sides of the body. It is the
  contractor's responsibility to supply proper mounting based on job condition. The fixture is suitable for a
  maximum 1 1/2" ceiling thickness. A 5 3/8" diameter cut out hole is required for the fixture to properly fit
  through the ceiling.
- Utilize the conduit entries on the sides of the J-box for wiring. CONNECT GREEN WIRE TO "GROUND",
  CONNECT BLACK FIXTURE TO BLACK BUIDLING WIRE AND CONNECT WHITE FIXTURE WIRE TO
  WHITE BUILDING WIRE. The remote driver should be in a suitable electrical enclosure.
- Re-install the lens assembly. Assure proper seal between top of lens assembly and ceiling structure.

#### For Installation in Steam Rooms:

• This is only available for the RSR LED version. It is very important that the contractor seal the trim assembly to the sealed ceiling structure. This step must completed every time the fixture is opened for any reason.

# **Wiring Diagram**

# **DMX512-A Controller Example**



#### FOR ARAYA5 USE:

The ARAYA5 app enables the commissioning of Bluetooth-equiped ARAYA5 modules incorporated into the lighting fixture. The app is designed for use by professional lighting specifiers and designers.

For information about Tunable Color components inside the product (CTM1C-24V) and commisioning app (araya 5 Tunable color 2.0) visit:

www.Lumenetrix.com

<sup>\*</sup>Fixture refers to a luminaire with one Lumenetix module, and with one address (DDM) or four addresses (CTM).





#### 8.3.2 DMX512-A Recommended Field Wiring

Liberty 24-2P-485 (Non-Plenum), 24 AWG, 2 pair dual 120 ohm, 11.2 pf/ft low capacitance (Wago, XLR and PHX connectors)

Liberty 24-2P-P485 (Plenum), 24 AWG, 2 pair dual 120 ohm, 11.2 pf/ft low capacitance (XLR and PHX connectors) Belden #9842 (Non-Plenum), 24 AWG, 2 pair dual shielded 120 ohm, 12.8 pf/ft low capacitance (XLR and PHX connectors)

Belden #89842 (Plenum), 24 AWG, 2 pair dual shielded 120 ohm, 12.8 pf/ft low capacitance (XLR and PHX connectors)

Please refer to wire manufacturer's lighting catalog for and/equals as required by code.

# **Category Wire or Equal**

The Entertainment Services and Technology Association (ESTA) does not define a maximum run length for DMX over Cat5 since many factors will affect the maximum run length, such as number of devices, number of splices in the cable, the strength of the DMX transmitter(s), if Remote Device Management (RDM) is being used, and sources of interference. ESTA does state (again, in ANSI E1.21-2):

"A properly selected and installed DMX512 cable should provide acceptable signal strength for runs of 300m (1000ft). Please note that the technical requirements, such as run-length and topology for other networking technologies, such as Ethernet, should be considered if using the installed cable for another networking technology in the future is anticipated."

Cat5 or equivalent is not preferred as a portable cable since it is not as rugged as other DMX cables. Male RJ45 connectors are especially prone to breakage over repeated re-connections.

#### **LUMENETIX RECOMMENDATION:**

CAT 5E -150 FEET

**CRESTRON** 

DM-CBL-8G-NP

DM-CBL-8G-P

**CAT 7-330 FEET** 

**CRESTRON** 

DM-CBL-ULTRA-NP

DM-CBL-ULTRA-P

#### DMX512-A Recommended Field Connectors (or Equal)

**WAGO 221** 

PHOENIX CONTACT

XLR NEUTRIK

**CRESTRON** 

RJ45 DM -8G-CONN

**RJ45 IDC DM-CONN** 

#### **DMX512-A Wiring Connections**

#### **DMX512-A Control Systems (recommended list)**

Choreo

Cognito

Crestron Greenlight System

Entec

**ETC Mosaic** 

**ETC Paradigm** 

Fresco

Interactive Technologies

Lutron HomeWorks QS

**Lutron Quantum** 

Nicolaudie

Pathway Connectivity

**Pharos** 

Traxon Ecue

Vantage Controls

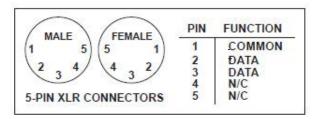
\*Recommendations are subject to change. Consult your Lumenetix representative for the most updated list.



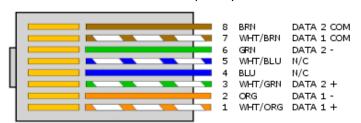
# **Wiring Diagram**

Signal	Description	Pin Colors (4-Pair Cable)	Pin Colors (2-Pair Cable)	3-pin XLR connector	5-Pin XLR connector	5-Pin PHX connector
Signal Common		White/Brown and Brown	White/Blue and Blue	1	1	1
Data (-)	Primary Data Link	Orange	Orange	2	2	2
Data (+)	Primary Data Link	White/Orange	White/Orange	3	3	3
Data2 (-), or not used	Optional Secondary Data Link				4	4
Data2 (+), or not used	Optional Secondary Data Link				5	5

## XLR Connectors (5-Pin)



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



# 7.1.2 Pin Allocation Chart for Power Cable Assembly

Lead Color	Input
Red	Power 24VDC
Black	Power Common

# 7.2.2 Pin Allocation Chart for Control Cable Assembly

DMX Connections

Lead Color	Input
Violet	0-10V Dimming (+)
Blue	0-10V Color (+)
Orange	Data (-) IN / OUT
White with Orange Stripe	Data (+) IN / OUT
Brown	Digital Common IN / OUT
Gray	Signal Common for 0-10V Dimming (-)
White	Signal Common for 0-10V Color (-)