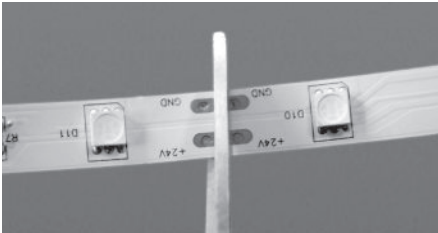


STEPS FOR INSTALLATION

1. Shut off power supply at the lighting panel circuit before starting installation.

2. Measure the length of surface to which LED Strip Series will be installed.

3. LED Strip series can be cut every 4" (101mm) for 5060-60 series and every 6.5"(165mm) for 5060-30 series. Be careful to use sharp cutting scissors and cut directly on the marked cutting line when cutting product to desired length. Cut pieces of LED Strip can be rejoined with our 15cm joiner or In-Line Connector.
- NOTE:** Maximum single run is 20' for 5060-60 series, 40' for 5060-30 series and 16' for CCT Colour Adjust Series.


4. Make sure surface to be mounted to is smooth and clean of any dust or oils. Gently pull backing off of self adhesive on back of LED Strip Series.

5. Push down gently on tape portion of LED Strip Series to assure a firm adhesion to mounting surface being careful not to damage LEDs during this process.

6. For porous surfaces that will not allow a firm grip with the self adhesive backing, we recommend that you use clear 3/8" U channel (Magic Lite Part # VO-C10-8) which can be screwed to the surface first. The LED Strip Series can then be mounted inside the U channel. Also available for mounting to surfaces that will accept screws or nails are our mounting clips (Magic Lite Part # LV-FS-MC-004).

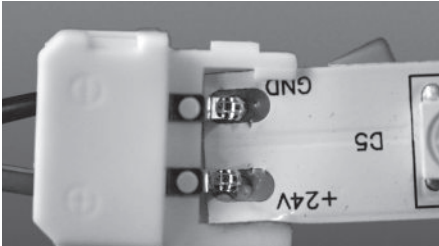
CONNECTING LED STRIP TO LOW VOLTAGE POWER SUPPLY

1. Magic Lite Ltd. LED Strip Series runs on class 2, 24 Volt power supply. Use only power supplies from Magic Lite Ltd. listed in these instructions. Be sure to match appropriate power supply to length of LED Strip Series being used and observe maximum and minimum load requirements.

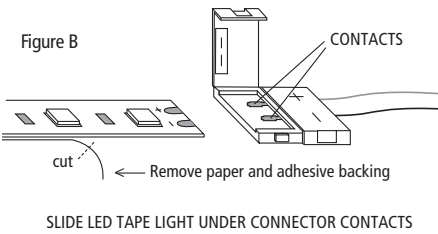
2. **Connecting new roll of LED Strip Series to Power:** Connect one end of LED Strip with power feed connector to low voltage (24V) side of power supply noting + and – markings on LED strip. Make sure to use appropriate size power supply for length of material. Maximum run is 20' for 5060-60 series, 40' for 5060-30 series and 16' for CCT Colour adjust series.
- A. Peel back adhesive tape covering approx. 1" from end of LED Strip.

B. Insert cut end of LED Strip with copper contacts facing up so that they slide underneath the tinned metal contacts in the power feed connector. This is important to ensure a solid connection.

C. Close the top portion of the power feed connector so it snaps shut onto the bottom half of the connector.



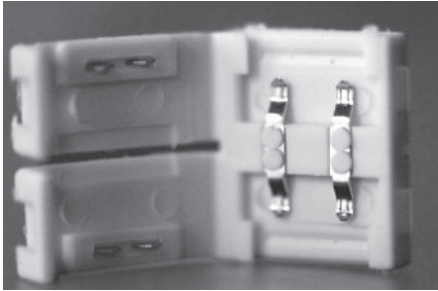
NOTE: Figure B shows the standard polarity connection for the power cord with the “+” on the right side looking down the LED Tape Light. The power cord for this connection is the LV-CN-A10. If you need to connect a power cord to the opposite end, the “+” would be on the left side. The power cord for this connection is the LV-CN-A10-0.



