Connecting the Radio Shack 12-250 SAME Weather Receiver to the RC-210

This model weather radio is a nice, cheap, addition to the RC-210 controller. It receives reasonably well, is easily interfaced to the controller, and has a circuit that will provide a good signal to the alarm line.

The audio gate circuit for the speaker is what I used to connect to the alarm line. It is +5 VDC when the speaker is gated, and drops to around zero volts when the speaker is on. This line is controlled by the uP of the radio and is taken low when the SAME decoder activates or you press the button on the unit to listen to the broadcast.

I was unable to find my copy of the schematic, so here are pictures of the actual unit I am using.

It took the built in antenna off and that is where my wires come out. I use an outside antenna. You may want to use the built in antenna, if so you’ll need to drill a hole in the case.
Here is a view of the main board, showing the connection points of the alarm line and the audio connection.

Here is a close up of the alarm line connection. The jumper shown carries the audio gate control signal from the uP to the audio gate on the radio board. The red wire is what is connected.
This is a close up of where I connected to the audio. I used shielded line. The center conductor hooks to the vol. pot as shown, and the shield is connected at the point where the negative side of the back up battery connection. I wouldn’t worry too much about conditioning the audio, NOAA audio sounds like crap no matter what type radio you listen to it with.

If you have any questions, feel free to drop me a line at kf4pxz@highstream.net. I will ignore any comments questioning the legality of rebroadcasting NOAA radio. Part 97 allows it, and almost calls NOAA by name it that portion of the rules.