

### RGB CONTROL OF ANALOGUE RGB NEON FLEX AND FLEXIBLE STRIPS WITH SR-1009EAWI CONTROLLERS AND SR-2819T8 REMOTE CONTROL



THE HIGH QUALITY, COMMERCIAL-GRADE SR-1009EAWI ANALOGUE RGB CONTROLLER AND SR-2819T8 REMOTE CONTROL OFFER EXTREME FLEXIBILITY IN CONTROLLING A RANGE OF ANALOGUE RGB INSTALLATIONS. THE CONTROLLER SUPPORTS A MAXIMUM OF 8A PER CHANNEL WITH 4 CHANNELS AVAILABLE : RED, GREEN, BLUE AND WHITE (RGBW).

SR-1009EAWI IS AN IP20 CONTROLLER – IF USED OUTDOORS PLEASE ENSURE IT IS ADEQUATELY PROTECTED FROM MOISTURE.

SR-2819T8 IS AN IP20 REMOTE CONTROL AND IS NOT SUITABLE FOR USE IN WET / MOIST CONDITIONS.

#### CALCULATING THE MAXIMUM LENGTH OF LED NEON FLEX OR FLEXIBLE STRIP PER CONTROLLER

WHEN CALCULATING THE LENGTH OF ANALOGUE RGB NEON FLEX OR FLEXIBLE STRIPS PLEASE CONSIDER THE FOLLOWING:

##### VOLTAGE DROP

12V AND 24V LED NEON FLEX AND LED FLEXIBLE STRIPS EXPERIENCE A NATURAL VOLTAGE DROP AS THE RUNNING LENGTH INCREASES. TO ENSURE A CONSISTENT BRIGHTNESS AND CONSISTENT COLOUR ACROSS THE LENGTH YOU MUST NOT EXCEED THE RECOMMENDED LENGTHS – AS VOLTAGE DROP OCCURS THE LEDs FURTHEST FROM THE POWER SOURCE WILL GRADUALLY BECOME DIMMER AND THE RGB COLOUR MAY ALSO START TO FLUCTUATE. THIS CAN RUIN AN INSTALLATION.

WITH THE SR-1009EAWI CONTROLLER YOU CAN POWER AND DRIVE YOUR NEON FLEX OR FLEXIBLE STRIPS FROM BOTH ENDS AS LONG AS THEY ARE BEING POWERED AND CONTROLLED BY ONE CONTROLLER. WE RECOMMEND THAT YOU DON'T EXCEED :

- 5M OF 12V LED NEON FLEX OR FLEXIBLE STRIPS POWERED FROM ONE END
- 10M OF 12V LED NEON FLEX OR FLEXIBLE STRIPS POWERED FROM BOTH ENDS
- 8M OF 24V LED NEON FLEX OR FLEXIBLE STRIPS POWERED FROM ONE END
- 16M OF 24V LED NEON FLEX OR FLEXIBLE STRIPS POWERED FROM BOTH ENDS

##### CURRENT DRAW

EACH CHANNEL OF THE SR-1009EAWI CONTROLLER CAN SUPPORT A MAXIMUM CURRENT DRAW OF 8A. DRAWING MORE THAN 8A PER CHANNEL WILL DAMAGE THE CONTROLLER. ANALOGUE RGB TYPICALLY CONSUMES A MAXIMUM OF 14.4 WATTS PER METER.

- AT 12V THIS WOULD DRAW 1.2A PER METER = 0.4A PER CHANNEL. THIS MEANS THAT ONE CONTROLLER CANNOT CONTROL MORE THAN 20M OF ANALOGUE RGB LED NEON FLEX OR FLEXIBLE STRIP. REMEMBER THAT YOU CAN ONLY HAVE ONE POWER SUPPLY CONNECTED TO THE CONTROLLER AND THIS POWER SUPPLY NEEDS TO BE ADEQUATELY SIZED TO POWER ALL THE STRIPS CONNECTED TO THE CONTROLLER.
- AT 24V THIS WOULD DRAW 1.2A PER METER = 0.2A PER CHANNEL. THIS MEANS THAT ONE CONTROLLER CANNOT CONTROL MORE THAN 40M OF ANALOGUE RGB LED NEON FLEX OR FLEXIBLE STRIP. AGAIN, REMEMBER THAT YOU CAN ONLY HAVE ONE POWER SUPPLY CONNECTED TO THE CONTROLLER AND THIS POWER SUPPLY NEEDS TO BE ADEQUATELY SIZED TO POWER ALL THE STRIPS CONNECTED TO THE CONTROLLER.

