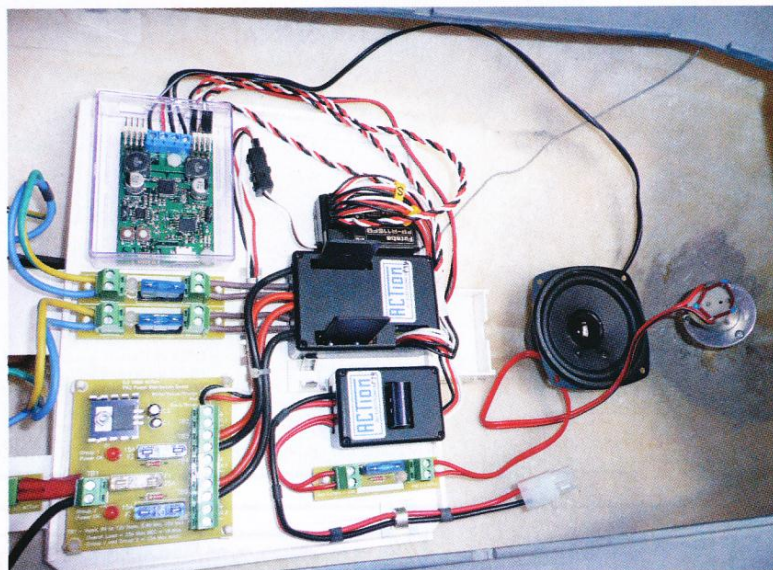


The SFX 6.3 unit as supplied from Canada.



Installed in the Speedline Severn lifeboat. The unit is on the port side with an ACTION power distribution board on the starboard side and the drive motor esc, speaker and a bow thruster forward of it.

Model Solutions SFX 6.3 Programmable Sound System

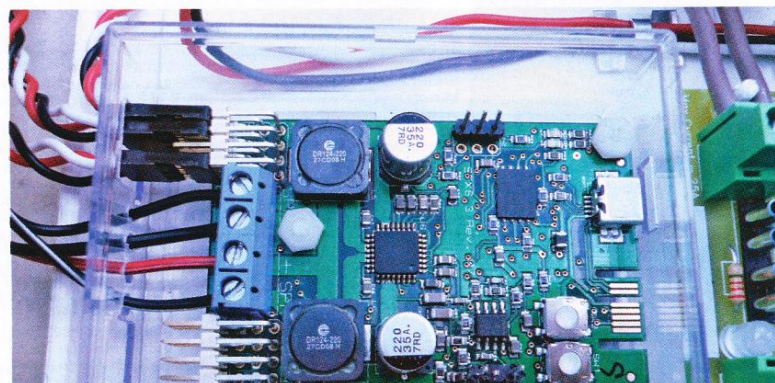
TERRY SMALL attempts to deafen us!

Models having real working sound effects are becoming much more common. Admittedly these are not to every modeller's taste, but sound is a feature well worth having as it can bring a model to life. Technology today spoils us as there is now an increase in the number of products that are easy to use and Model Solutions of Canada are one such business supplying these useful 'gizmos'.

They have now introduced a new ultra high performance SFX 6.3 unit incorporating better than CD quality sound and a range of features that could well make it the sound system that is the yardstick by which others are measured.

Having built and reviewed recently a Speedline Severn class lifeboat model, I wanted to incorporate twin engine sound with additional sounds of ship-to-shore radio communication talk, hooter and foghorn, all

The unit was eventually installed in one of those clear plastic snap containers in which spare receivers and servos are often supplied, particularly by Futaba.



working with my existing r/c installation. The main problem was that the model could not take much more weight, so whatever I decided to use had to be light.

The heaviest part of any sound system is the speaker and the bigger the speaker the better they say, but it will also be heavier, so after experimenting and determining the weight of a 100mm diameter speaker, I realised the model could just about manage this with the speaker midway towards the bows and low down inside the hull without affecting the normal water line of the model. The sound unit itself had to be light and compact and to do everything I required all within one module, so that's where the SFX 6.3 met my current requirements.

