

## RC MOSFET Solid State Light Dimmer Kit

Thank you for purchasing one of our RC Modules. We hope it will give you many years of trouble free service. If you have any problems with your module, please either email or contact our technical support helpline first on the number provided on the last page. We are sorry that it is a mobile number, but we work between three sites and find that our mobiles are far more versatile for our non –electronic communication needs.

Before pressing your switching module into service, please carefully read through the installation drawings, notes and information below.

It may well be we are 'trying to tell Grandma How To Suck Eggs' but just sometimes as we find, information is priceless knowledge, and in our case, a knowledge which we have gained over 40 years of Avionic Electronic Engineering Design and Construction experience.

Please follow the wiring protocol as in the drawing. The Conductors/Ports are clearly marked 'Load' and 'Batts' Do not connect them to anything other than what is described . 'Load' is your Lights. 'Batts' is your Battery pack or Power Source.

**Irreparable damage will occur to the internal components of the module if you:**

**Short Circuit The 'Load' Connections.**

**Cross Polarise The Supply (Batts) Connections**

**Exceed the Maximum 8A Load**

**Allow water or fluid to enter the module.**

**Mount the module where it cannot dissipate heat from the MOSFET Device**

**Always use a Fuse in the 'Batt' (Supply) Line.** This will help protect your module from a possible Short Circuit or overload. It will also prevent your precious model/project from going up in smoke (Glass Fibre Burns Also!) if there is such an event.

A major factor in the design and application was to simplify the connectivity between receiver and output connections. In doing so has meant that the module will not lend itself to be driven from anything other than a standard three wire servo protocol connection arrangement. Simplified, irreparable damage will occur to the module if you attempt to drive it from anything than your receiver.

### **\*\*\* IMPORTANT\*\*\***

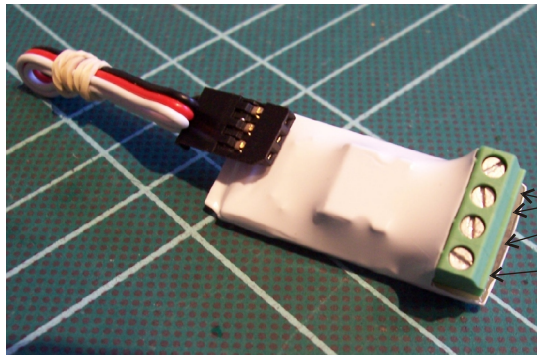
Before Powering the Receiver, best practice is to switch on the transmitter with all Sticks/Rotary Knobs in neutral **FIRST**. If, by chance you power the receiver first with the Stick/Rotary Knob on your Lighting Channel in any position than off, the Decoder will invalidate the signal for 50 seconds it will then need a reverse stick signal (Amber On-Board LED glows) before it will turn the lights on.

Should you need technical support for your purchase, please call +4475 9999 8183 (075 9999 8183) between 9am and 5pm Monday to Friday.

Email: [support@mr-rcworld.co.uk](mailto:support@mr-rcworld.co.uk)

Best Wishes

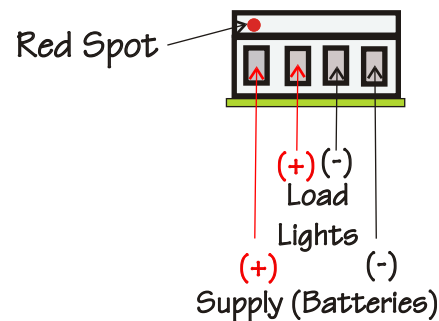
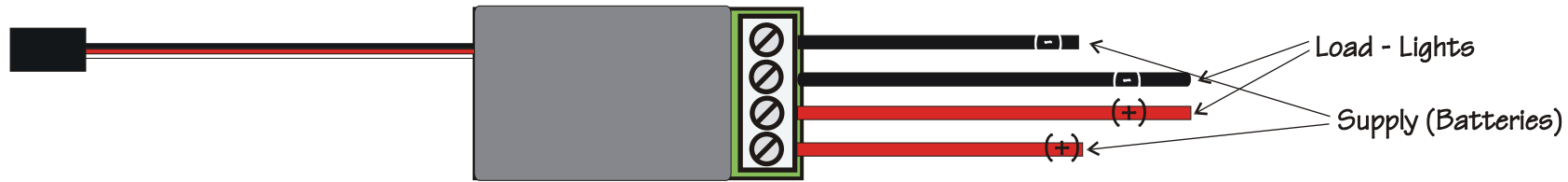
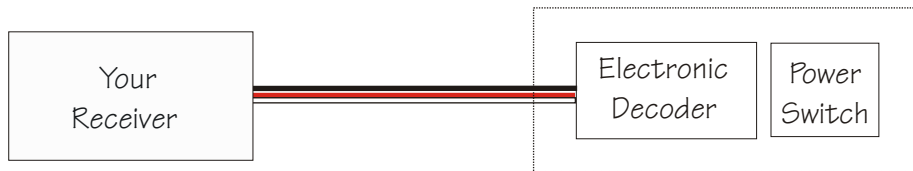
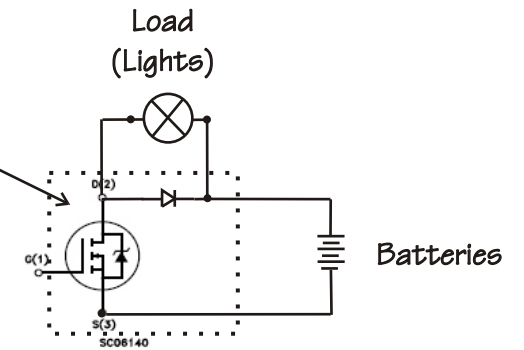
The Staff at Mr RC World