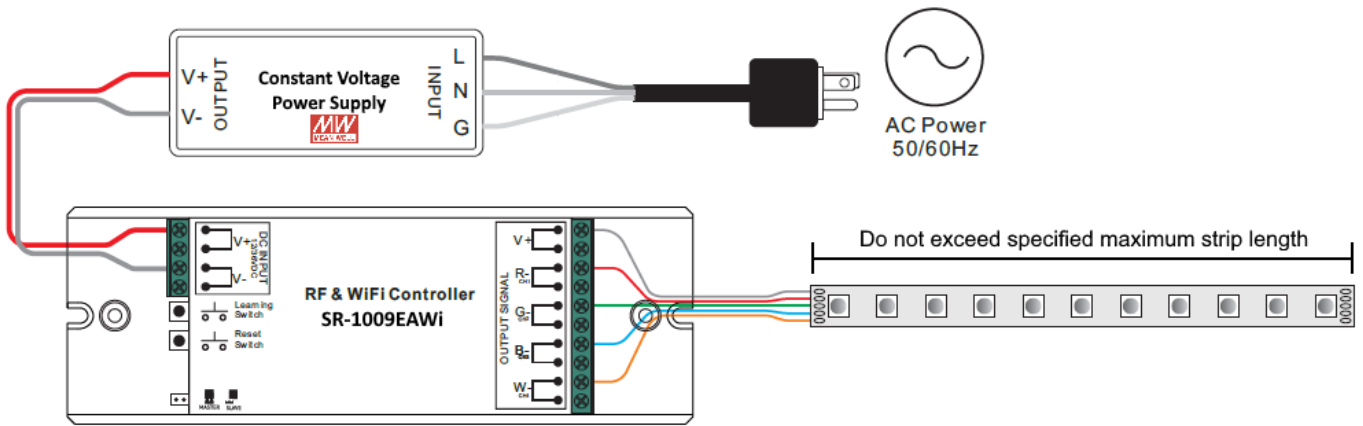
## Power supply

The total power drawn from the SR-1009EAWI controller should not exceed more than 80% of the rated power of the power supply which is powering the controller. Add up the total meterage of analogue RGB LED neon flex or flexible strip you want to run off the controller and multiply that number by 14.4. The result should not exceed 80% of the power supply's rated power.

The controller itself will draw a marginal amount of current.

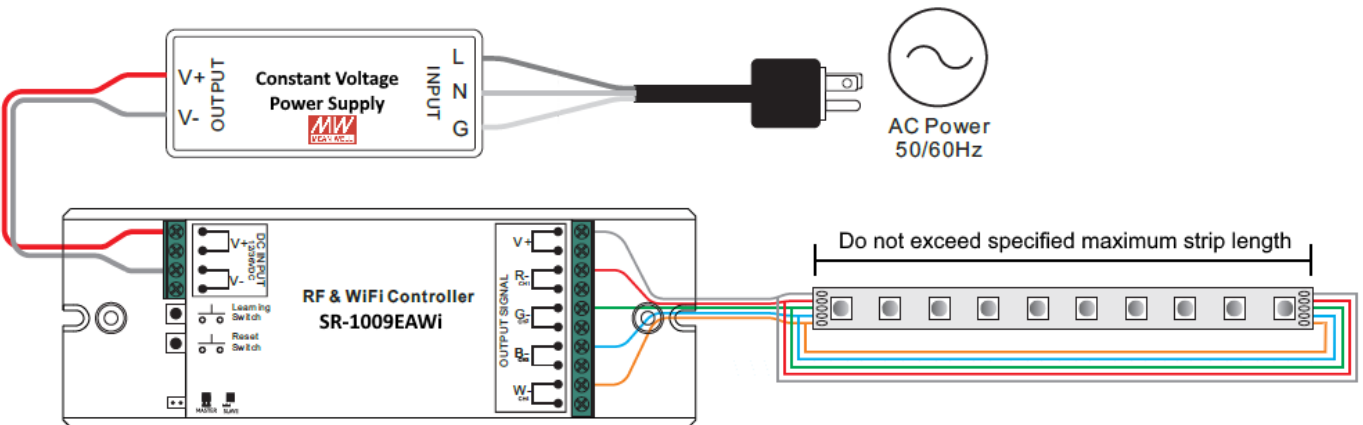
## Wiring configuration 1

Single length of analogue RGB LED neon flex or flexible strip powered from one end.



