

## RGB LED STRIP LIGHTING KIT EUKT01- RGB30

This kit comes complete with everything you will need to light up your project: It includes a deluxe RGB LED controller, a mated AC/DC power supply, 16'4" of LED strip light, and six light strip connectors. In some cases, you may need to splice connecting wire to power the LED strips or make extended turns. It is recommended you first read these guidelines completely to understand how the products work, and how they can be configured to your desired lighting layout.

Please note: All wiring must comply with local and national electrical codes for Class II lighting. If you are unclear on how to install this product, please contact a licensed electrician. All 120V AC main connections should be made by a licensed electrician.

#### What's included in the KIT:

| Part Number   | Description                                      | Item     | QTY |
|---------------|--|----------|-----|
| EUPS06012-5.5 | AC/DC Power Supply                               |          | 1   |
| XR3-30400-RF  | RGB Controller                                   |          |     |
| EUACRE-003    | RGB Remote                                       | B Remote |     |
| EULSR0230-5.0 | RGB LED Strip Light                              |          | 1   |
| EUAECON-R10   | Wired Interconnect with End<br>to End connectors |          | 4   |
| EUABCON-R10   | Butt Connectors                                  |          | 2   |
| MKT01-Rev1    | Owner's Manual                                   |          | 1   |

If any parts are missing, please call 1-888-535-9580

The AC/DC power supply is UL listed and ready to use in a standard 120V AC outlet. Any alterations or wiring modifications (i.e. hardwiring) to the 120V AC input power must be completed by a licensed electrician. Please check your local codes prior to beginning any project. All 12V DC output circuits meet Class II lighting requirements and are safe for DIY installation.

 Our commercial grade RGB LED controller has 31 changing modes and 256 grey levels changing in addition to manual controls for Brightness, Speed, Pause, Mode, and On/Off.

# Please read these guidelines before installing:

- Disconnect the AC/DC power supply before making any cuts or connections.
- Do not connect power to the LED strip lights while they are coiled on the reel.
- Do not install or use this kit in wet or damp locations.
- Use LED strip lights only with a low voltage 12V DC power source and 5-24V DC RGB Controller.
- To protect the eyes, do not stare directly into the LED lights when they are lit.
- Make sure to use the B/R/G indicators on the LED strip lights to maintain polarity and correct sequencing.
- For running wires inside walls, use properly certified CL2 or better cabling.
- Do not install Class 2 low voltage wiring in the same runs with AC main power wiring. If AC and DC wires cross, keep them at 90-degree angles.



#### Peel:

Remove the 3M tape backing from the LED strip lights and stick in place.



## Connect:

Simply use the wire interconnects and butt connectors to join the RGB strips.



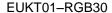
## Cut:

Locate the cut lines on the RGB strip light and cut strip to desired length.

# **Cutting:**

# Figure A Copper pad location Figure B Soldered copper pad location

Cut the RGB strip light using scissors. Make sure to cut strip in the center of the copper pad locations as shown in the *Figure A*. If you cut at a soldered location, refer to *Figure B*. You may need to remove the solder from the RGB strip light connection joint in order for the butt connectors to work properly.





# Connecting:

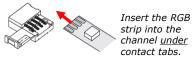




Figure 2

Carefully slide the LED tape into the connector so that copper pads on the RGB strip are positioned underneath the connector contacts.

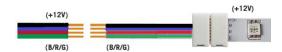
Figure 1



Figure 3

Snap the lid down to close the connector. Perform a test to be sure that the connection is correct and that the LED's light before proceeding with the final installation.

Important: Make sure to use the +12V B/R/G indicators printed on the LED tape light to ensure correct polarity and color sequencing.



If necessary, the LED wires can be extended using 4-conductor 22-18 AWG wire. But the shorter the length of wire added or the larger the wire gauge, the less chance for voltage drop which would allow for higher LED brightness. Please consult your electrician if you are unclear about your connections.

