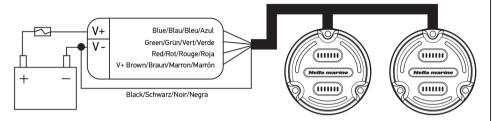




Vision and Innovation

# Wiring

### Wiring to the Fusion MS-RGBRC:



Further information is available at the Fusion website. https://www.fusionentertainment.com/marine/products/remote-controls/ms-rgbrc

### Wiring to a Generic RGB Controller

Most common RGB controllers use a permanent positive feed and a wire for of the individual color channels. Color blending is done by switching the relevant color channel(s) to the negative/ground source via varying levels of PWM, or (Pulse Width Modulation).

The APELO lamp uses an additional wire that needs to be permanently connected to Negative. APELO uses this wire to for the lamp current and bypass the controller from seeing the load. This means that there is no limit to the amount of APELO lamps that can be connected to the controller.

Hint - If your controller has only 4 cables, connect the extra lamp ground cable to the negative (-ve) terminal of the battery. An example of this is in the image of controller wiring above.

Lamp Wire	Function				
Brown	Main Positive, Switched				
Black	Main Negative, Permanent				
Red	Controls the Red LED – Signal to Ground via PWM				
Green	Controls the Green LED – Signal to Ground via PWM				
Blue	Controls the Blue LED – Signal to Ground via PWM				

## Wiring without an RGB controller

An APELO RGB lamp will operate without an external RGB controller. In this mode, the effect is 3 lamps in one. You may use any or all of the colors as you like, however each color requires a separate switch. You may mix colors to achieve an additional color if desired.

Lamp Wire	Brown	Black	Red	Green	Blue	Output Color
Config.1	Batt + VE	Batt - VE	-	-	-	Edge Light (A2 only)
Config.2	Batt + VE	Batt - VE	Batt - VE	-	-	RED
Config.3	Batt + VE	Batt - VE	-	Batt - VE	-	GREEN
Config.4	Batt + VE	Batt - VE	-	-	Batt - VE	BLUE
Config.5	Batt + VE	Batt - VE	Batt - VE	Batt - VE	-	YELLOW
Config.6	Batt + VE	Batt - VE	-	Batt - VE	Batt - VE	CYAN
Config.7	Batt + VE	Batt - VE	Batt - VE	-	Batt - VE	MAGENTA
Config.8	Batt + VE	Batt - VE	Batt - VE	Batt - VE	Batt - VE	WHITE

#### Electromagnetic Compatibility (EMC)

This LED lamp is an electronic device. The electrical circuits contain components that suppress possible interference, both emission as well as susceptibility, to the limits prescribed in international regulations.