When connecting power to a piece of LED Strip that has been previously cut, attach power feed connector (Magic Lite Part # LV-CN-A10) to cut section of LED Strip as follows:

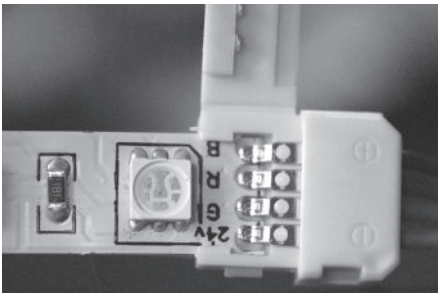
CONNECTING 2 PIECES OF LED STRIP TOGETHER

1. Using Magic Lite Part #LV-CN-B10 or LV-CN-J10 follow steps 1 – 5 as explained above in “CONNECTING LED STRIP SERIES POWER SUPPLY” and repeat for both sides of connector to the two pieces of LED Strip you are joining together.

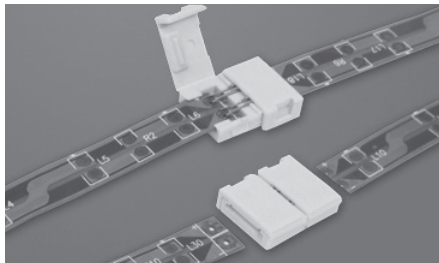


2. If one section fails to energize, check connection between lit section of LED Strip and unlit section.

NOTE: When connecting RGB LED strip to power supply and connecting two pieces of RGB strip together, follow same steps as above with appropriate RGB connectors:



LV-CN-C10
Power feed connector for RGB Indoor



LV-CN-D10
In-line connector for RGB Indoor



LV-CN-O10
15cm in-line connector for RGB Indoor

CONTROL OF RGB LED STRIP SERIES continued

NOTE: As LED Strip Series is powered by class 2, 24V power supplies, you will need one power supply and one controller for the first 20' run of LED Strip Series. A signal amplifier and additional class 2 power supply will be required for each additional 20' run of LED Strip Series.

1. Connect power feeds to RGB LED Strip Series as per instructions above.

2. Connect colour coded wires from power feed connector to output side on Controller. The output side of the controller is marked +, R, G, B to match wire colours from power feed. The black wire on the power feed goes to the + terminal on the controller.



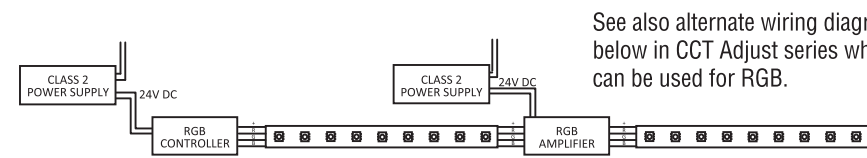
3. Connect input side of controller to appropriate size of 24V power supply from list of approved power supplies.

NOTE: Use only MLDR-120-24 or MLDR-20-24JB power supplies when controlling RGB LED Strip. Do not use Dimmable power supplies for colour change applications:

4. Connect line voltage side of power supply to line voltage.

NOTE: Line voltage connections should be carried out by a qualified electrician.

For Installations with multiple lengths of RGB LED Strip, you will need a signal amplifier for each additional run as follows:



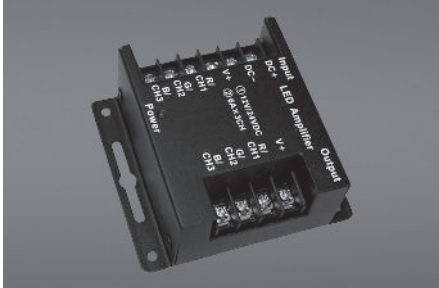
1. Connect wires from output of controller to input side of signal amplifier. If continuing in a straight line, you may simply connect from the end of the previous piece of LED Strip to the input side of the signal amplifier by using power feed connector (part # LV-CN-C10). If running wires directly from output of controller, we recommend using colour coded wires of at least 18AWG.

2. Connect next LED Strip to output side of signal amplifier.

NOTE: Black wire on power feed connectors goes to + on both input and output of signal amplifier.

3. Connect Jack adaptor wires to low voltage side of class 2 power supply. We recommend using our BS-9 terminal block and BS-11 Connection box for this connection.