## Planning:

EUKT01 -RGB30 Kit is designed for indirect lighting applications. The light from the LED RGB strip should not be directly visable. Every design is unique and the lighting effects depend on your personal preference. The installation location, surfaces, wall colors, mounting angle, and objects can all affect the lighting appearance. Before installing this LED lighting kit please consider the following:

- Location of the power supply and the RGB Controller.
- LED Lighting ON and OFF plan.
- The layout configuration you will be using.
- Wire connections to your LED strips.



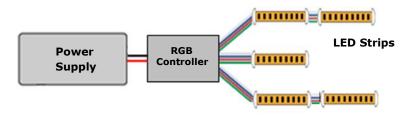
## EUKT01-RGB30

# **Typical Configuration Options**

## **Straight LED Connection**



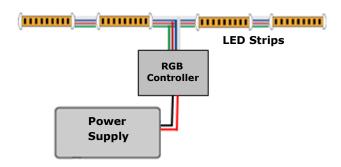
## **Array LED Connection**



## **Loop Back LED Connection**

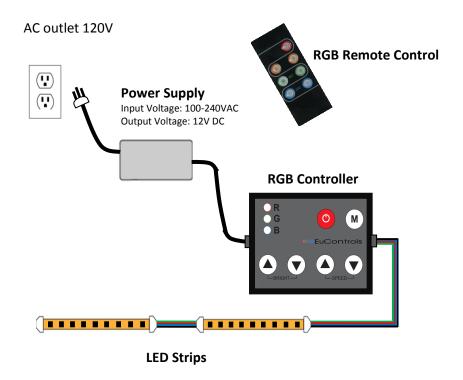


## **Center Feed LED Connection**





## **INSTALLATION INSTRUCTIONS**

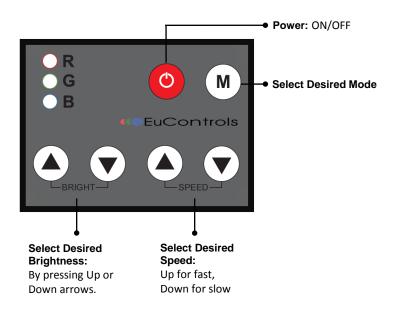


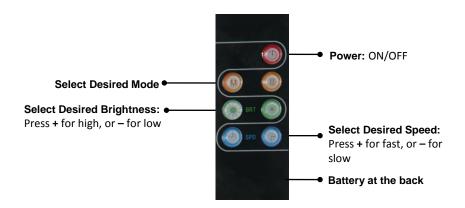
After you had determined the mounting position you are going to use.

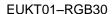
- Make sure to clean the surface area. The area should be free from oil or waxes and should be smooth and dry to ensure proper adhesion of the 3M tape on the back side of the RGB strip light.
- Gently remove the 3M backing and press the RGB strip light between the LED's to securely contact the surface of the mounting surface.
   Never press on the individual LED's since this could damage their solder connections to the strip.
- Avoid sharply bending the LED strip solder joints in curves or irregular spaces since this might damage the LED's.



