

coloronix®



# RGB 6" x 6" TILE LIGHT MANUAL

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Coloronix, Inc.

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## Summary

### Introduction

RGB Color Changing Tile Lights are active, top-of-the-line color changing fixtures. They draw on solid-state elements in order to produce highlights and washes in architectural spaces.

More specifically, “RGB” is an acronym for “Red, Green, and Blue”. RGB LED color mixing luminaires have the potential to produce 4.3 billion colors, and 16.7 million white light tones.

When installed and operated according to this manual, these tile lights will operate safely and dependably for their rated lifespan.

### Scope

The purpose of this manual is to properly install and use color-changing pathway lights at peak performance.

This manual must be complimented by additional references, consultation from qualified professional(s), and observance of state and local codes and regulations. This rule applies to any interior structure, exterior structure, or environment.

Therefore, it is important to: *“please read and comply with all instructions and warnings in this manual when installing or using this product.”*

### Who Is This Manual Intended for?

This manual is intended for electrical contractors, electrical engineers, and licensed electricians.

### Additional Supplies

DMX control cable: Belden 9841 or CAT5 RJ45 Cable  
DMX512 compatible controller or Coloronix Color Ray Device  
DMX controllers  
Data Enabled Power Supply


## Safety


### Purpose of Product

Coloronix Color Changing Pathway Lights are designed for interior applications, and are ETL/CETL certified.


### Hazard Icon Key:


The “ **DANGER**” icon means avoiding *pending* danger will result in serious injury, or death.


The “ **WARNING**” icon means avoiding this warning may result may in serious injury, or death.


The “ **CAUTION**” icon means not exercising caution here may result in minor to moderate injury, or property damage.


The precautions are:


 **DANGER:** Not turning off the main power before wiring, installing, connecting, or disconnecting this product may result in serious injury, or death.


 **WARNING:** Not following NEC codes, local codes, or consulting a certified professional may result in property damage, serious injury, or death.


 **WARNING:** Not following instructions, or safety labels may result in property damage, or serious injury.


 **WARNING:** Modifying, servicing, or ignoring these safety indications may void the warranty.


 **WARNING:** Inspect product before use. DO NOT use if damaged.

 **WARNING:** Install safety cables per local and structural engineer’s code.

 **CAUTION:** Hot swapping, not turning off fixtures before connection or disconnection, will void the warranty, and damage property.

 **CAUTION:** Do not go beyond the specified voltage, input current, maximum number of fixtures, or run length.

 **CAUTION:** Do not use sharp tools near the reflector or lens.

 **CAUTION:** Do not look directly into beam, with or without optical instruments.

## Specifications

### ELECTRICAL:

**Power Input:** Low Voltage V24 power  
**Power Consumption:** 5.9W Max  
**Power Connection:** 4-Wire Junction

### Load Rating:

2,000 lbs evenly dispersed across tile.  
 Rated for walk over applications.  
**Temperature Rating:** -4 °F-150 °F

### PHYSICAL:

**Environment:** Wet Location (IP 67)  
**Construction:** 3/8" Frosted Glass (Tempered)  
**L70 Life:** 35,000 Hours

### COLOR DETAILS:

**LED Die Colors:** Red (620-630nm)  
 Green (520-535nm)  
 Blue (450-465nm)  
**Color Mixing:** InternaMix Unified Color Mixing  
**Data:** Defined by Satellite Source

## Planning for Installation

### Unpacking

Survey the unit to make sure the tile light is intact—not cracked or damaged. Any damages to the package or its contents are the buyer's responsibility; please follow protocol for filing damage claims. Please recycle or appropriately discard any packing materials.

### Preparation

Before Installation, Coloronix suggests:

- Consulting the provided submittal drawings to recognize layouts of luminaries, power supplies, and wiring layouts.
- Drawing out a layout plan consisting of locations of luminaries and wiring.
- Record DMX addresses on a mapping grid for easy reference and addressing (where applicable).
- An electrical inspector reviews all wiring plans.

