

Supply voltage range : 10Volts – 26Volts

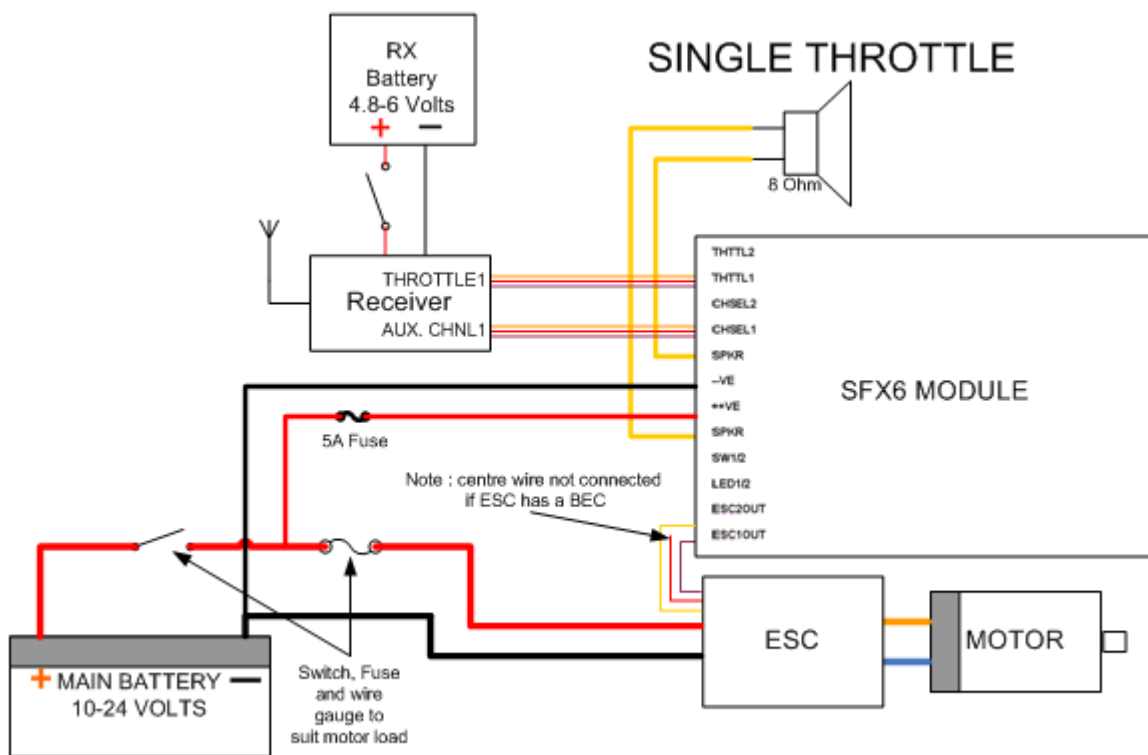
Loudspeaker Impedance : 8 Ohms – DO NOT use lower than 8 Ohms

**This is a Quick Start Guide only. For comprehensive instructions, please read the SFX6HWManual.pdf document in the Manuals folder on the SFXPC3 CD-ROM.**

### ELECTROSTATIC HANDLING

Your SFX6 module is a sensitive electronic device and can be damaged by electrostatic discharge. Before unpacking, handling and installing the module, be sure that you have touched a grounded metallic plate or a grounded conductive case of a plugged in 3-wire appliance.