4. Connect primary side of power supply to mains voltage.



SUMMARY:

The RGB amplifier receives Pulse Width modulation (PWM) signal from the controller allowing you to do multiple runs from a single controller. They are powered individually by a class 2 power supply. The power supply should match the wattage of the length of LED Strip series you are controlling.

CONTROL OF CCT LED STRIP SERIES

NOTE: As LED Strip Series is powered by class 2, 24V power supplies, you will need one power supply and one controller for the first 16' run of LED Strip Series. A signal amplifier and additional class 2 power supply will be required for each additional 16' run of LED Strip Series.

1. Connect colour coded wires from power feed connector to output side on Controller. The output side of the controller is marked W, C, G, V+. Connect Red wire form power feed to W, green wire to either C and white wire to V+.



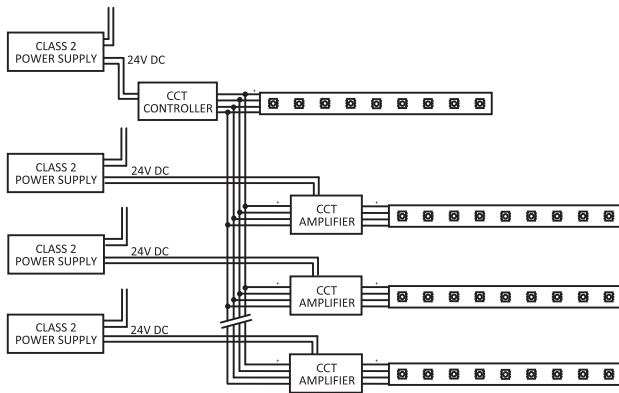
2. Connect input side of controller to appropriate size of 24V power supply from list of approved power supplies.

NOTE: Use only MLDR-120-24 or MLDR-20-24JB power supplies when controlling CCT Adjust LED Strip. Do not use Dimmable power supplies for colour change applications:

3. Connect line voltage side of power supply to line voltage.

NOTE: Line voltage connections should be carried out by a qualified electrician.

For Installations with multiple lengths of CCT LED Strip, you will need a signal amplifier for each additional run as follows:



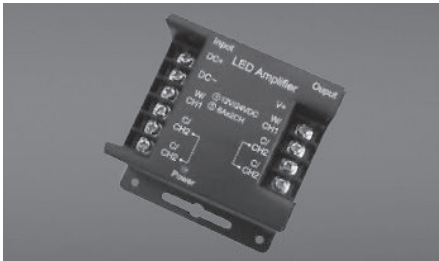
1. Connect wires from output of controller to input side of signal amplifier.

2. Connect next LED Strip to output side of signal amplifier.

NOTE: White wire on power feed connectors goes to + on both input and output of signal amplifier.

3. Connect Jack adaptor wires to low voltage side of class 2 power supply. We recommend using our BS-9 terminal block and BS-11 Connection box for this connection.

4. Connect primary side of power supply to mains voltage.



SUMMARY:

The CCT amplifier receives Pulse Width modulation (PWM) signal from the controller allowing you to do multiple runs from a single controller. They are powered individually by a class 2 power supply. The power supply should match the wattage of the length of LED Strip series you are controlling.

NOTE: Controllers and amplifiers must be placed in weather proof outdoor enclosures for outdoor installations.

SPECIFICATIONS	
Input Voltage	24V DC
Power Consumption	LP-5060-60-24 Series: 4.3W/FT LP-5060-30-24 Series: 2.2W/FT RGB colour change series: 4.3W/FT CCT series: 5.8W/FT
LED Type	High power 5060 SMD LEDs 3528 SMD for CCT series
# of LEDs per foot (304mm)	18 for 5060-60 series, 9 for 5060-30 series, 36 for CCT series
Viewing Angle	120°
Efficacy	75 LPW Cool White 66 LPW Warm White 70 LPW CCT (average)
Average LED Life	50,000 hours to 70% initial lumen output
Colour Temperature	6500K Cool White 3000K Warm White 2500K – 7000K CCT series
Custom Cuttability	Every 4" (102mm) for 5060-60 series Every 6.5" (165mm) for 5060-30 series CCT Adjust every 6 LED's (50mm)
Approvals Listing	cETLus

RGB AMPLIFIER TECHNICAL PARAMETERS	
Working temperature	-20C – +60C
Supply voltage	Class 2, 24V
Output	3 channels
External dimensions	L 114mm x W 65mm x H 25mm
Net weight	110G
Static power consumption	< 1W
Efficacy	< 4A each channel
Maximum length of LED Strip per amplifier	20'

LED STRIP SERIES POWER SUPPLIES

DIMMABLE DRIVERS
See the Magic Lite catalogue for a list of compatible dimming systems.

