



RC MOSFET Solid State Switch Kits

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 voice 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 Chew Gum' but just sometimes as we find, information is priceless knowledge, and in our case, 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/Pumps/Motor. '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(Positive on Negative, etc.)

Exceed the Maximum 21A Load

Allow water or fluid to enter the module.

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 from going up in smoke 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 PWM servo protocol connection arrangement. Simplified, irreparable damage will occur to the module if you attempt to drive it from anything than your receiver.

A recent feature added to these modules is an '**Adjustable Switch Point.**' Carefully using a very fine Jewellers/Watchmakers Flat Bladed Screwdriver, (1.3mm) you can adjust the precise point of travel on a Joystick or Rotary Knob Channel. This feature allows you operate multiple switches on the same Proportional (Joystick/Rotary Knob) Channel.



Reversible Options Module (Available on 'Reverse Mode Module' ONLY)

With this option you can reverse the switch direction on a Stick or Rotary Channel. This function allows operating multiple switches on a single channel.

Please review the associated drawings before attempted to change the mode selector.

1. Disconnect the Module from the Receiver and Load/Supply Connections,
2. Cut Open the Access Window Adjacent to the Activity LED.
3. Using a Fine Pointed Soldering Iron and either a De-Solder Pump, or De-Solder Wick, carefully remove the Solder Bridge from the Default Normal Mode Pads.
4. Apply a Solder Bridge to the Reversed Mode Pads.
5. Test and Trim the Switch Point to your desired position..

Fully Test the module, and Adjust the Switching Point if necessary **BEFORE** applying the Load and Supply. The Switching Point is when the Onboard LED is illuminated.

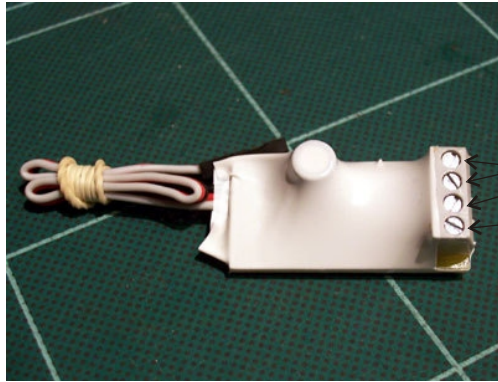
If you are unsure or about the above task, you can return it to us and we will do it for you. This Service is FREE but you will be asked to pay the return postage costs. Please e-mail or call our Technical Support line before sending the Module back.

Should you need technical support for your purchase, please call between 9am and 5pm Monday to Friday.

Email: support@mr-rcworld.co.uk

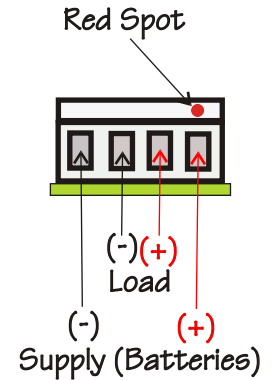
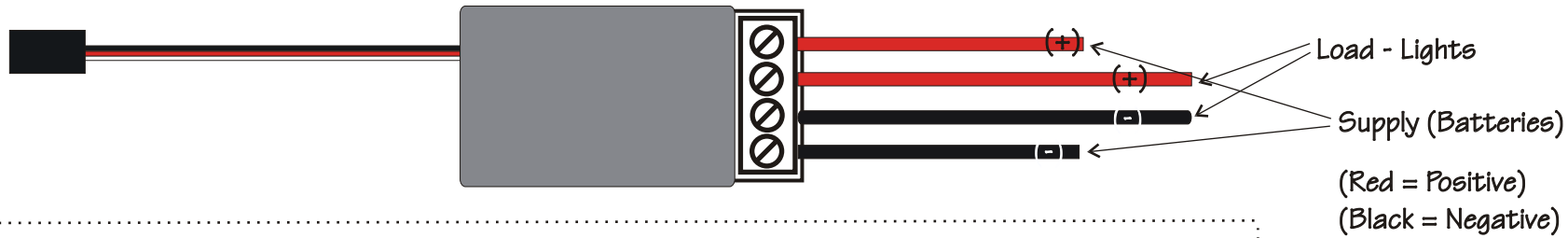
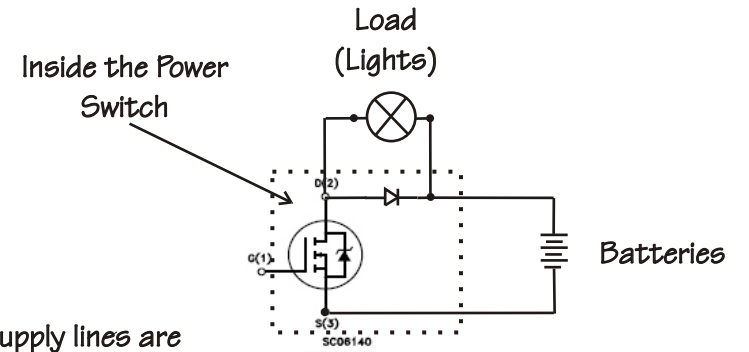
Please Note...