### WIRING FOR ONE THROTTLE – WITH RECEIVER BATTERY



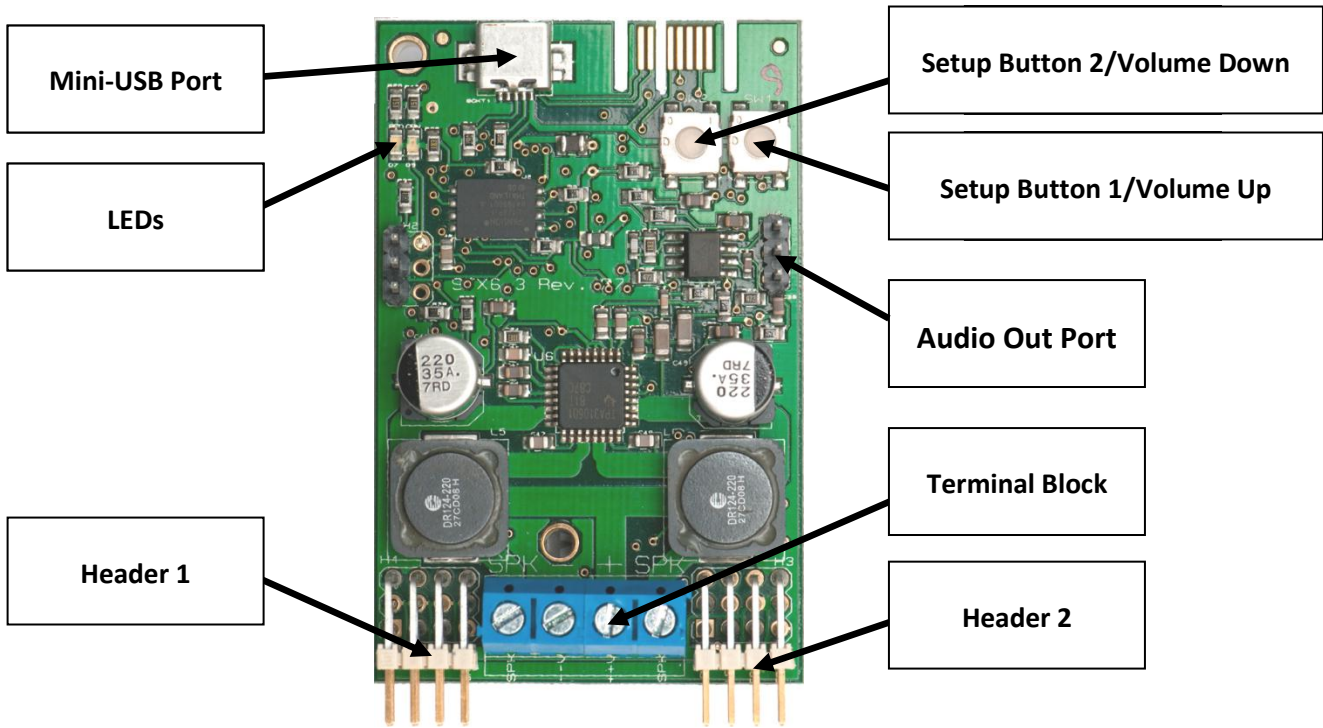
**Please note :** When using a separate battery for the receiver, if the ESC has an active BEC, the centre wire of the servo lead **MUST BE CUT**. This avoids the Rx. Battery and the ESC BEC “fighting each other”, which will likely severely damage the ESC. **For other wiring details, see the SFX6 Module Hardware manual on the CD-ROM.**

**DO NOT CONNECT ANY RECEIVER lead to LED1/2 OR SW1/2. Your receiver will be fried if you do.**

**DO NOT REVERSE THE BATTERY CONNECTIONS. THE MODULE WILL BE DESTROYED IF YOU DO.**

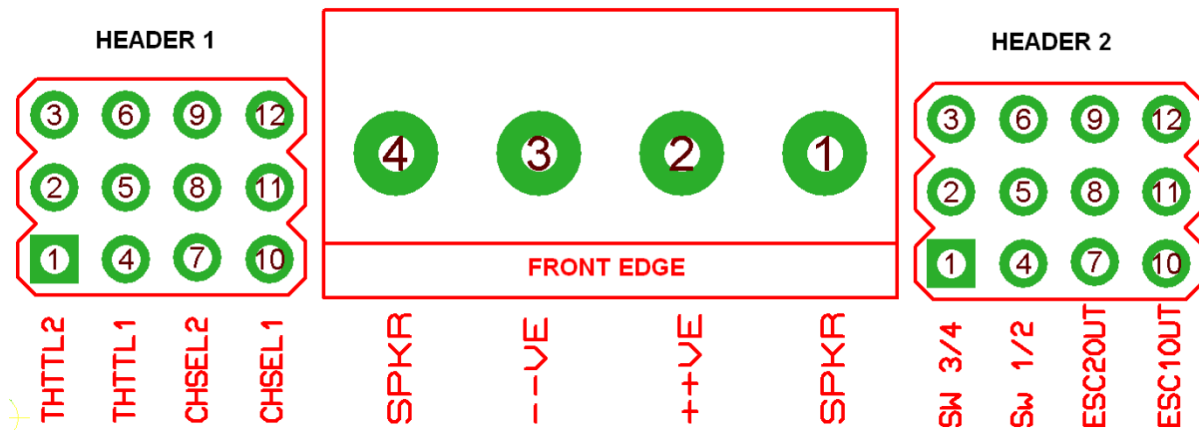
When installing, be sure to run separate power lines to the battery just for your module. If the power lines are shared with motor or ESC lines, the electrical noise generated by them will almost certainly interfere with the sound module. **It is highly recommended to have a 5A quick-blow fuse or circuit breaker in the power line as well as a switch.**

### SFX6 SOUND MODULE CONNECTIONS



Power supply input and loudspeaker connections are made through the centre terminal block. All R/C receiver inputs for throttles and channel select are made at Header 1. All ESC outputs, LED and switched outputs are made at Header 2. All these connectors are located at the bottom of the board. **Setup Buttons 1 and 2** are multi-purpose buttons having different functions at different times depending on what is happening at the time.

