

## MrRCSound Version 4 Instructions

We have made every effort to make the MrRCSound Version 4 RC airplane sound system, the most easy and versatile sound system on the market. Every effort has been made to make this the the most hassle free system available. Designed for the average pilot, the unit has been pre-loaded with all the sounds, tested to ensure each unit is functioning properly, and is easy to use.

Your sound module comes with at least one speaker and the Version 4 sound card. The sound card is actually several different components in one. It consists of a voltage regulator, sound module, and amplifier. It has been specially designed to work best with the Max SPL2 speakers available at MrRCSound.com. It is not recommended to use any other speakers.

The sound card can safely accept input from a 3S Lipo to an 8S Lipo, or approximately 12v -35v. Connection to the main flight pack is recommended via a power Y cable or tapping off the main power connector. Using a separate battery pack is also an option, but because of the extra weight it is not recommended.

The sound unit, even with two speakers, has very low draw, especially compared to other sound units. There is no need for high wattage and amp draw, when decent volume levels can be achieved with higher efficiency. With two speakers the unit will never draw more than 1.75A and 25W.

### **Hooking up your Version 4:**

Connection of the Version 4 is straight forward. There are four servo style connections on the board. These accept female to female servo cables that go to your RX. These are labelled on the board 'Servo 1-4' Servo 1 is the main engine sound connection. Servo 2, 3 and 4 are used for auxiliary sounds such as guns, whistles, and pilot chatter. Servo 1 connection can be made either to your throttle channel with a servo Y cable with the other end going to your ESC, or to a separate channel you have mixed with the throttle.

Connection of Servo 2, 3 and 4 can be made to any empty RX channels that are associated with a switch.

### **Powering up:**

When powering up the Version 4 sound unit, it is recommended that you do not hook its power up until power to your RX is on. The Version 4 sound card detects your throttle position when connected and uses that for its start position. Since some RXs can take several seconds to initialize, it is important to wait until the RX is ready, otherwise the Version 4 sound card may not see the proper starting throttle position.

Once powered up, one to two clicks of the throttle stick will start the engine start up sequence. To make these as realistic as possible, some of the start up sequences can be quite lengthy, upwards of 20 seconds. During the start up sound sequence, adjust the throttle position one more click up, or a couple clicks up on the throttle trim. When the start up sound is done, it will enter an idle sound. The RPM now will increase and decrease with throttle movement. Move the stick back to the start position to run the shut down sound.

### Sound Configurations:

The default Version 4 sound unit comes complete with six engine sounds. These include Lycoming, Merlin, Continental, Daimler Benz 601, Pratt & Whitney Double Wasp, and a Generic Turbine. Each sound configuration has three auxiliary sounds with it to complete the sound set. Servo 2 is **always** a machine gun sound, and is synced to the two LED outputs on the board. The main engine sound used determines the auxiliary sounds on Servo 3 and 4. For example, Lycoming, Continental or other civilian engine sounds may have pilot chatter such as “clear”, “clear prop” or “contact”, while military engines may have a second machine gun, cannon, whistle or other special sounds.

Sound configurations are changed by pressing the red button located on the board. You will hear what configuration you are on by an audible “airplane one”, “airplane two”, etc. announcement. To determine which configuration you are on, please review the configuration sheet.

### Volume:

The volume knob is a yellow turn screw located on the board. This can be adjusted by a small Philips screw driver. Just be careful not to contact any points on the board with the metal screw driver. The volume knob is preset to full volume. Notice it looks like a + sign, and not tilted to the right. This is the full volume point. Although it may be possible to turn the knob slightly more to the right, it is not recommended, and will not increase the volume.

The system will work at full volume with either one or two speakers attached. You should never have to move the volume down, unless you want to, with one exception. On especially warm days, the amplifier chip might get too warm and begin to cut the sound in and out. If this happens it might be necessary to adjust the knob down in volume to about the ¾ mark.

If you have any problems or questions, feel free to contact me at: [MrRCFlying@MrRCSound.com](mailto:MrRCFlying@MrRCSound.com)

