



## **SCI-6 Sound Card Interface Kit**

### **Frequently Asked Questions**

#### **Revision 1.0**

**Q. Why don't you sell cables for my radio?**

A. Cables are very expensive and time consuming to make commercially. On top of that every radio is different making it difficult to stock all the different options. There are commercial interfaces that are plug and play, but they cost many times as much as an SCI-6. Much of the difference in price is to handle the cabling.

The SCI-6 was developed for the ham who does not mind doing a little soldering and reading their radio's manual to save a lot of money.

**Q. I can't key my radio. What is wrong?**

A. There are four possible areas:

1. The cable to radio is wrong
2. There is something wrong with the SCI-6
3. There is something wrong with the cable between the computer and the SCI-6
4. Something is not set up right on the computer.

The best way to find out what is wrong is to divide and conquer. Try the following steps.

- Plug the cable into the radio but leave the other end un-plugged. Short out the PTT line at the SCI-6 end. If the radio does not go to transmit, something is wrong with the cable.
- Plug in the cable between the SCI-6 and radio. Put a 9V battery on the PTT input of the SCI-6. +9V goes to the center pin. If the radio does not go to transmit there is something wrong with the SCI-6. Check the opto is in the right way. Be sure the diodes are installed in the right direction. Check your soldering.
- Plug the cable from the computer into the SCI-6. Unplug the computer end. Apply the +9V battery at the computer end to the control signal you picked for PTT. Connect the negative side of the 9V battery to the PTT ground pin. If the transmitter does not key, check this cable.
- At this point something is not set up correctly. Be sure the program is selecting the correct COM port. Be sure the correct signal is being used for PTT. Usually it will be the RTS line but others might default to DTR. Most programs will let you select which one is used. Some programs let you use both at the same time so you don't have to worry which one you have wired up.

**Q. I'm not getting enough drive to the transmitter.**

A. The output of the PC sound card is designed to provide enough power to drive speakers, but most transmitters only require milivolts for full drive. Trimmer pot R1 and R2 form a voltage divider to reduce the drive to proper levels for most transmitters. If you are not getting enough drive, replace R2 with a lower value resistor. Something in the range of 10K to 22K is suggested. The exact value is not critical.

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