RC MIXER MODULE

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 bottom of this 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 Mixing Module into service, please carefully read through the installation drawings, notes and information below.

As it stands, there is precious little you can do to damage the Module, perhaps the only thing which could harm it would be to immerse it water, liquid or corrosive fluid.

The Thrust or Forward/Reverse Channel is 'Mixed' with Left/Right Channel which is presented to the Electronic Speed Controllers as a combination of a proportional bi-directional control signal component.

When configuring a twin Hull Catamaran installation or a rudderless application, the best results were obtained with a 50/50 (configuration 4) and the power units run in reverse. i.e. reverse is forward – forward is reverse.

The easiest way found to achieve this is to invert THE MOTOR connections (Swap + with – or with brushless motors, swap 1 line with one of the other 2) To correct the stick movement, see your transmitter guide.

Here the Thrust & Differential Mix Ratio is represented as a percentage.

configuration	Jumper 1	Jumper 2	Thrust	Differential
1 (default)	OFF	OFF	100%	100%
2	OFF	ON	100%	50%
3	ON	OFF	50%	100%
4	ON	ON	50%	50%

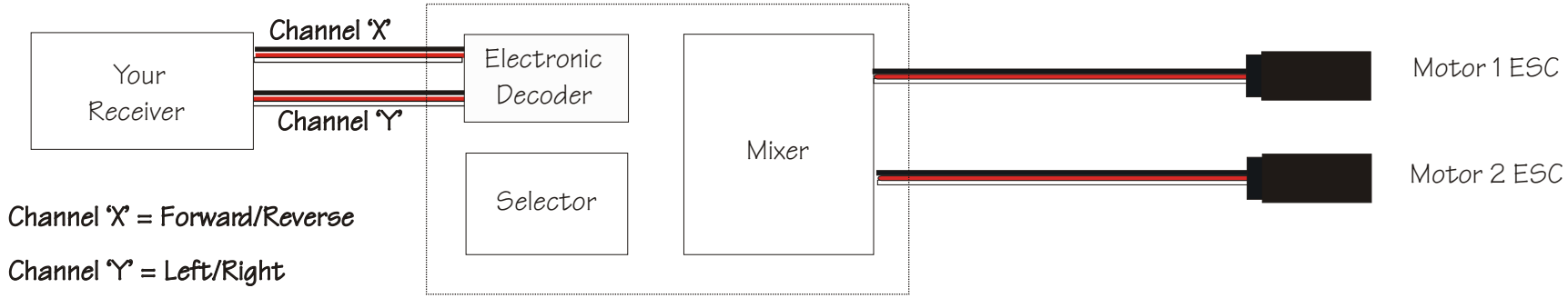
Please Note
Any changes made to Mix Ratio will not take effect until the receiver power supply has been disconnected then re-connected.

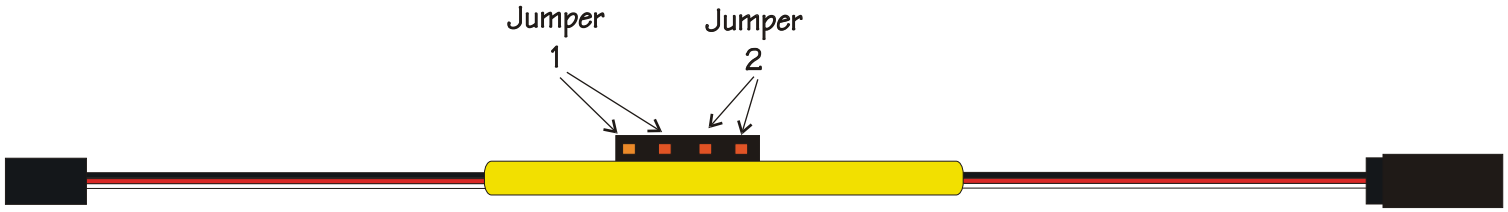
Should you need technical support for your purchase, please call (+44(0)7462655578) 07462655578 between 9am and 5pm Monday to Friday.

