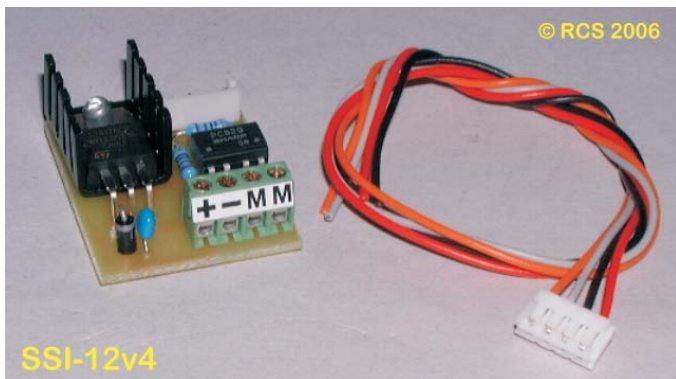




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RCS # SSI-12v5

IN-LINE INTERFACE
 FO SIERRA SOUND



The **SSI-12v5** is for use with the any brand of R/C ESC. It replaces the regular **SIERRA SOUND SYSTEM** battery and provides a regulated 12 volts to power **SIERRA SOUND SYSTEMS**.

Follow the regular **SIERRA SOUND SYSTEM** instructions to programme the sound features.

INSTRUCTIONS.

WHY THE SSI-12v5 IS NECESSARY.

Most PWM throttles have a continuous positive potential on at least one motor lead. Although not normally a problem a **SIERRA SOUND SYSTEM** may not operate correctly when used with battery R/C. If the traction battery is also used to power the Sierra sound, the continuous positive potential will tell the **SIERRA SOUND SYSTEM** to go to run mode. and stay there because of a sneak path back to ground (-) via the traction battery connection.

The problem is the same for both diesel and steam sound.

The **SSI-12v5** will work effectively with **SIERRA** diesel sound and enable it to ramp up to notch 8 provided you are using a minimum of 14.4 volts.

If the **SIERRA SOUND SYSTEM** does not ramp down to get the "AT IDLE", the effects such as the spent exhaust blowdown, fireman Fred and the grease gun will not work. The turbo generator will remain on continuously instead of turning off automatically. Diesel sound systems will go to notch 8. The **SSI-12v5** has an opto coupler and is needed to enable the **SIERRA SOUND SYSTEM** to cycle between the "AT IDLE" and "RUN" modes depending on throttle output.

Other operating criteria remains unchanged.

INSTALLATION.

(A) The **SSI-12v5** is wired in parallel to the battery POWER IN and MOTOR OUT wire sets from the **ELITE** and the power source and the actual motor(s). The wires must be colour matched and then inserted into the **SSI-12v5** screw terminals exactly as shown.

Remove the **SIERRA SOUND SYSTEM** battery.

Mount with silicone adhesive, double stick tape or Velcro.

Connect the Red/Black/Grey/Orange wires from the **SSI-12v5** into the **SIERRA** screw terminals as shown in the diagram.

Do not allow metal objects to touch the rear of the PCB. Damage to the PCB may result and is not covered by warranty.

(B) OTHER THROTTLES. The **SSI-12v5** can be used with other brands of R/C throttles. The actual circuit is shown overleaf.

