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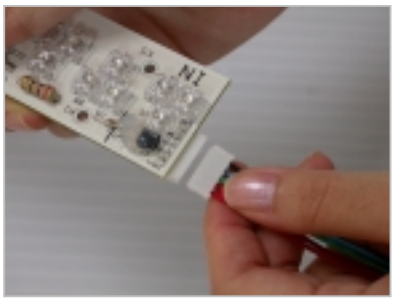
DMX & ECM-S48 LightBar

Setup Instruction

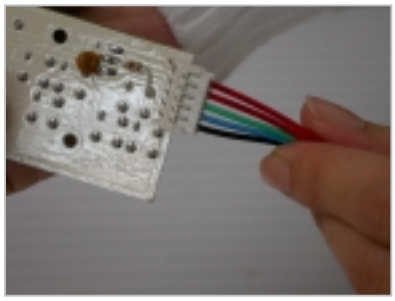
The standard DMX signal controller requires a DC12V, 1Amp of power input. The controller has a compact dim. 125(W)X170(H)X55(D)mm, which minimizes the space design.

On the other side of the power adapter, be sure it requires AC110V or AC220V input power.



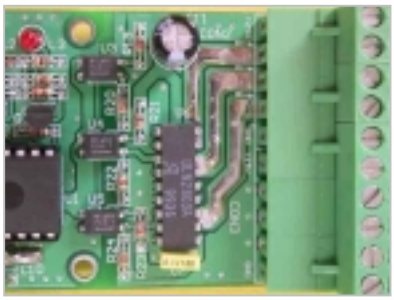
Carefully interlock the jumper wire of W2505B5-50 to the ECM-S48 RGB lightbar from the end of “IN”. Note plug the red wire to anode (+); another red wire to data signal R, green wire to data signal G, blue wire to data signal B, black wire to cathode (-) before you power on. The RGB lightbar runs under DC24V.

To interlock to adjacent board, you can use the jumper cable, model no. W2542A4-05, 2pin, 50mm or 120mm.

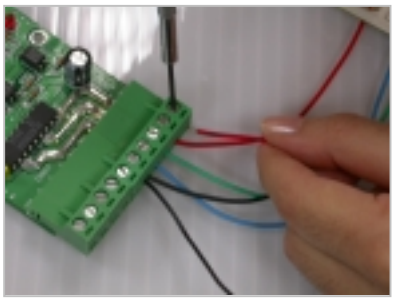


The connector is good for one direction of insert. Here shows the rear side of the lightbar in a correct connection.

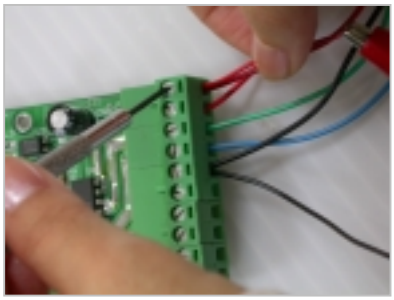
The DMX-512, the decoder board, is designed for use with DMX-103 controller. The DMX-103 controller provides up to 60 channels, which can allow up to 20PCS of DMX decoders being connected to. The DMX decoder board runs under DC12V.



Here take a closer look at screw terminals for RGB light bar data signal and power. The DMX decoder board includes two set of COM ports, and one of each requires only four wire connections to screw terminals for data signal and power.

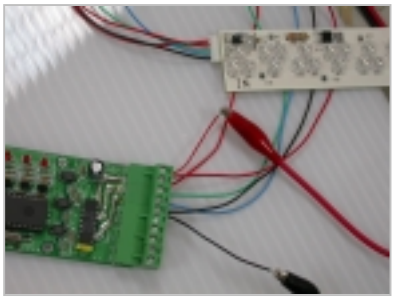


Carefully screw down the W2505B5-50 wire to the +24V, R, G, B, GND as indicated on the board accordingly.