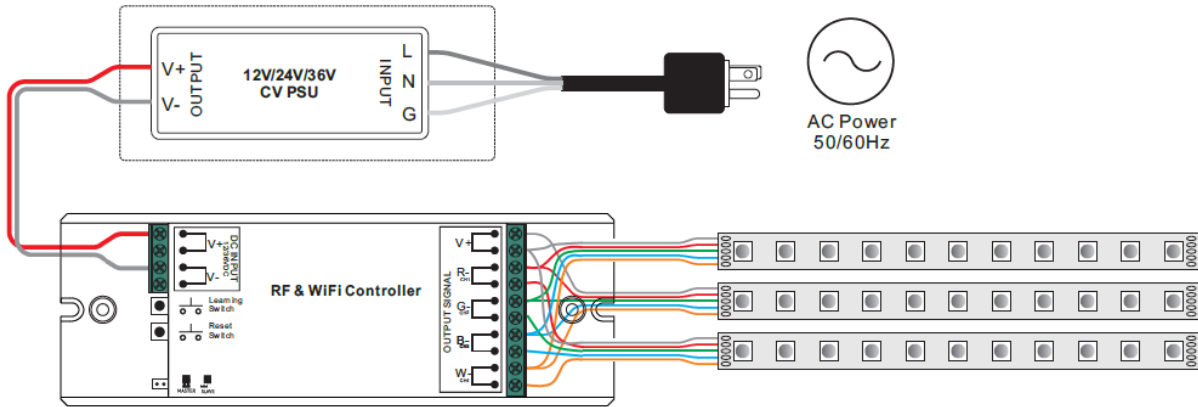
## Wiring configuration 2

Length of analogue RGB LED neon flex or flexible strip powered from both ends.



### Wiring configuration 3

Multiple sections of analogue RGB LED neon flex or flexible strip can be wired in parallel into the controller. Ensure that you don't exceed the maximum total length of flexible strip / neon flex for one controller. Ensure that each length of analogue RGB LED neon flex or flexible strip does not exceed the specification for that model of strip.



### Wiring configuration 4

You can control multiple SR-1009EAWI controllers with one remote control. Each SR-2819T8 remote can control up to 8 zones and each zone can control an unlimited number of SR-1009EAWI controllers. When you pair a remote with a controller, it is the remote which broadcasts the RF signal and its unique code whilst the receivers listen for that broadcast before pairing.

If you are controlling multiple controllers with one remote, it is recommended that you set one controller as the master controller and the others as slaves. Set the jumper on the one controller to master by connecting the two pins with the jumper, and the others to slave by setting the jumper on only one pin or removing the jumper. The master controller will then orchestrate the slave controllers.