### Point to Consider About Data

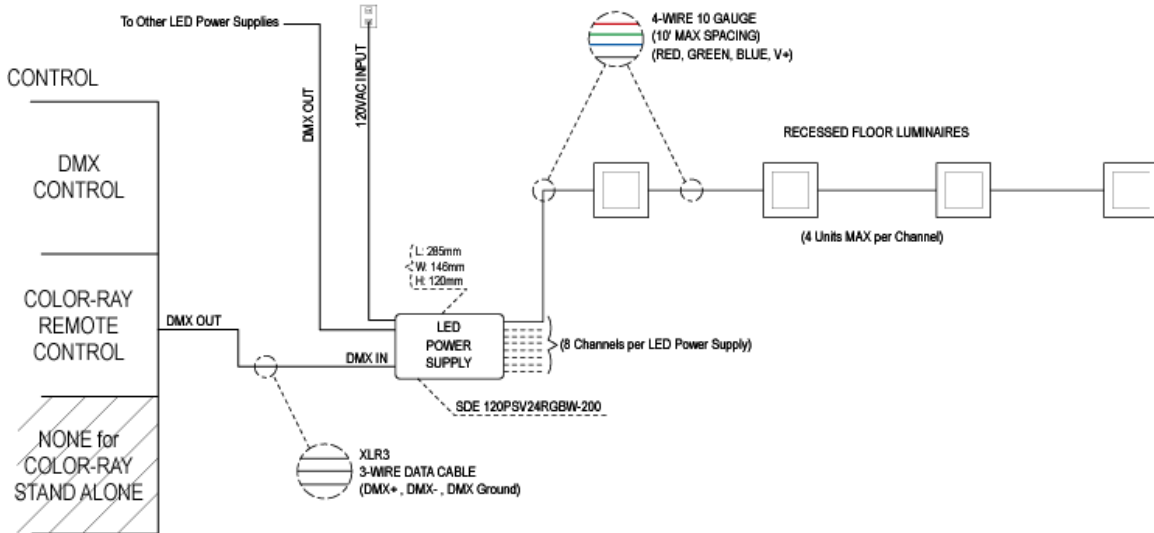
- AC Power and DATA cables may NOT run in the same conduit due to possible induced errors.

### Quick Step-by-Step Instructions

To successfully install RGB Tile lights, the steps are:

1. Mounting and Alignment of Fixture
2. Installing Power Connections
3. Install Pathway Light
4. Ready to Go!

WIRING SCHEMATIC  
Figure B



## Install Fixture

### Mounting and Electrical

1. Make a square cavity in the ground which is L6.69"xW6.69" in the installation surface and lay the power cable, for input and output.
2. Put the recessed case prepared in the cavity, knock-out conduit entries as required and divert the power cord to the recessed box through the hole.

Note: Make sure that the support box is in place. The case box must be put in a position in such a way that the installed tile sits from 1/16 to 1/8 just below the finished surface.

3. Connect the power cords (figure B). Join the cables with the same color using appropriately sized wire nuts. Connections must be made using watertight connections.

Figure B

Tile Wire Color	Connection
Gray	Green
Blue	Blue
Brown	Red
Black	24x

Note: Voltage drop must be considered for long runs.

4. Concrete, cement, pavers (or any other flooring materials) must be installed. Once installation is complete, the tile must be slightly recessed, 1/16" to 1/8" below the block out lid.
5. In order to comply with established electrical code, seal the area around the Luminaire Canopy and the Wall, with type of caulking compound such as GE 100% or Dow Corning 100% silicone to provide a watertight seal in accordance with the differing surface textures of the wall.

## Notes to Consider

**Note:** In order to prevent trip hazards, as well as to protect the edges of tiles, install the tile slightly below the finished surface level.

**Note:** When in the final stage of placing the tile, for greatest security, apply a metal-to-metal adhesive where the tile sets on the recessed case.