Load - Lights.

Supply (Batteries)

Inside the Power Dimmer



**\*\*\*IMPORTANT\*\*\***

Internal Damage will occur if the supply lines are cross polarised (Positive on Negative, Negative on Positive)

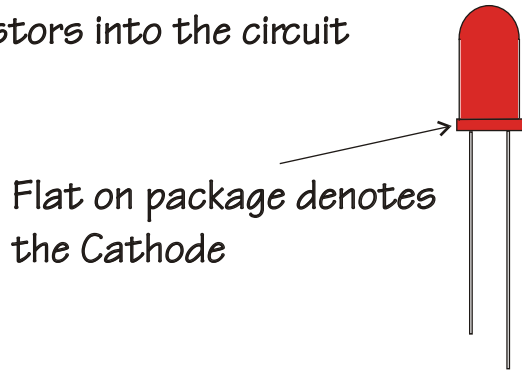
Always use a suitable Fuse in the supply Lines

Fuses, Resistors, Diodes LED's and Suppression Capacitors can be purchased from our On-Line Store at [www.mr-rcworld.co.uk](http://www.mr-rcworld.co.uk)

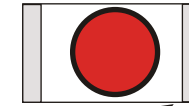
Rev No	<b>MR RC WORLD</b>
Mar 2010	
RC Electronic Solid State Light	
Dimmer Connections	
and LED Details	
Eng.	
Scale 1:1	Drawing No 1 of 1

If you are using LED's you MUST fit resistors into the circuit

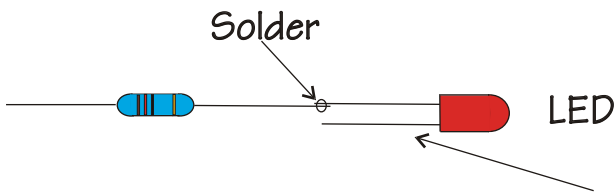
Battery Voltage	Resistor (Ohms)
5.0V	150
6.0V	200
9.0V	360
12.0V	510



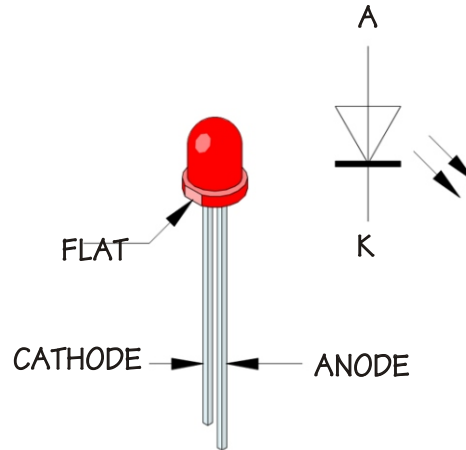
SMD 1206, 0805 & 0603



Cathode usually marked by a Green Band or Arrow on Underside of Device.



Short Leg is Cathode.  
Cathode is connected to the negative side of the batteries



\*\*\*\*\*Please Note\*\*\*\*\*

The information on LED current limiting resistors is generic to all LED applications.

With this kit it is unnecessary to use a resistor in the circuit as they are already built in on the Module.

The Resistor can be placed in either Leg of the LED

Replacement or additional LED's can be purchased from us  
Please contact us, or visit our website [www.mr-rcworld.co.uk](http://www.mr-rcworld.co.uk)

Rev No		<b>MR RC WORLD</b>
Sept 2009		
LED General Information		
Eng.		
Scale 1:1	Drawing No 1 of 1	