To maintain our multiple order carriage discounts to you, if your order was for more than one module of the same kind, we will only have sent you one set of documentation. If you need more copies, please contact us to where we will send you printable .pdf's or you can download a copy from our website, www.mr-rcworld.co.uk.



Load - Lights.
Supply (Batteries)

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

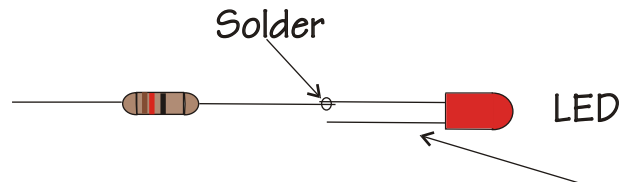
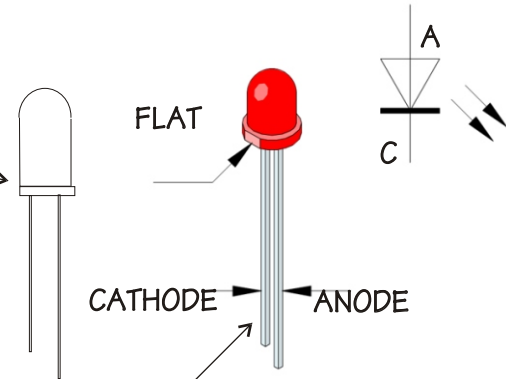


FOR INFORMATION PURPOSES ONLY

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

Flat on package denotes the Cathode



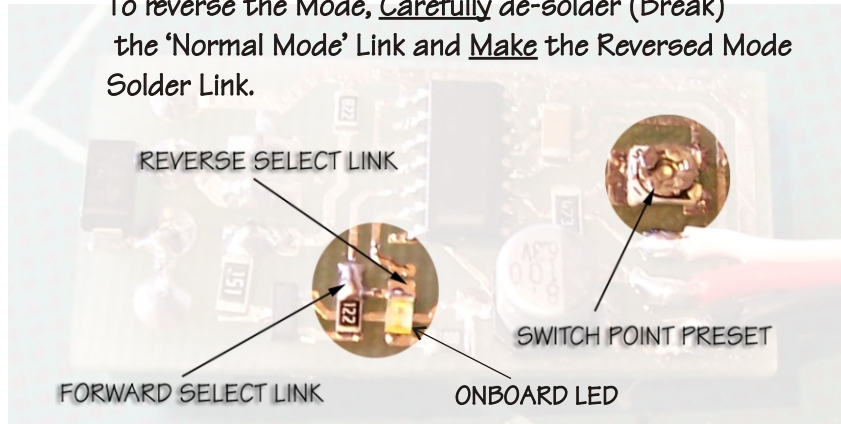
Short Leg is the Cathode. Cathode is connected to the Negative side of the Supply

*******IMPORTANT******

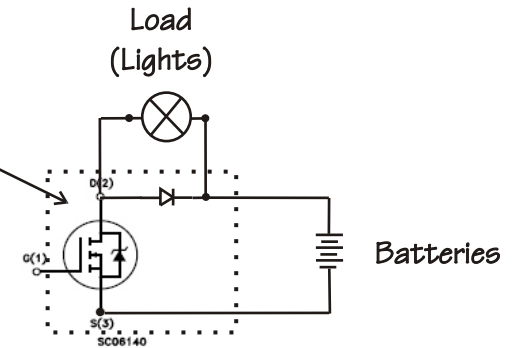
Always fit a Fuse between your batteries and the Load. If there is a wiring short circuit or a defect, there is normally enough current in your batteries to set fire to your precious Model.

Rev No	MP RC WORLD
JAN 2010	
RC Electronic Solid State	
ADJUSTABLE MOSFET	
POWER SWITCH	
Scale 1:1	Drawing No 1 of 3

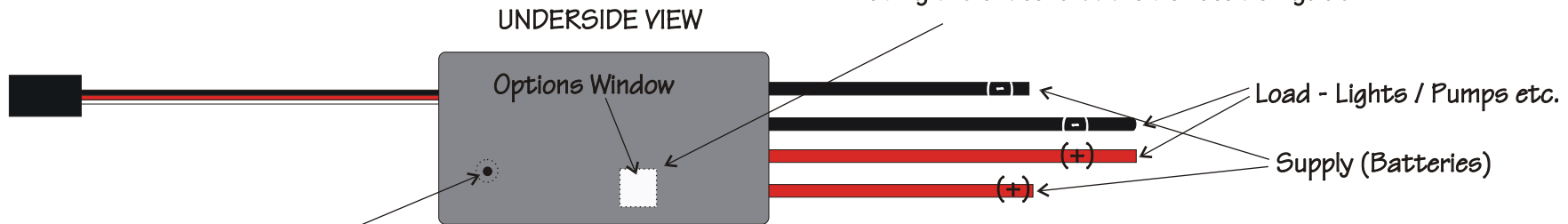
To reverse the Mode, Carefully de-solder (Break) the 'Normal Mode' Link and Make the Reversed Mode Solder Link.