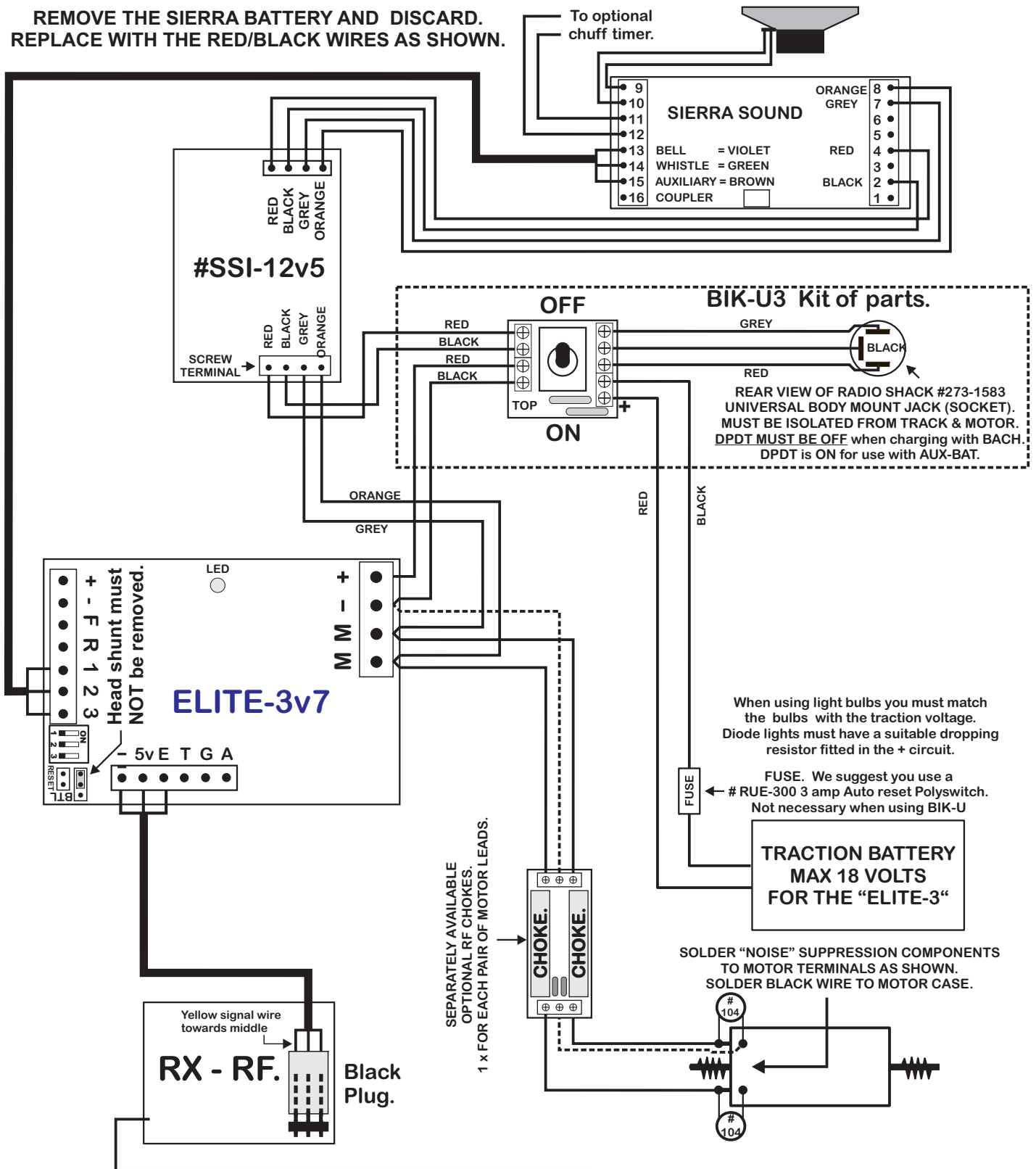
OPERATION.

The **SSI-12v5** is fully automatic. The opto coupler will separate the motor output from the **SIERRA SOUND SYSTEM** and alternate between "AT IDLE" and "RUN" mode where appropriate.

OVERLOAD PROTECTION.

The **SSI-12v5** is protected by an automatic reset 1 amp Polyswitch circuit breaker.

REMOVE THE SIERRA BATTERY AND DISCARD.
REPLACE WITH THE RED/BLACK WIRES AS SHOWN.



TO MAXIMISE RANGE IT IS OK TO CONNECT BLUE (or PINK) ANTENNA WIRE TO ONE SIDE OF TRACK PICK UPS.