### TERMINAL BLOCK AND CONNECTOR H1/H2 DETAIL



HEADER 1 Detail – Use male – male servo leads

Pin Numbers	Board Legend	Function	Notes
1, 2, 3	THTTL2	Throttle2 signal in from receiver. 1 is GND, 2 is receiver power, 3 is Throttle2 signal.	Receiver power is on pin 2
4, 5, 6	THTTL1	Throttle1 signal in from receiver. 4 is GND, 5 is receiver power, 6 is Throttle1 signal.	Receiver power is on pin 5
7,8,9	CHSEL2	Channel Select2 signal in from receiver. 7 is GND, 8 is receiver power, 9 is Channel Select2 signal.	Receiver power is on pin 8
10,11,12	CHSEL1	Channel Select1 signal in from receiver. 10 is GND, 11 is receiver power, 12 is Channel Select1 signal.	Receiver power is on pin 11

TERMINAL BLOCK DETAIL

Pin Numbers	Board Legend	Function	Notes
1, 4	SPKR	Loudspeaker - Do NOT use less than 8 Ohms	
2	++VE	Main Battery positive 10Volts – 26 volts	Do NOT reverse Battery leads!!
3	--VE	Main Battery negative 10Volts – 26 volts	Do NOT reverse Battery leads!!

Header 2 Detail – Use any servo connector and wire

Pin Numbers	Board Legend	Function	Notes
1, 2, 3	SW 3/4	Switched Outputs 3/4. 1 is SWITCH4, 2 is <b>MAIN POWER</b> , 3 is SWITCH3.	<b>TAKE CARE!! Main Battery power is on pin 2</b>
4, 5, 6	SW 1/2	Switched Outputs 1/2. 4 is SWITCH2, 5 is <b>MAIN POWER</b> , 6 is SWITCH1.	<b>TAKE CARE!! Main Battery power is on pin 5</b>
7,8,9	ESC2OUT	Throttle signal out to ESC2 (if present). 7 is GND, 8 is receiver power, 9 is ESC2 signal.	Receiver power is on pin 8
10,11,12	ESC1OUT	Throttle signal out to ESC1. 10 is GND, 11 is receiver power, 12 is ESC1 signal.	Receiver power is on pin 11

NOTES :

- LEDs for guns etc. connect between their LED1/2 output terminals 4, 6 and a positive supply voltage which can be the same supply as the module on pin 5. **DO NOT** exceed 5A on each output or **10 Amps total** for all LED and switched outputs. Switched output loads are connected identically to the LEDs.

2. It is highly recommended to include a 3Amp quick blow fuse in the power line to the SFX6 module. This protects, to some degree, against wiring errors.
3. The servo leads for Throttle and Channel Select inputs may be either Futaba style (black, red, white) or JR style (brown, red, orange). **The brown or black wire is always the GND, 0V or –VE connection and should always be inserted towards the outside of the receiver case and towards the board of the sound module.**

## THROTTLE1 AND THROTTLE2 SETUP

The engine sounds are linked to the receiver throttle outputs. For some engine sounds, there are separate engine start-up and shutdown sounds. All these sounds are controlled solely by the position of the throttle controls.

The throttle neutral or off and maximum forwards and reverse (if applicable) throttle settings for your specific transmitter and receiver have to be stored in the module. This procedure also stores the neutral/off pulse information for the two **Channel Select** inputs. This has to be done **only once** unless you change your transmitter or receiver. Progress is indicated by the LEDs. To Setup the throttles, do this :

1. Switch on your transmitter with the throttle controls in their **neutral positions (model boats/tanks) or off positions (model aircraft)**, then switch on your receiver and sound module. The red and green LEDs should flash alternately for about four seconds.
2. While the red and green LEDs are flashing alternately, push **SETUP BUTTON1** and release it quickly. This enters the **THROTTLE1 SETUP** mode. The green LED will glow steadily and this indicates the **Throttle1** neutral position has been captured.
3. Move the transmitter throttle1 control **FIRST** to the maximum forward position, then back to the neutral position. The green LED will go out and the red LED will come on to indicate the maximum forwards value has been captured.
4. If the throttle1 has a reverse mode (model boats/tanks), move the throttle1 control to the maximum reverse position and back to neutral again. The red LED will go out and the green LED will start flashing to indicate the maximum reverse value has been captured and the throttle1 calibration is complete. The green LED flashes briefly every few seconds to indicate that the signals are OK. If the Throttle1 or ChannelSelect1 signals are not present, or not valid, the red LED will flash every few seconds instead.
5. If the throttle1 is forwards only mode (model aircraft), the red LED will go out after a period of about 1 second by itself and the green LED will start flashing to indicate the throttle1 calibration is complete. The green LED flashes for three times to indicate it is forwards only. The green LED continues to flash briefly every few seconds to indicate that the signals are OK. If the Throttle1 or ChannelSelect1 signals are not present, or not valid, the red LED will flash every few seconds instead.
6. If you are using a second throttle input (optional), then repeat steps 2-5 but use **SETUP BUTTON2** and the transmitter throttle2 stick instead.