120-277VAC; RGBW 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.
- The main power connection must be in ac-cordance with local electrical codes.
- Unauthorized alterations or tampering of product voids warranty.
- Suitable for OUTDOOR applications.





IP67

ATTENTION: For In-Grade - It is the contractor's responsibility to seal the conduit with "Great Stuff" aerosol seal that prevents water and moisture penetration for ultimate protection. Contractor **MUST** use gel-filled wire nuts.

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.

Notes

- This model is designed for concrete pour installation. The upper edge of the housing must be flush with the prepared surface into which it is recessed. Do not install fixture in a manner that creates a pocket where water can sit on top of fixture.
- Not suitable for use in places where the luminaire is likely to be exposed to a horizontal stress load caused by braking, acceleration or change of direction.

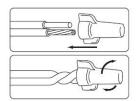
P: 908-996-7710 F: 908-996-7042



Fixture Installation

installation instructions

- Lighting fixture comes fully assembled. Note: When not working on fixture replace trim ring for site
 safety and to protect fixture components from moisture and damage. Keep each trim ring with the
 original body it was supplied on. Note: Use care to protect O-ring on trim ring. Do not remove,
 loosen, cut, deform or otherwise disturb O-ring. Keep O-ring clean and dry.
- Set fixture in desired location. Position the fixture in such a manner that the conduit/cable is not stressed at the entry point to the light fixture.
- The foundation on which the luminaire is to be installed must correspond to the maximum
 permissible pressure load of the luminaire. Suitable drainage must also be provided. Level the
 body in two horizontal planes using the three leveling tabs around outer body. The upper edge of
 the housing must be flush with the prepared surface into which it is recessed. UNDER NO
 CIRCUMSTANCES MAY IT BE LOWER!
- Unthread lens assembly from body with tool provided. Ensure that all internal surfaces of the
 fixture are kept completely dry during installation. Pry out the accessory gasket (if applicable) by
 using a screw driver.
- Remove (2) Flared Collar Knurled Head Thumb screws (by hand) from left and right side.
- Remove LED assembly with heat sink from fixture.
- Use M3 wrench provided to remove (2) M5x16 Screws.
- Remove bracket assembly from fixture.
- Do proper wiring connections. Connect incoming leads to quick disconnect plug. GREEN WIRE TO "GROUND", CONNECT BLACK FIXTURE TO BLACK BUIDLING WIRE AND CONNECT WHITE FIXTURE WIRE TO WHITE BUILDING WIRE.
- Connect the DMX wires.
- Reassemble internal components. Make sure that no wires have been damaged.
- The conduit entries must be sealed with "Dow 'Great Stuff' Gaps & Cracks" (not provided). The
 foam should be sprayed from inside the fixture up into the conduit. Failure by the contractor to use
 the Dow product could cause a void in the warranty. Replace tray with lamping. If not using
 through wiring, plug second conduit entry with 3/4" conduit plug. Please make sure wet label
 requirements are met.
- Place lens frame over fixture ensuring that there is no foreign matter between the lens frame and the body. Energize the fixture and bring luminaire to operating temperature (20 to 30min.), this will evaporate the moisture content of air to be trapped. Once operating temperature has been reached, carefully thread the trim assembly to body with tool provided.



Use gel-filled waterproof wire-nuts for wire connections.

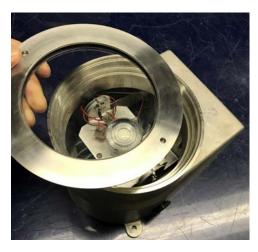
designplan@

installation instructions

Wire Access Instructions





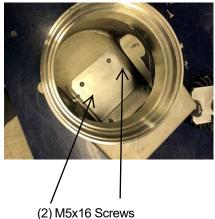




`(2) Flared Collared Knurl Head Thumb Screws











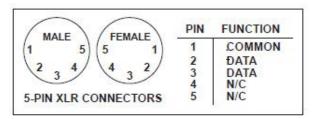




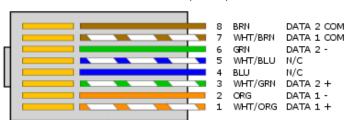
Wiring Diagram installation instructions

| Signal | Description | Pin Colors (4-Pair Cable) | Pin Colors (/-Pair Canie) | 3-pin XLR | 5-Pin XLR | 5-Pin PHX |
|------------------------|------------------------------|---------------------------|----------------------------|-----------|-----------|-----------|
| | | | | connector | connector | 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 24 VDC |
| Black | Power Common |

