



## Newsletter - Issue No. 4, December, 2008

Welcome to the fourth quarterly newsletter from Model Solutions of Canada Ltd. and Christmas greetings to you all. We wish all our previous and potential new customers a very Merry Christmas and a prosperous New Year.

### ***U.K. Dealer***

We are continuing to work with one of the U.K.'s leading electric flight specialists, with the aim of them becoming our exclusive U.K. retail agent for both model airplane and model boat customers. Once they are up and running, we'll announce them in a future e-newsflash.

### ***Choosing Speakers for the SFX5.3 Sound Module and using the Volume Control***

Our SFX5.3 sound module has a maximum power output of 40-45Watts. This power is achieved only when powered at its maximum supply voltage of 26Volts **AND** with the volume control turned fully clockwise to its maximum position. We have been advising customers who wish to use their SFX5.3 on 6S LiPo (22.2V nominal, approx. 25-26V when fully charged) to use two of our 4" 20Watt 4 Ohm speakers in series to handle this high output power. This has caused some customers problems who do not want their airplanes to carry the weight of two speakers, but who also wish to run it on 6S LiPos. This can be circumvented by the simple expedient of turning the volume control down to about the  $\frac{3}{4}$  full position.

Power is proportional to the square of voltage, and the volume control controls the signal voltage going into the power amp., so the volume control need be reduced by only a small amount to reduce the power by half. Also, note that sound pressure level (SPL) is a logarithmic scale so a reduction of power by half represents only a 3dB (decibel) reduction in SPL.

### ***Opto-Isolated ESCs***

Our SFX5.3 module features an opto-isolated ESC output to drive conventional ESCs directly without the need for a "Y servo extension lead". However, this does mean that there is no receiver power fed out on the ESC output centre pin. This will therefore not work with an ESC that also has an opto-isolated input since you cannot drive one opto-isolator from another. In this case a "Y servo lead" is required to connect both the sound module's throttle input and your ESC directly to the receiver throttle channel output. You can obtain this from your local hobby store.

### ***Customer Testimonials***

We have a customer testimonials web page and have several testimonials sent to us by pleased customers of our older SFX4 series sound modules. We would welcome testimonials from any customer that has purchased our new SFX5.3 module who are pleased with either the product, or our service. Thank you.



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### ***LEDs Must Have Series Resistors***

We continue to remind our readers that LEDs must have series current limiting resistors, or else a special PWM (pulse width modulation) current controlled LED supply. Our sound modules have two optional LED/lamp flasher outputs which can be enabled by us prior to shipping. We also sell large high power LEDs suitable for use as gun barrel flashers in larger models. These LEDs, or any other LED, must be used in conjunction with a series resistor to limit their current draw. **NEVER** connect a LED, especially a high power one, directly to a battery or power supply without a series resistor. They will likely get fried if you do.

To help you understand how to calculate the value and power rating of LED series resistors we have written an [article](#) which is posted on our [“Articles” page on our web site.](#)

### ***Sound Clip Library***

We have the most extensive collection of sound clips of any sound module manufacturer and it continues to grow all the time. Nonetheless, we recognize that some modellers will want sounds that we do not currently have. If the sound you want is not in our library listing on-line, just ask us, and we will search for it. Currently we are able to offer this search service free of charge. As our sales volume increases we may have to make a charge for this service in the future.

### ***The Spitfire Rules!!***

The most popular sounds for our model aircraft customers have been for the Supermarine Spitfire. We would remind potential Spitfire customers that we have both RR Merlin and RR Griffon Engine sounds as well as genuine Hispano 20mm cannon and Browning 0.303 cal and 0.5 cal machine gun sounds. A close second is the F4U Corsair for which we have the genuine Pratt and Whitney radial engine sound as well as the Browning 0.5 cal MG and rocket firing sounds as used on many Corsairs.

### ***SFX5.3's are also for Model Boats and Tanks – Magazine Product Review***

Although our new flagship sound module, the SFX5.3, was designed to be suitable for model aircraft, it is equally at home in model boats and model tanks. A comprehensive product review of this module appears in the **November/December** issue of the U.S. magazine, [“Ships in Scale”](#), pages 60-62. Product reviews in a leading U.K. magazine and the on-line magazine [eZone](#) are pending.

### ***Opting Out of this Newsletter***

If you do not wish to receive any future newsletters from us, please send an email with the subject line “Unsubscribe” to [newsletter@modelsolutions.ca](mailto:newsletter@modelsolutions.ca). Thank you.

David Harrison,  
CEO and Chief Engineer,  
Model Solutions of Canada Ltd.  
[www.modelsolutions.ca](http://www.modelsolutions.ca)