Obtaining the unit

The product is made and sold in Canada, but purchasing via the internet and the website is very easy. When ordering, I requested the sounds applicable to an RNLI lifeboat to be pre-installed, and this was duly obliged. From placing the order to delivery took just under two weeks, which considering the distance was excellent service. The unit is extremely well made being 68 x 44 x 14mm in size and just 24gms in weight with a sound output power of 40 watts when using a 26v dc power source. The voltage range is 10 to 26 volts. The software on the CD supplied is compatible with Microsoft Vista (32bit only) XP Home and Professional SP2. You will need to have installed on your computer Adobe Acrobat reader version 7.00 or later to be able to read the user manuals on the CD which can also be freely downloaded from the web.

A closer look

There is a row of four screw terminal blocks and some gold r/c lead pins for the lead plugs. Also, there are two push buttons for set-up and volume control and a USB socket for connecting the module to the computer so that the user can programme the unit if desired, which is the great beauty of this module. The configuration software and instructions on how to fully utilise this are included in the package, but if that's not your scene then having it ready to use as a plug-and-play device is the best option. Currently most other manufacturer's sound units are for single motor models and where two motors are used then you have to purchase another module and have two speakers installed which on this occasion was not an option, so that's where the SFX 6.3 came in.

Although the module is supplied in an anti-static bag, this is for dispatch purposes, so it's up to the user to make something suitable to hold the unit, and fix it within a box using the mounting holes on the pc board. Don't forget to use insulation washers and handle with care as static could damage the pc board components. I made my own plastic case from styrene sheet and lined the inside of the box with masking tape to avoid any static charge but then later found that a clear plastic Futaba style packing box that contained a receiver (or servo) was even more suitable after drilling a few holes for the wires.

Wiring connections

These are simple as long as you follow the supplied example diagrams and keep to some form of wire colour code. My system was already set-up at time of ordering so it was a simple case of 'plug and play' with virtually no modification to existing wiring in the lifeboat. The servo leads for connecting between the esc, module and receiver were supplied by Model Solutions, thus making life even easier and the power cables were easily 'plumbed in' to my

existing installation. Be careful though, check and double check the connections are correct as a wrong wire in the wrong place and the sound unit could be damaged. The hidden beauty of this sound system is that the one module can work from a twin throttle or single throttle r/c control to activate the engine sounds which are all played through just the one speaker.

Speaker choice

No, not the UK House of Commons Speaker! Any old speaker for this sound system will not do. Model Solutions give sound (pun there!) advice on their website, but can also supply a very suitable speaker that will handle the power. This is what I have used, the most important point being that the speaker impedance has to be 8 Ohms. Generally speaking, positioning within the hull is important. This is usually a large open space if a GRP moulding, so will act as a very good sound box. A tube over the speaker can also be helpful as would open deck hatches to let the sound out. As I wrote earlier, mine was mounted to the hull bottom forward of the motors. Bear in mind that paper cone speakers have a much better sound quality than the Mylar variety. The sound volume can be set by using the two push buttons on the unit. Remote volume control is also possible if either Throttle 2 or Channel Select 2 inputs are not used.

Beyond 'plug and play'

The user can fully explore and programme the module with a multitude of settings via a normal Windows based computer. Connection is via a USB cable and once the supplied software is installed, by following



and responding to the prompts as it installs all will be rapidly completed and up and making noises!

You do need to have the unit connected via the USB cable to the computer before launching the programme as it needs to detect the unit's presence. Another thing to note is the USB will power the SFX unit at a low level power setting for configuration purposes, but this will not be enough to power the audio amplifier side of it as this requires 10 to 26 volts.

The software uses what is commonly known in the computer world as a Graphical User Interface (GUI), and is all in colour so you can programme switching functions, assign sounds etc. Controlling and setting each available parameter is easy to do. Sound clips can be imported into the software which supports WAV and MP3 formats. These sounds can be obtained from various websites

at a price, but some are free. Audio editing software is also supplied on the CD, allowing the user to manipulate the sounds available.

Conclusion

The sound quality produced was loud, clear and very realistic. In the Speedline Severn lifeboat model, the twin Turbo-Cat diesel engines sounds were synchronized with the actual electric motor speeds. Additional sounds of ship-to-shore crew speech simulating a search and rescue conversation operated via a spare receiver channel was also clear, but not too good with the motors running as the engine noise effect drowned out the speech, which is actually what you would expect! So yes, it does what it says on the box! Price in May 2010 was Canadian \$199.95 (approx GBP130) plus p/p and UK VAT. The website is: www.modelsolutions.ca.

The Severn at speed - it's a pity that this magazine is not like some birthday cards that when you open or turn the page, a tune or sound is then played! (Something to think about for the future perhaps - Editor!)

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