The screw terminal, where provides the RGB data connections, also provides the power ports, +24V and GND. As LEDs are current dependant devices, at first figure out an appropriate power supply by which the lightbar can be driven. Each ECM-S48 requires current typ. 320mA and runs at 24VDC. Here is the simplest calculation to define the required power supply. ***Power Wattage = Voltage * Current***

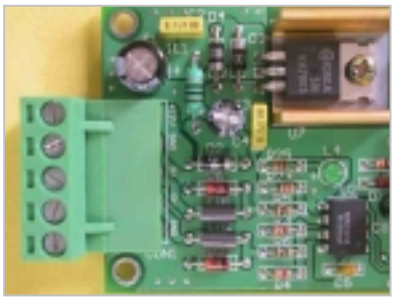
The filled cable can be of different wire gauges, but with a minimum spec. of 16AWG.



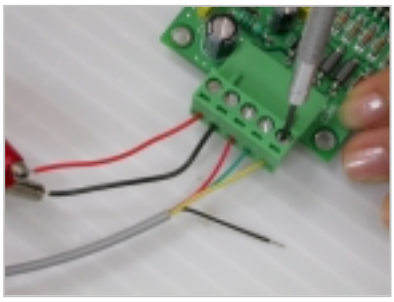
An overall view at the connection between RGB lightbar and the decoder.

The DMX-103 controller includes four ports of connectors, XLR 3pin X1; XLR 5pin X1; phone jack RJ11 X2. Either port of connection is acceptable.

Here we plug in the phone jack connector to provide an interface signal between the DMX-103 controller and DMX-512 decoder. Note there is no need to provide DC12V power source to Pin 1 V+12V.



Here take a closer look at screw terminals for DMX data signal and power. As to the required five wire connections, two of them are used for power input, DC12V, 1Amp. Other three terminals are used for DMX data signal connection, ie Data+, Data-, GND.



Carefully screw down the W2503B6+W2503B7-50 wire to D+, D-, GND as indicated on the board accordingly.

When setting up, the screw terminal is easy to screw down and provides a dependable electrical connection. When you screw down, make sure the wire is in the contact of the screw terminal.

In general DC operation is the most simple and efficient way of driving LEDs. The RGB DMX lighting device is operated at the power source 12VDC, driving the DMX-512 decoder board, and 24VDC, driving the RGB lightbars, respectively.

Turn on the power supply only when the setup is completed.

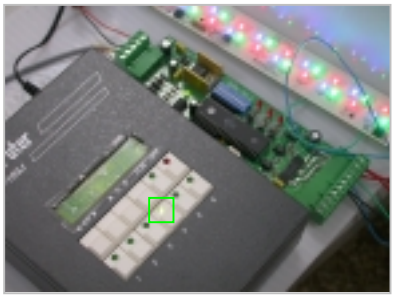
Make sure the DMX-103 controller power “ON” at the same time.

The DMX-103 controller has six buttons for selecting shows, in which one can set up the scene and chaser, chaser speed, and chaser mode. In following to the user manual, you can set up 6 sets of chaser memory, up to 24 step per set. Your ordered DMX-103 is setup at default value, ie no lighting memory. DMX-103 provides you a complete control over your lighting environment at the push of a button. Here shows a simple example.

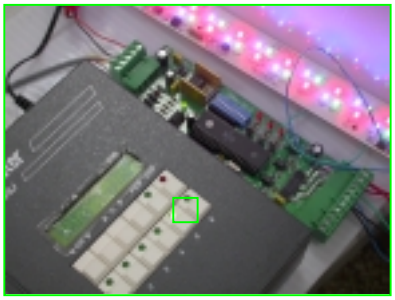
Chaser 1.

Chaser 2.

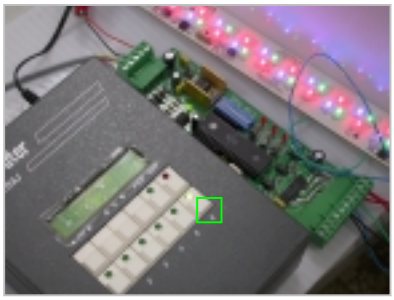
Chaser 3.



Chaser 4.



Chaser 5



You can also adjust the chaser speed during show play back.

Chaser 6

Service Support

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