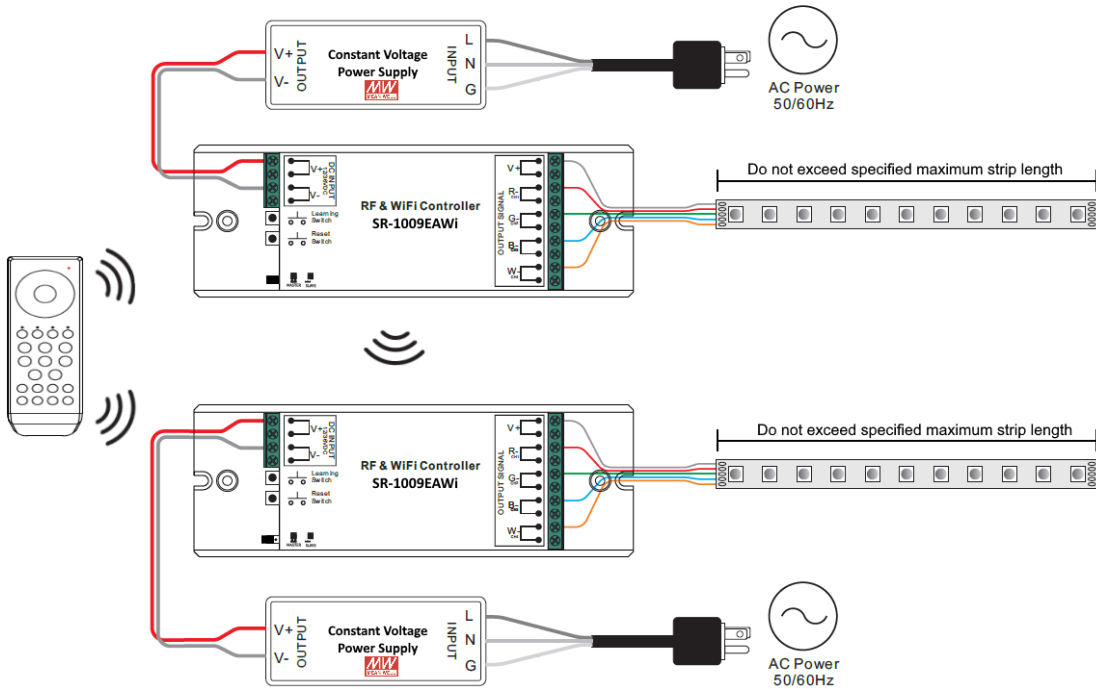


With the power turned off, wire all controllers to your LUMUL LED flexible strips or LUMUL neon flex and turn on the power.

- Using remote SR-2819T8 :
- Pair the master controller to zone 1
- Pair all slave controllers to zone 2

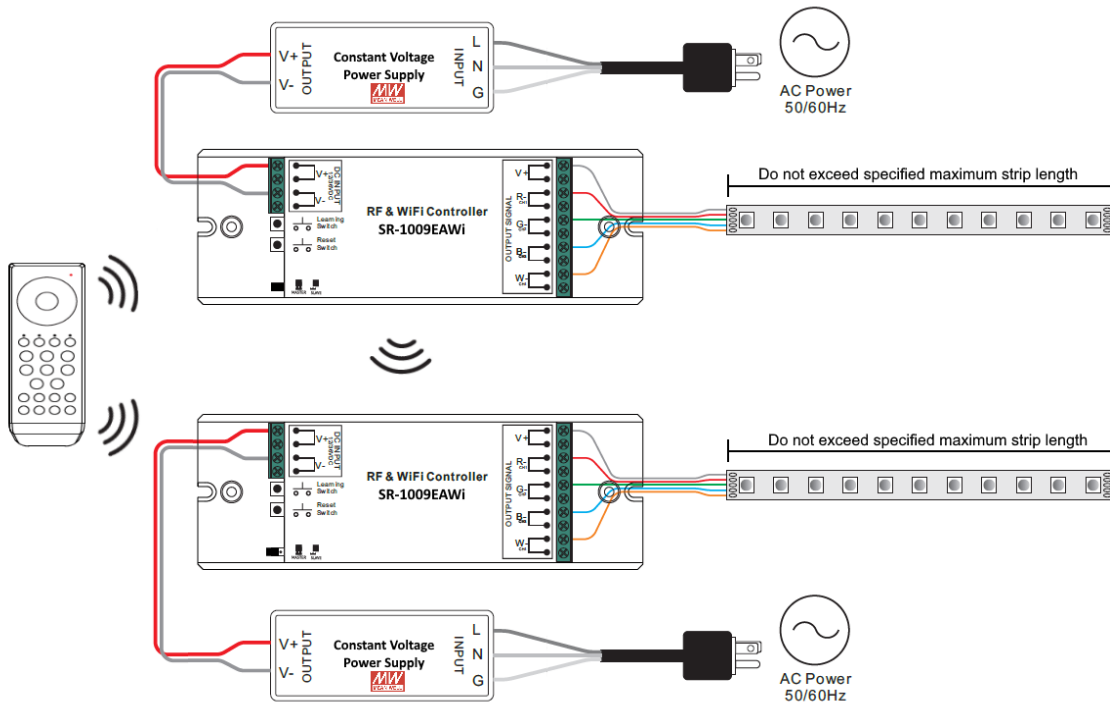
You can only have one controller set as the master controller but multiple controllers set as slave controllers. This implies you can only have one master controller paired to zone 1 and multiple slave controllers paired to zone 2.

To control the different controllers in synchronisation, select zones 1 and 2 on the remote. When you manually change colours and brightness, or use one of the pre-built colour programs, all controllers will be in sync and will remain in sync as the master controller sends signals to the slave controllers every 15 seconds.



### Wiring configuration 5

It is possible to control multiple SR-1009EAWI controllers with one SR-2819T8 remote control without making any one controller master and the other slaves : whilst not ideal, you can set all the controllers as masters and pair the remote control with them.