Email: support@mr-rcworld.co.uk

Best Wishes

the Staff at Mr RC World



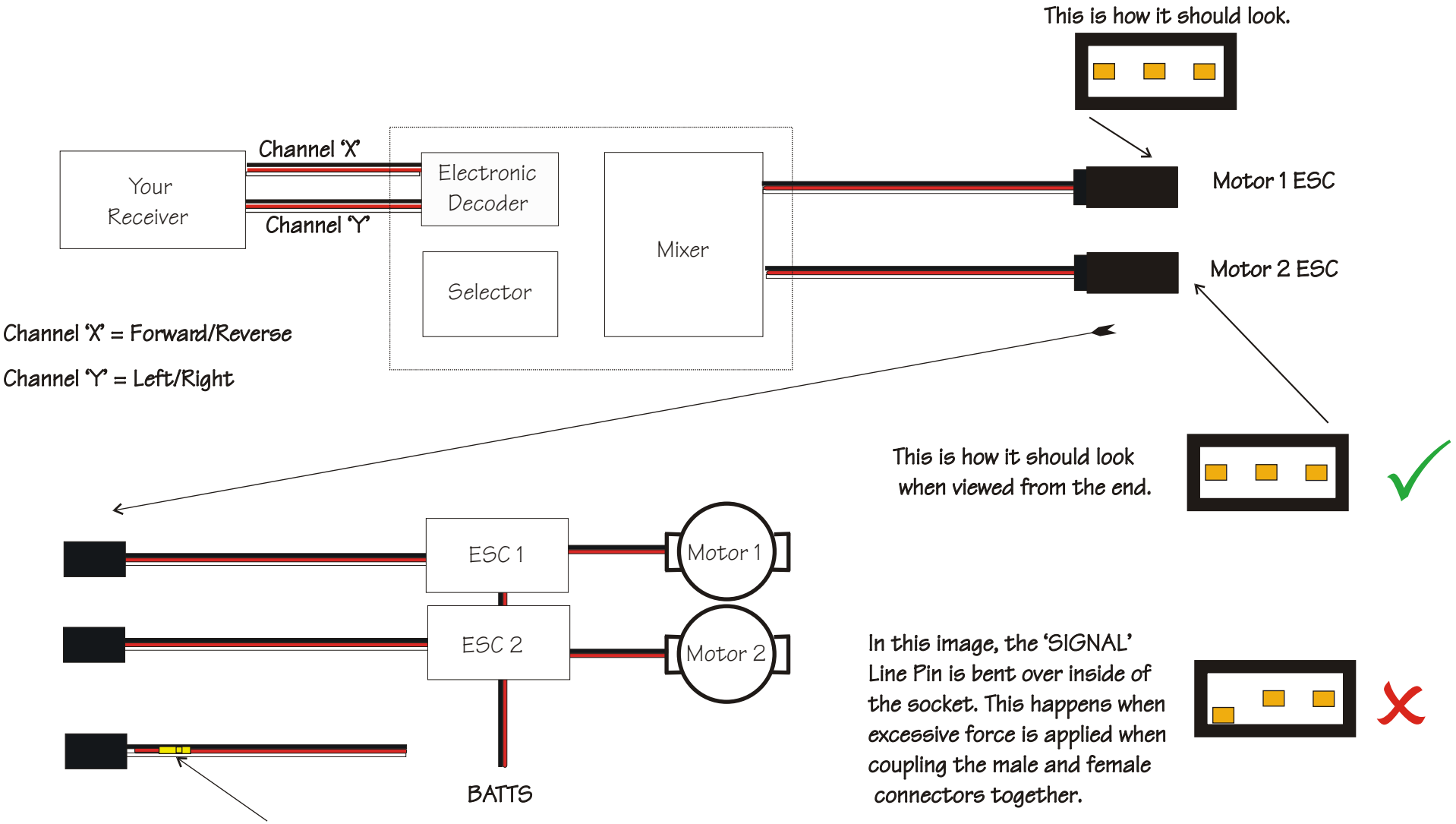


				MIX RATIO	
Configuration		Jumper 1	Jumper 2	Thrust	Differential
1	(Default)	OFF	OFF	100%	100%
2		ON	OFF	100%	50%
3		OFF	ON	50%	100%
4		ON	ON	50%	50%

Note
Any changes to the Mix Ratio will NOT take effect until the Receiver Supply has been disconnected and re-connected.

TIP/RECOMMENDATION
1. When used in a Rudderless Marine application, best results were obtained using a 50/50 Mix Ratio.
2. If you are using programmable ESC's Set your Forward/Reverse Ratio equal.

Rev No	MR RC WORLD
OCT 2010	
RC Boat Motor Mixing Module	
Eng.	
Scale 1:1	Drawing No 1 of 1



Rev No	MR RC WORLD
OCT 2010	
RC Boat Motor Mixing Module	
Wiring Addendum	
Eng.	
Scale 1:1	Drawing No 2 of 3

RC MIXER MODULE Troubleshoot Guide.