**Note:** Coloronix tiles are designed to tolerate regular weather, pedestrian flows, and occasionally, traffic from utility vehicles (i.e. maintenance carts). Exercise caution on and around tiles: tiles are sensitive to excessive salt, snow removal agents, snowplows or shovels, or other chemicals.

**Note:** Because tiles are sealed fixtures and LED's cannot be replaced, the entire fixture needs to be replaced if there is a fixture failure.

## Troubleshooting Guide

If does not light, check if:

- Electrical power is not connected.
- Electrical power is less than specific voltage.
- Electrical power is greater than specified voltage.

If does not respond to DMX control signal, check if:

- DMX control device and RGBW are addressed differently.
- DMX cable is damaged.
- DMX control device is disconnected or not operating.
- DMX device needs to be restarted.
- LED fixture was not restarted after address change.

If the fixture is not responding to DMX, check if:

- DMX addressing is wrong:
  - Check Control Panel and unit addressing.
- The wrong polarity settings may be on the controller:
  - Check polarity switch settings on the controller.
- DMX cables may be loose:
  - Check cable connectors.

If DMX control operation flickers or is intermittent, check if:

- RGBW Color Changing Pathway Light or final DMX device in daisy chain is not terminated.
- DMX cable is damaged.
- DMX control device is operating at less than 25Hz.

## Further Troubleshooting

Should problems occur while using the product, unplug it at once and contact:

- Coloronix, Inc.
- Tech Support: (909) RGBW-555
- [support@coloronix.com](mailto:support@coloronix.com)

## Replacing a Failed Fixture

“Hot Swapping” a fixture is not allowed. If a fixture needs to be replaced, the steps are to:

1. Disconnect the DMX input at the junction box of the fixture needing replacement.
2. Disconnect DMX output.
3. Replace fixture.
4. Reconnect DC negative.
5. Reconnect DC positive.
6. Reconnect DATA output.
7. Reconnect DATA input.
8. Reconnect power.
9. Make sure the replaced fixture and the entire system is in working order.

## Warranty Information

### 3 YEAR PRODUCT LIMITED WARRANTY

Coloronix, Inc. provides a warranty to LED fixtures in case of physical or assembly-related malfunctions. This warranty is valid up to three years from the product's purchase date. Furthermore, Coloronix, Inc. offers to repair products with no charge for labor, or at its own discretion, may offer to replace parts at no charge. However, any labor to remove or install fixtures is not covered. This warranty is only valid for the original purchaser of the product. Proof of date of purchase by receipt or by other means (deemed acceptable by Coloronix, Inc.) is necessary for any warranty service. The warranty only covers product failures due to failure in parts or labor resulting from normal use. The warranty does not cover product failure due to mistake, improper use, mistreatment, neglect, modification, improper installation, inappropriate application of product, or any other defect not resulting from the manufacturer's construction or labor. This warranty does not cover damages resulting from products interacted with non-Coloronix, Inc. brand products. Corrosion or discoloration in components or products are not covered. Except as written above, no other warranties are applicable.

*Coloronix, Inc. is not liable for any damages—accidental, unusual, or resulting—in breach of this warranty. Any warranties, stated here or implied, are only valid for the duration of this warranty.*

The length, limitation, or cancellation of a warranty, whether incidental or resulting from use, may not apply to individuals in certain states.

This warranty is the only warranty, written or verbal, accepted by Coloronix, Inc. The rights of the consumer herein may be different from state to state.

For warranty service, please write to:

Coloronix, Inc.  
5461 W. Jefferson Blvd.  
Los Angeles, CA 90016.

Please include the product name, a description of the product, and address and telephone contacts.

Coloronix, Inc. will offer a solution to the problem, or provide instructions for return. Any returns must include the return material authorization code (provided by Coloronix, Inc.), as well as return freight prepaid. Returns without a return authorization code will not be accepted.

Coloronix, Inc. accepts no liability for any damages incurred in shipping. All products are inspected as packed. Damages, apparent or not, must be claimed with the delivery carrier.