MLDRE-40-24-DM
Max. recommended load 36W or 8' LED Strip, min. 8W or 2' LED Strip.
5.03" x 2.14" x 2" (127.76 x 54.36 x 50.80mm)

MLDRE-96-24-DM
Max. recommended load 90W or 20' LED Strip, min. 8W or 2' LED Strip
7.56" x 3.06" x 2.94" (192.02 x 77.72 x 74.68mm)

NON DIMMABLE DRIVERS

MLDR-20-24JB
Max. recommended load 18W or 4' LED Strip 20W hardwire. Max. = 3.5' CCT Colour Change.
Input: 100 – 240V AC
Output: 24V DC
4 1/8" x 4 1/8" x 1 1/2" (104.8 x 104.8 x 38.1mm)

MLDR-120-24
Max. recommended load 90W (20' LED Strip) per single tap, 120W (28' LED Strip) combined two secondary taps.
Max. = 16' CCT Colour Change.
120W hardwire
Input: 100 - 240V AC
Output: 24V DC
10" x 3 3/8" x 3 3/16" (254 x 85.7 x 80.9mm)

NOTE: Above maximum and minimum lengths are for LP-5060-60 series. You may double these when using LP-5060-30 series. For High Power or RGB eStrip, maximum lengths shown must be multiplied by .45 due to higher power consumption.

WARNING AND CAUTIONS

1. Do not operate with the flexible light tightly coiled.

2. During installation, make sure flexible light isn't receiving electricity in any manner.

3. Make sure the voltage marked on your light strip matches the power supply.

4. Do not overlap this product as the overlapping may cause the flexible light to overheat and melt or ignite.

5. Do not puncture, cut, shorten, or splice the flexible lighting.

6. Do not route flexible lighting through walls, doors, windows or any like part of the building structure. See wiring diagrams for remote power source installations.

7. Do not use if there is any damage to the light or cord insulation. Inspect periodically.

8. Do not submerge flexible light in liquids, or use the product in the vicinity of standing water or other liquids. Keep all parts of LED Strip Series installation at least 10 feet (305cm) from any swimming or decorative pool.

9. Secure this flexible light using only the hangers or clips provided. Do not secure this product or its cord with staples, nails, or like means that may damage the insulation.

10. Do not subject flexible lighting to continuous flexing.

11. Do not exceed the length in feet permitted by the marking.

12. Make sure to disconnect the power before adding segments.
13. Only use extension segments provided with the entire set of product.

14. To preclude the entry of water, make sure that all connections between section segments are secure.

15. Do not bend the LED Strip Series in the horizontal plane at all. Use "T", "+", "L", or step cords instead. Maintain a minimum 2" (5.1cm) radius in the vertical plane.

16. Do not subject flexible light to over 15 lbs. of tensile force.

17. When connecting the flexible light with connectors, step cord, and the power supply (LED driver), make sure the polarity markings are correctly matched.

18. When using outdoor use portable lighting products, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

(a) Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuits or outlet to be used for the outdoor use of flexible lighting product. Receptables are available having built-in GFCI protection for this measure of safety.

(b) Use only listed outdoor extension cord from 110VAC source to LED Driver, such as type SW, SOW, STW, STOW, SJW, SJOW, SJTW, or SJTOW. This designation is marked on the wire of the extension cord.