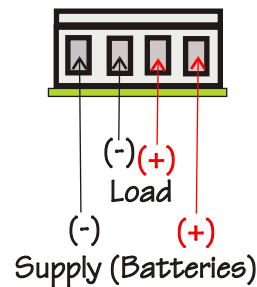
Inside the Power Switch



Options Window
to expose the Forward/Reverse Link carefully cut a window through the protective cover using the onboard LED as a location guide



To change the 'Switch Point' carefully trim the Shroud and carefully adjust the Preset with a 1.3mm Watchmaker's Flat Blade Screwdriver.



*****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

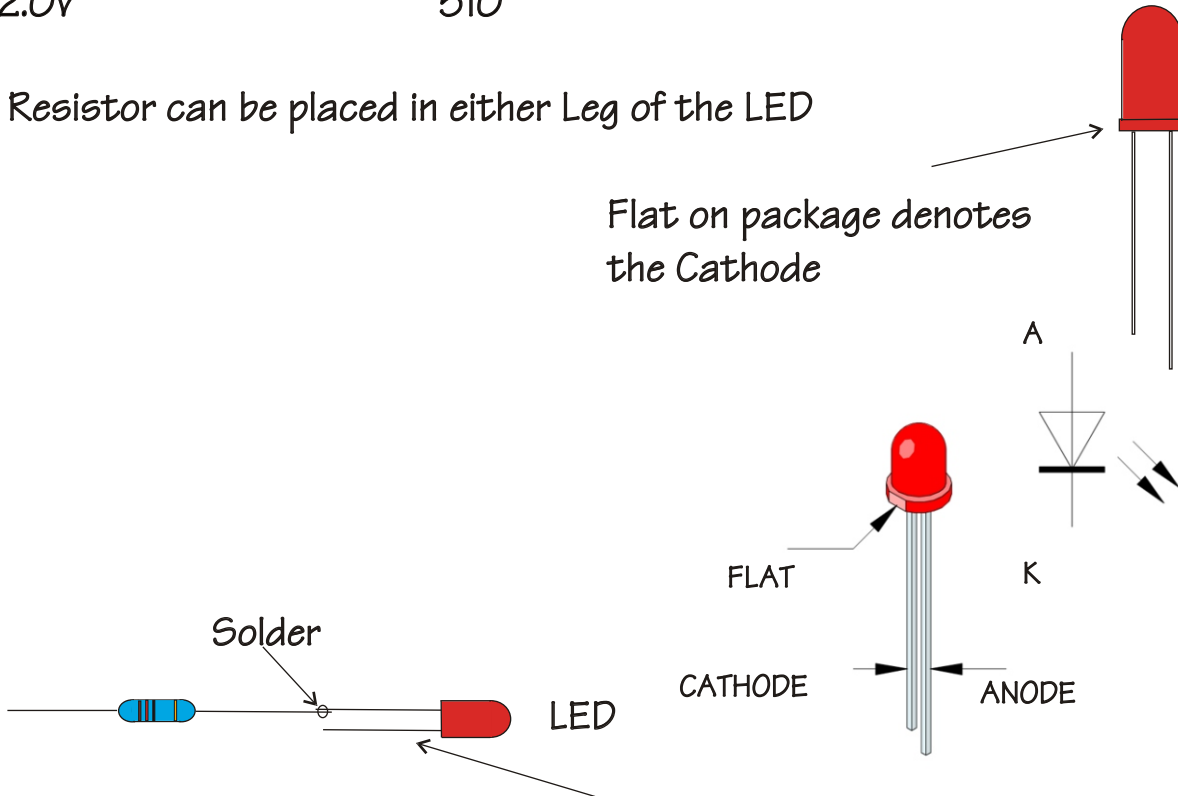
Resistors, Diodes and Suppression Capacitors can be purchased from our On-Line Store at www.valley-electronics.co.uk

Rev No	VALLEY ELECTRONICS
May 2009	
RC Electronic Solderless Reversible Solid State Switch Connection Details	
Eng.	
Scale 1:1	Drawing No 2 of 3

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

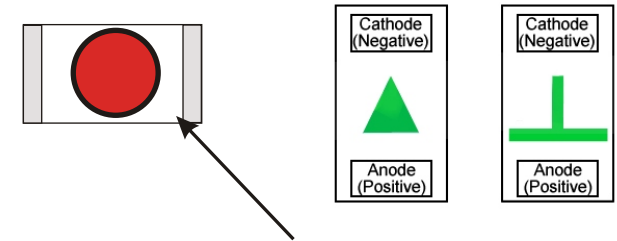
The Resistor can be placed in either Leg of the LED



Flat on package denotes the Cathode

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

SMD 1206, 0805 & 0603



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

*****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.

Replacement or additional LED's can be purchased from us
Please contact us, or visit our website www.mr-rcworld.co.uk

Rev No		MR RC WORLD
Sept 2009		
LED General Information		
Eng.		
Scale 1:1	Drawing No 3 of 3	