Input

7.2.2 Pin Allocation Chart for Control Cable Assembly

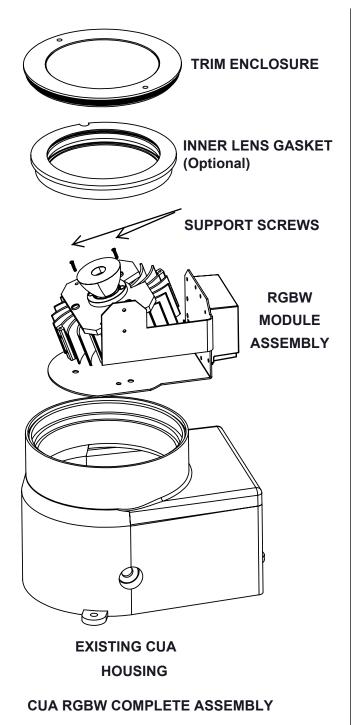
Lead Color

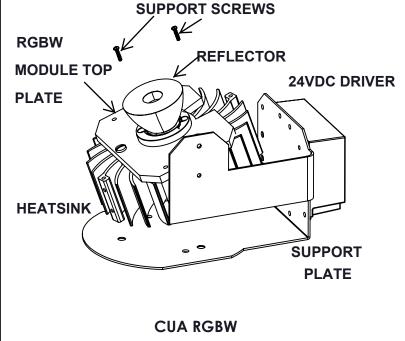




Fixture Installation





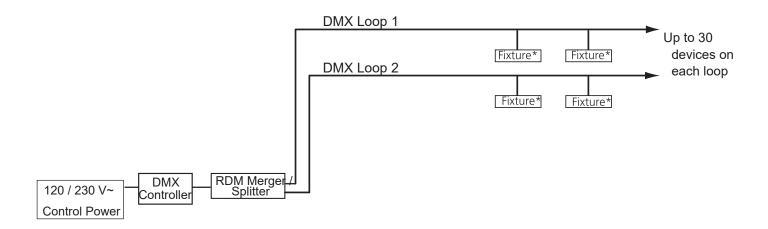






Wiring Diagram installation instructions

DMX512-A Controller Example



^{*} Fixture refers to a luminaire with one Lumenetix module, and with one address (DDM) or four addresses (CTM.



installation instructions

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

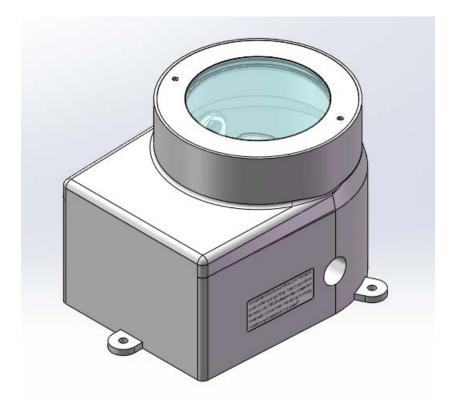
*Recommendations are subject to change. Consult your

Lumenetix representative for the most updated list.

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- * Housing is tapped on the sides with two (2) NPT threads for conduit or IP68 liquid tight fittings. Properly plug and seal the threads using **TEFLON plumbers tape or equivalent thread sealer** to prevent water from entering the housing. *A conduit plug is supplied but not sealed!!!*
- * The INSIDE of the conduit entries must be sealed with "Dow 'Great Stu' Gaps & Cracks" or equivalent (not provided). The foam should be sprayed from inside the fixture up into the conduit to seal around the wire conductors to prevent water inside the conduit from entering the housing. Failure by the contractor to use the Dow product could cause a void in the warranty.