ACCESSORIES



LV-CN-A10
Power feed connector for single colour indoor
LV-CN-A10-CCT
Power feed connector for CCT Colour Adjust



LV-CN-B10
In-line connector for single colour indoor
LV-CN-B10-CCT
In Line Connector for CCT Colour Adjust



LV-CN-C10
Power feed connector for RGB indoor



LV-CN-D10
In-line connector for RGB indoor



LV-CN-J10
15cm in line connector for single colour indoor



LV-CN-O10
15cm in line connector for RGB indoor



BS-9
Terminal Block



BS-11
Connection Box to house terminal block connections



LV-FS-MC-004
Mounting Clips



LV-FS-EC-001
End Caps



LV-LB-D3-FR†
Recessed Aluminum Extrusion and Frosted PC Cover



LV-LB-W3-FR†
Surface mounted Aluminum Extrusion and Frosted PC Cover



LV-LB-V3-FR†
Corner surface mounted Aluminum Extrusion and Frosted PC Cover



V0-C10-8
Clear U Channel



LT-09S-RF
3 channel controller for RGB Strip Series*



LT-031-RF
CCT LED Strip Series Controller



LT-032-RF
6 key dimming controller



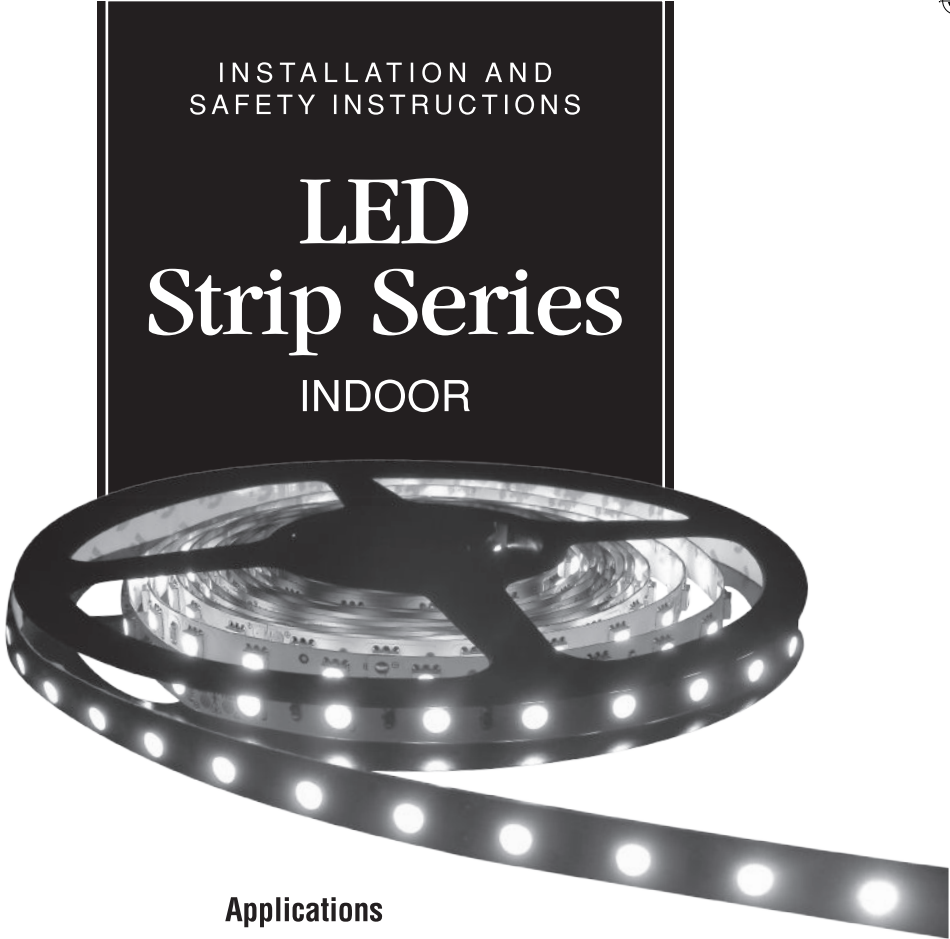
LT-390A
Signal amplifier for LED Strip Series 150W, 24V



LT-290A
Signal amplifier for CCT LED Strip Series

* Must be placed in appropriate outdoor box for outdoor use.

† Extrusions come in 1 metre lengths. End caps and mounting clips are available, sold separately.



Applications

- Aisle and stairway lighting
- Cabinet and Cove lighting
- Back lighting
- Showcase lighting
- Linear decorative lighting