## Wiring the SR-1009EAWI controller

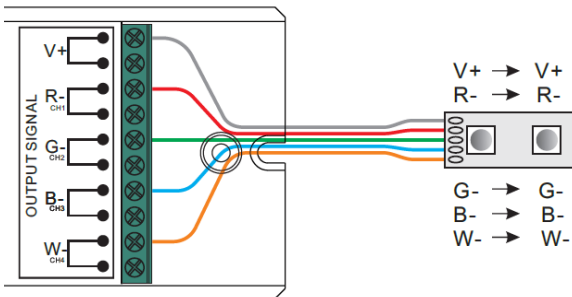
- Using a Philip screwdriver, unscrew the two Philip screws on either end of the controller and remove the two end casings.



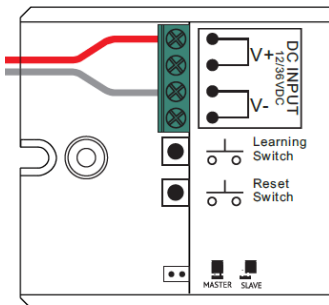
- Using a small screwdriver, loosen the screws to the RGB and power connectors on the controller.



- Insert the exposed ends of the red, green, blue and black wires of the analogue RGB LED neon flex or flexible strip into the connectors as follows:
  - Red wire is inserted into the connector marked R
  - Green wire into the connector marked G-
  - Blue wire into the connector marked B-
  - If you are connecting an RGBW LED flexible strip or neon flex, connect the white wire to the connector marked W-
  - The common anode wire, usually black, must be inserted into the connector marked V+



- Ensuring your power supply is disconnected from the mains power, connect the power leads to the connector. Connect the positive wire to the connector marked V+ and the negative wire to the connector marked V-.

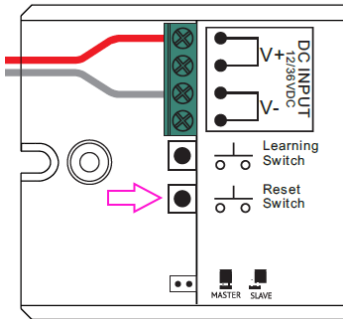


- Connect the power supply to the mains supply and power it on.
- If you will be controlling the controller through the smartphone or tablet application, replace the end covers of the controller, ensuring you move the wires out of the way as needed. Tighten the screws so that the covers hold the wires firmly in place.

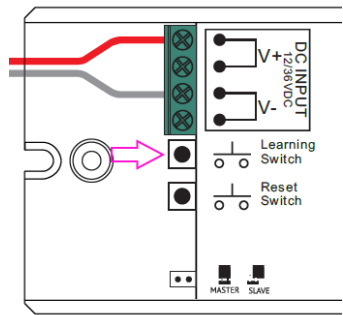
## Pairing SR-1009EAWI with SR-2819T8 remote control

Follow the steps below to pair your SR-1009EAWI controller with an SR-2819T8 remote control.

1. Ensure the controller is receiving power from the power supply.
2. Press and hold the **Reset Switch** for more than 3 seconds. The LEDs should flash on and off, with a white colour.



3. Remove the battery cover from the SR-2819T8 remote control and insert 3 x AAA batteries. Replace the battery cover.
4. Press and release the **Learning Switch** on the controller.



5. On the remote control press the zone number you want to use for this controller (eg. Press zone 1).
6. On the remote control, move your finger on the colour wheel. Your SR-1009EAWI controller and SR-2819T8 remote are now paired.
7. Replace the end covers of the controller, ensuring you move the wires out of the way as needed. Tighten the screws so that the covers hold the wires firmly in place.



## Controlling SR-1009EAWI with the smartphone / tablet app

1. On your smartphone or tablet, download and install the application entitled Easylighting.
2. On your smartphone or tablet, turn on your WiFi and search for wireless networks.
3. Each SR-1009EAWI controller will broadcast a wireless network with SSID = EASYLIGHTING\_xxxx.
4. Connect to the wireless network corresponding to the SR-1009EAWI controller to be controlled with the password 0123456789.
5. If you cannot see the WiFi network for your controller, reset the controller by holding down the Reset Switch for 5 seconds or longer.
6. Open the Easylighting application.
7. Select the Room icon.
8. Choose the room in which your controller is in.
9. Press and release the Learning Switch on the SR-1009EAWI controller.
10. Touch and rotate the colour wheel on the Easylighting application.
11. Your Easylighting app and controller are now paired.
12. Every time you want to control your lights via the Easylighting application you must connect your smartphone or tablet to the controllers' WiFi network.