Your Mixer Module has been designed to give you very many years of trouble free service, however to assist you in troubleshooting any problems you may encounter, we have created this guide to help you determine any problems you may have and to aid you towards a conclusive outcome should you think your Mixer Module is defective.

Firstly we must emphasise the need to determine a 'level field' scenario when following this guide as you may arrive at the wrong conclusion.

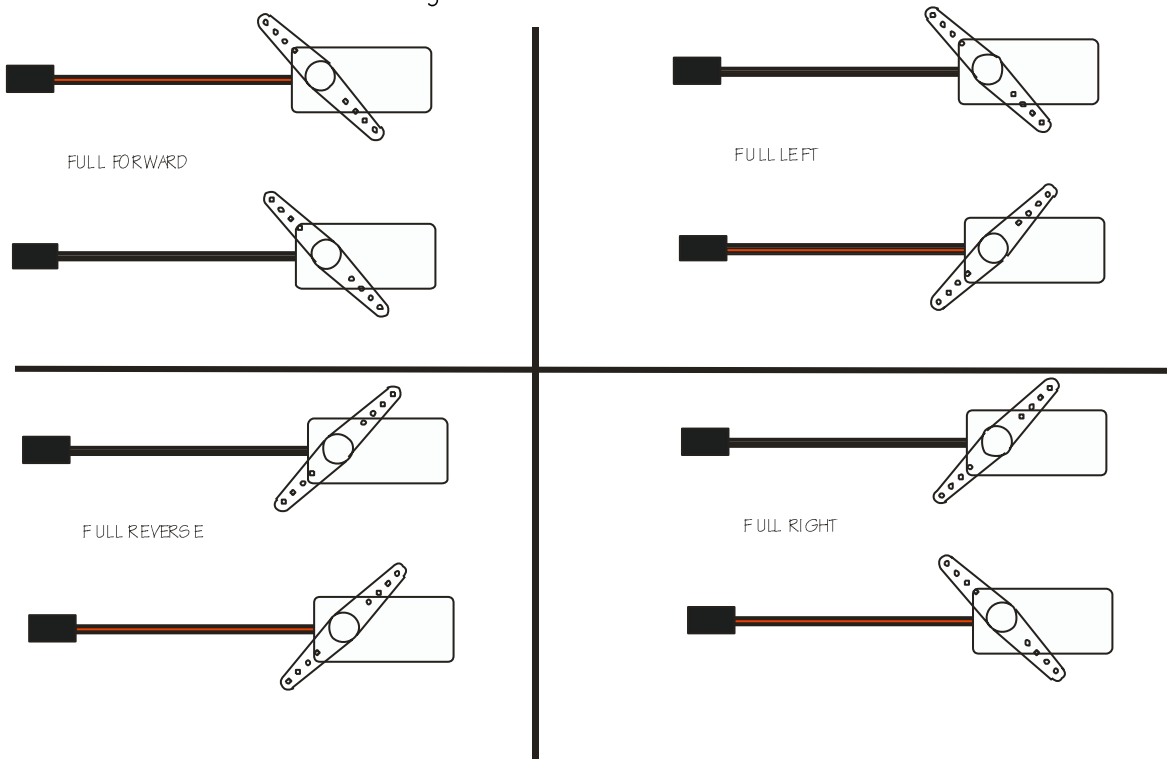
Electronic Speed Controllers (E.S.C.'s)

Both ESC's must be of the same Make and Model – Mixed ESC's will give you erratic performance. Programmable ESC's must have a matched performance.

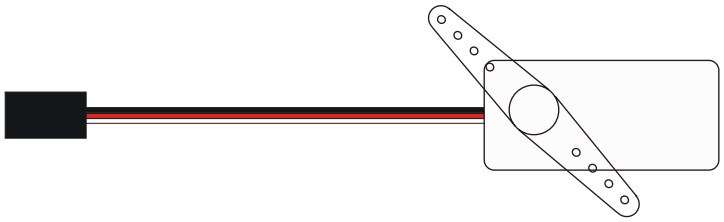
Most ESC's have a Built-In Battery Elimination Circuit (BEC) It is important that Only One ESC provides the supply for you RC Gear (Receiver, Servo's etc.) The easiest way to do this is left the 'RED' Connection tab on one of the ESC Plugs, fold it back and insulate it.