## **OPERATIONAL MANUAL**









# **SPECIFICATIONS**

| Power Supply                                     | RGB<br>Controller              | Remote<br>Control                | LED Tape                        | Connector                               |
|--|--------------------------------|----------------------------------|---------------------------------|---|
| Output Power: 60W                                | Input Voltage:<br>DC 12-24V    | RF remote control                | 5050 SMD                        | Use for: AWG 22#                        |
| Output Voltage: 12V                              | Output Power: 12V              | Distance:<br>up to 30 meters.    | 30 LED/meter                    | LED strip thickness: 0.3mm              |
| Output Current: 0-5A                             | Gatput Forten 127              | up to so meters.                 |                                 | Current: 5A AC,DC                       |
| Input Voltage:<br>AC 100-240V 50/60Hz            | 12V: 144W; 24V:<br>288W        | Speed and brightness adjustments | 12V DC<br>maximum               | Voltage: 12-24V DC                      |
| Range Voltage:<br>AC 90- 264V 47/63Hz            | Standby Power:<br>0.5W         | Battery: Alkaline<br>27A 12V     | Operation temp:<br>-20° ~ 50 °C | Operation temp:<br>-40° ~ 105 °C        |
| Over-voltage Protection:<br>120% min             | 3 channel RGB<br>Control       |                                  | Non-waterproof View Angle:      | Voltage Resistance:<br>1500V AC/min     |
| Over-current Protection: 120% min                | 31 control mode functions.     |                                  | 120 degrees                     | Contact Resistor: 30m max,<br>1000m min |
| Load Regulation: +/- 5%                          | 8 brightness level adjustments |                                  | Storage Temp:<br>-30°C ~ 80°C   | Housing: PA6                            |
| Ripple and Noise: 100mV  Operation Temp: 0-40 °C | 8 speed level adjustments      |                                  | Power per<br>meter: 7.2watt     | Contact: Over Brass Tin                 |
| Storage Temp: -20 -85 °C                         | aujustments                    |                                  | Color: RGB                      | Tooth Slice: double Tin                 |
| Operation Humidity: 5 - 96%                      |                                |                                  | IP20                            |   |
| Size:<br>(L)119 x (W)52 x (H)31.7 (mm)           |                                |                                  |                                 | Size:<br>12.88 x 15.48 X 3.3 (mm)       |
| Safety: UL Listed                                |                                |                                  |                                 |   |

| MODE SELECTION       |                         |                          |                      |  |  |  |
|----------------------|-------------------------|--------------------------|----------------------|--|--|--|
| 1. Red               | 9. Flashing 2           | 17. White flashing       | 25. White flickering |  |  |  |
| 2. Green             | 10. 6 colors flashing   | 18. Gradual flashing     | 26. RG flickering    |  |  |  |
| 3. Blue              | 11. 6 colors flashing 2 | 19. RGB gradual flashing | 27. RB flickering    |  |  |  |
| 4. Yellow            | 12. RGB flashing        | 20. RG gradual flashing  | 28. GB flickering    |  |  |  |
| 5. Purple            | 13. RGB flashing 2      | 21. RB gradual flashing  | 29. R flickering     |  |  |  |
| 6. Cyan              | 14. RG flashing         | 22. GB gradual flashing  | 30. G flickering     |  |  |  |
| 7. White             | 15. RB flashing         | 23. Flickering           | 31. B flickering     |  |  |  |
| 8. 7 colors flashing | 16. GB flashing         | 24. RGB Flickering       |                      |  |  |  |



## EUKT01-RGB30

### Standard Product Warranty

**PRODUCT WARRANTY:** EuControls warrants that at the time of shipment, the standard products manufactured by EuControls, and sold hereunder, will be free from defects in material and workmanship for a period of three years from the date of shipment.

Warranty Adjustment: Buyer shall notify EuControls immediately if any defect within the warranty period should appear. EuControls agrees to repair or furnish a replacement for, but not install, any product which within three (3) years from the date of shipment by EuControls, shall upon examination by EuControls, prove defective within the above warranty period. No product will be accepted for return or replacement without written authorization of EuControls. Upon such authorization, and in accordance with instructions by EuControls, the product will be returned shipping charge prepaid by Buyer. Replacements made under this warranty will be shipped prepaid by Seller.

**Exclusions from Warranty:** This warranty does not extend to any products manufactured by EuControls which has been subjected to misuse, neglect, accident, improper installation or use in violation of instructions furnished by EuControls. This warranty does not extend to, or apply to, any unit which has been repaired or altered other than at EuControls' factory, or by persons not expressly approved by EuControls. Components purchased or made by Buyer from any supplier other than EuControls shall bear only the warranty given by the manufacturer of that product, and EuControls assumes no responsibility for the interface of its product with any other product, and such responsibility shall remain with Buyer for interface, functionality, and intended use.

**Notice:** The foregoing warranty is in lieu of and excludes all other expressed or implied warranties of merchantability or fitness for use or otherwise.

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