Leaving both BEC's in circuit may give cause to an erratic performance as both BEC's 'fight' each other and use more precious battery energy.

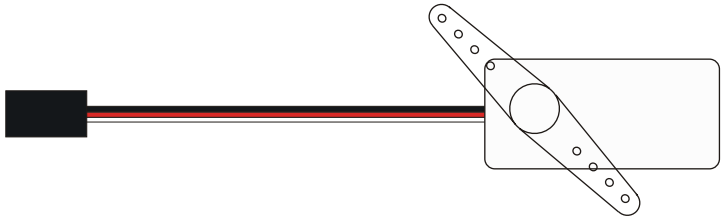
Troubleshooting using Two Standard RC Servo's
Finally, to conclude the integrity of your Mixer, connect two standard RC Servo's in place of your ESC's You should find the following actions.

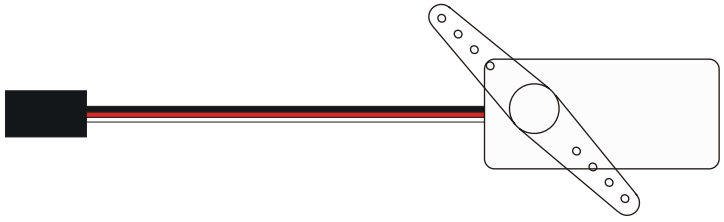


Remember, you will need to provide your Receiver circuit with 5vDC from elsewhere, or plug an ESC into your Receiver 'Bat' Connection.

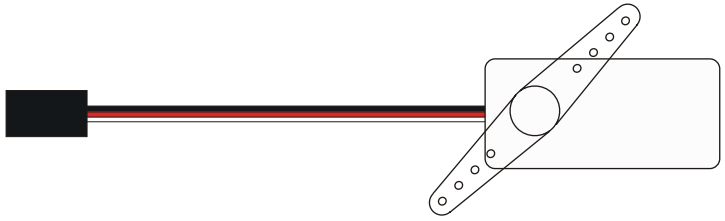


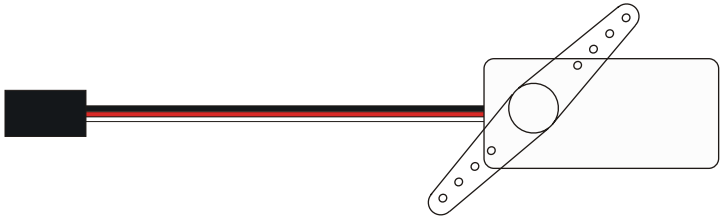
FULL FORWARD



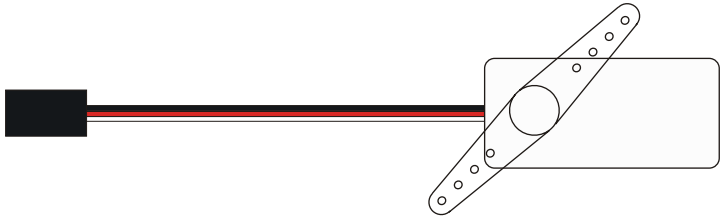


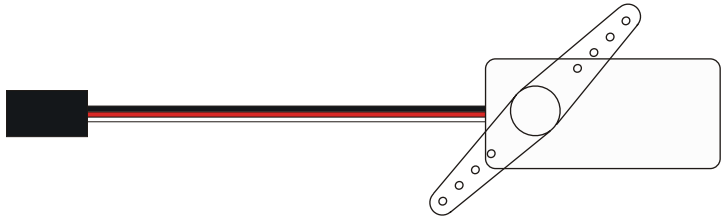
FULL LEFT



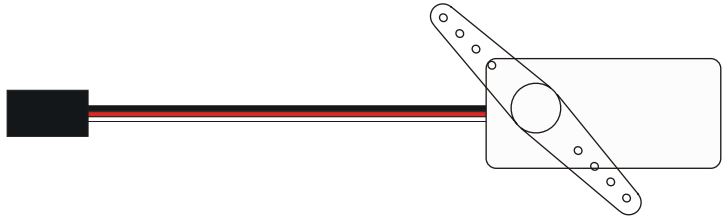


FULL REVERSE





FULL RIGHT



Rev No OCT 2010	MR RC WORLD
RC Boat Motor Mixing Module	
Eng.	
Scale 1:1	Drawing No 3 of 3